

Advisory Committee Meeting Minutes

PROGRAM COMMITTEE NAME:		Machining Technology Program	
CHAIRPERSON:	John Cunningham		
MEETING DATE:	15-Nov-19	MEETING TIME: 3:00 p.m.	MEETING PLACE: East Campus - Manufacturing Education Center, Room 104
RECORDER:	Debra Russell	PREVIOUS MEETING:	15-Feb-19
COMMITTEE MEMBERS			
List all members of the committee, then place an X in the box left of name if present			
NAME	TITLE	EMPLOYER INFO	PHONE
Chris Kerbo	Manager	Hunting Titan	(806) 665-3781
Chris Swenson	CEO	Swenson Machine	(806) 622-2730
Dashia Sanders		Bell Helicopter	
X David Gibson	Instructor	Amarillo ISD-Caprock High School	(806) 236-4169
X Garrett Hall	Machine Shop Supervisor	ASARCO, LLC	(806) 468-4004
Greg Hudspeth	Vice President	City Machine and Welding	(806) 358-7293
X James Baker	CNC Supervisor	Amarillo Gear Co.	(806) 324-7575
Jared Morland	General Manager	CDS Industrial	(806) 372-8930
X John Cunningham	Production Manager	Amarillo Gear Co.	(806) 676-9131
X John Herrera	Craft Supervisor	CNS Pantex	(806) 477-3413
X John Mitchell	Machining & Welding Supervisor	TASCO	(806) 335-2301
Karyn Pierce	Director, Career & Technical	Amarillo ISD	(806) 326-1305
Michael Haning	CEO	CDS Industrial / DISCO	(806) 543-9955
Rickey Schoor	Territory Productivity Engineer	Sandvik Coromant Co.	(806) 224-6890
EX-OFFICIO'S PRESENT			
X Claudia Arnold	Advisor, Technical Education	Amarillo College	(806) 335-4301
X David Hall	Associate Dean, Tech Education	Amarillo College	(806) 335-4309
X Debra Russell	Administrative Specialist, Tech Ed	Amarillo College	(806) 335-4390
X Efrain Medrano	East Bookstore Manager	Amarillo College	(806) 335-4228
X Dr. Kim Hays	Chair, Manufacturing Tech Dept	Amarillo College	(806) 335-4366
X Dr. Linda Munoz	Dean, Technical Education	Amarillo College	(806) 335-4352
X Robert Gustin	Instructor, Machining Technologies	Amarillo College	(806) 335-4332

AGENDA ITEM	ACTION DISCUSSION INFORMATION		RESPONSIBILITY
Old Business:	No old business		
Continuing Business:	No continuing business		
New Business:			
Welcome / Introductions			John Cunningham
Curriculum Decisions:			
Program Curriculum & Status			Bob Gustin
NIMS Reaccreditation			
Other:			
Open Discussion			
KEY DISCUSSION POINTS		DISCUSSION	
Old Business:	No old business		
Continuing Business:	No continuing business		
New Business:			
Welcome / Introductions	John Cunningham opened the meeting with a welcome and all attendees introduced themselves. Dr. Hays recognized Efrain Medrano as the new manager of the East Campus Bookstore and explained that it is a vital part of the East Campus.		
	Bob Gustin reported that this semester is the biggest class he has had since being an instructor in the Machining program. There are nine students in the beginning Bench Work and Layout class. There are five advanced students that will graduate in December.		
	Curriculum has not changed since the last advisory meeting. Bob pointed out the handout showing the yearly rotation of classes. All advanced students hold at least one credential and are currently working on other multiple NIMS credentials. One student came from the Machining program at Caprock with three credentials and is working on his fifth one now.		
	Last year, through Perkins Grants, the Machining program received two Harrison Lathes and a Trax CNC Conversational Program Mill. Goal is to phase out the Bridgeport mills and convert to Trax mills to start introducing CNC in earlier classes.		
Program Curriculum and Status	Bob is going to move the first chance of taking a NIMS credential to the Machine Shop I class. Bob explained that the Bench Work and Layout class is the fundamentals class for Machining and teaches the introductory knowledge for students to prep them for beginning on lathes and mills in the Machine Shop I. Students will make projects but no credentials in the first semester. Bob and Dave Gibson explained the grading on the NIMS credentials is 100 percent or nothing. If students don't build up to the knowledge and experience they need to pass the credentials then the failure rate for students would be very high.		
	Dr. Munoz asked the question about when it is in the program that students leave. It was explained that students leave in the first two [support] classes when they have to learn math and be in good attendance in their classes. It was also explained that if students ever try to start in the middle of the program without the beginning classes, they are usually not successful.		

	<p>NIMS reaccreditation will be coming up this next year. The organization has changed their proces regarding the reaccreditation. A simplified process, Amarillo College will send the application fee and then NIMS will send paperwork. A few members of the MET Tec committee will do the inspection themselves according to the requirements that NIMS has provided. The beginning inspection was very arduous but nothing has changed since the initial accreditation so there shouldn't be anything to correct. NIMS evaluates on equipment and physical areas of teaching when they accreditate. Bob is required to stay current with industry as part of the accreditation. He will plan on working with Amarillo Gear through the summer.</p> <p>NIMS has changed many processes in their organization and there was quite a bit of discussion concerning the credentialing process. They are going to allow Amarillo College to specify what the project is that will be made and graded. None of the rules will change but just the item made. Bob explained that he would like to see something that the students can make that will be more of a tool that they can use in their career instead of a block of metal. Between Bob Gustin, John Cunningham and Dave Gibson, they all explained the grading process of the NIMS credentials. One of the NIMS credentialing parts was passed around for all to see. The new projects won't be any less regimented or grading criteria changed but the project will be something that would be of use to the student later in his career. John Cunningham said that if he is grading the progrects with manual tools it will take about 30 minutes to grade but if he uses automated tools to measure the parts, then it takes about 10 minutes. He said he has seen very good results from our students.</p> <p>There was some discussion about the new NIMS testing for evaluators and its difficulty. It includes a lot of theory and GDT in it. Bob said he would like to go to a GD&T training conference.</p> <p>There has also been a price change for the exams that students have to take for their credentials. It is cheaper.</p>
NIMS Reaccreditation	
Open Discussion	<p>It was asked where students learn GD and T which means geometric dimensioning and tolerances. It was explained that a small amount is taught in the Blueprint Reading and Sketching class but there is not enough time to teach a great deal.</p> <p>John Herrera discussed that the future is in 3D printing. It works great, but it does have some flaws if the part made is in the load path or in critical areas.</p> <p>Garrett Hall reported that ASARCO is short two positions, but with the strike going on now, they may be having more positions open.</p>

Open Discussion

There was discussion about recruiting for gender and ethnic diversity. In research by Dr. Munoz, she found that data showed a higher percentage of women in our manufacturing programs than the percentage of women working in the machining industry - 13 percent of female students at Amarillo College versus 5 percent females working in machining in the United States. Amarillo Gear reported one female on the shop floor running machines, one female in procurement and one female in the engineering area. One of their female employees is a past Machining student. Pantex has no women on the shop floor but one in the tool area and one in charge of materials. ASARCO, until recently, had one female in both maintenance and the machine shop and was only one in the history of the Amarillo plant. She was also a graduate of the Amarillo College Machining program. Dr. Munoz reported that sometimes grant funding can be tied to the non-traditional students. Many agreed that the image of the Machining industry keeps many females out of the career. It was suggested to make a video to take into high schools to use for recruiting.

The question came up about work-based learning - apprenticeships, internships or job shadowing - to give students the opportunity to come to industry to get experience. Amarillo Gear does some internships with WTAMU in the engineering area but are reluctant to put new people on the machines out on the shop floor. They also had a training program for a while with Tooling U. ASARCO is union shop and only has a closed apprenticeship for their machinists. It was explained that Technical Education has been charged to develop a system to get work experience for students. Dave Gibson from Caprock says we need to be looking at internship but it must reflect availability needed by industry. It was mentioned that the days of the traditional apprenticeship are a thing of the past in this region.

With no further discussion, the meeting was adjourned at 4:00 p.m..

Recorder Signature:



Date: December 13, 2019

Next Meeting: Tentatively Spring 2020