

VENTURA COLLEGE
Minutes of Manufacturing Advisory
Friday, November 3, 2021

Present: John Clark, Felicia Duenas, Mark Terryberry, Ray Elledge, Kevin Kuhn, Rene Rickard, Dick Herman, Scot Rabe, Dan Johnson, Wes Holser, Rebecca Evans Marina Luna, Holly Correa, Rebecca Evans, Donald Lee, Raquel De Los Santo, Ray Elledge, Steve Niel,

Recorder:

Minutes: Eileen Crump

Agenda Item	Summary of Discussion	Action	Assigned to:
Call to order	The Zoom meeting was called to order at 12:00 p.m. Attendees entered their names and company in the Chat.		John Clark
Program Update	<p>The industry demand for our graduates is very high. The Manufacturing Department is taking a 3-tier approach with students. This effort is being executed by Raquel De Los Santos, Placement Project Specialist, and Dick Herman, CTMAA.</p> <p>Three Tier Program Goals:</p> <ol style="list-style-type: none"> 1. Place students as apprentices. (Partner with CTMAA) 2. Direct employment of degree or certificate completers. 3. Continuation of training for students – degree/university. <p>The Manufacturing Technology Program has a new space the “Gene Haas Advanced Manufacturing Lab” located in the Applied Science Building at Ventura College. This space will be the center of Manufacturing Education for the community.</p> <p>The final piece of equipment Optical Inspection CMM Machine was installed and calibrated this week. Mike Bastine helped acquire the machine.</p> <p>There is strong student enrollment – all classes were full for the fall 2021 semester. (Although there is an 18-student cap due to COVID). Registration for the spring 2022 semester is now open. Low enrollment could be due to vaccine mandate for students.</p>		John Clark

	<p>The Manufacturing Technology Team has expanded now includes the following members.</p> <ol style="list-style-type: none"> 1. Roberto Garcia, Instructional Lab tech 2. Donald Lee, Teaching CNC II, CNC III, & MT V35 3. Darrell Gooden, Building the Advanced Manufacturing Technician Program 4. Steve Nial has developed custom training for Skyworks, Building a short-term soldering class, 5. Wes Holster, Auditing the electrical technician training 6. Paul Montgomery, Developing a “fun” project based curriculum for a high school camp. 7. Holly Correa, Program Director 8. Felicia Dueñas, Career Education Dean 		
Program Review	<p>Every year the Manufacturing Department reviews their program and create goals.</p> <p>Goal: Increase enrollment by 25% in three years. Consider making the manufacturing course description in the college catalogue less technical and easier for students to understand.</p> <p>Build pipeline to Ventura College Manufacturing Program by:</p> <ul style="list-style-type: none"> • Employers upscale your existing workforce by sending the to the Manufacturing department for advance training. • Recruiting high school students. Ventura Unified will be sending students to the Manufacturing Program 	.	Dr. Rene Rickard, Ray Elledge, Dick Herman
Curriculum Update	<p>CNC Machine Operator COA (New Program) 16 units of stackable classes for one certificate. Can be completed in one semester. Vote to create certificate.</p> <p>DRFT V02 = 54 Hours MT V04 = 54 Hours MT V05 = 72 Hours MT V08 = 90 Hours MT V10 = 72 Hours MT V15 – 3 Hours 16 units = 342 Hours</p>	Advisory Board voted to approve all certificates of achievements.	John Clark

	Local awards and awards under a certain amount of units were no longer going to be able to grant those at the community college level.		
Curriculum Update 2	<p>CNC Machinist COA (New Program) 12 Unit Certificate</p> <p>Stackable certificate Must complete CNC Machine Operator COA before you can earn CNC Machinist COA. To earn both certificates is 28 unites.</p> <p>MT V06 CNC 2 = 72 Hours = 2 units MT V07 CNC 3 = 72 Hours = 2 units MT V18 Manufacturing Projects (Capstone) = 72 Hours = 2 units MT V35 Production Machining = 90 Hours = 3 units DRFT V50 Flexible CAD = 90 Hours = 3 units</p> <p>Both Certificates 738 Hours</p>		John Clark
Student Learning Outcomes	<p>Current SLO assessments</p> <p>MT V04 - Description: This course is the occupational application of measurements and computations as used by technology students. Topics include geometric shape calculations, practical trigonometry, areas, volumes, ratio and proportion, units and conversions, decimals and fractions and applied algebra.</p> <p>Current SLO's</p> <p>CSLO-1 Students will be able to compare and contrast various geometric shapes.</p> <p>CSLO-2 Student will accurately read a micrometer to .0001 of an inch.</p> <p>CSLO-3 Student will compute areas and volumes of various geometrical shapes.</p> <p>.MT V10 - This is an introductory course dealing with the quality control field with special emphasis on part inspection/verification processes as applied to CMM & OM (coordinate measuring machine & optical measurement) technology. Open-end (surface plate) mechanical inspection principles are also covered.</p>		John Clark

	<p>Current SLO's</p> <p>CSLO-1 List the geometric tolerance symbols and the families to which each system belongs.</p> <p>CSLO-2 Interoperate flatness tolerances and the flatness tolerance zones</p> <p>CSLO-3 Measure straightness tolerances using direct or differential measurement methods</p> <p>Multiple tests are given throughout the entire program. Majority of test are on hands as opposed to theoretical test.</p>		
	<p>MTV08- Computer Numerical Control (CNC) Programming</p> <p>The course is an introduction to Computer Numerical Control (CNC) parts programming.</p> <p>Topics: CNC concepts, axis nomenclature, tooling, programming formats, manufacturing processes, Computer Aided Manufacturing (CAM), CNC milling and turning, program editing, speeds and feeds, and machine shop safety.</p> <p>Current SLO's</p> <p>CSLO-1 Student will manually create a g-code program that includes 5 operations.</p> <p>CSLO-2 Student will produce g-code program with relevant CAM software. (Opportunity to change SLO because the first 12 weeks is Mill and then the last weeks are Late)</p> <p>CSLO-3 Student will develop supplemental documentation for a given manufacturing process.</p> <p>Planning field trips to different manufacturing companies.</p>		John Clark
Advanced Manufacturing Program Elements	Short-term maintenance technology/manufacturing trainings key areas. 15 hours training, non-credit in partnership with Ventura College.		Darrel Gooden

	<p>Advanced Manufacturing Program Elements Duty Areas</p> <p>Duty Area 1 Maintenance Operation Duty Area 2 Basic Mechanical Systems Duty Area 3 Basic Hydraulic Systems Duty Area 4 Basic Pneumatic Systems Duty Area 5 Electrical Systems Duty Area 6 Electrical Control Systems Duty Area 7 Process Control Systems</p>		
Ventura college Advanced Manufacturing Program Support	<ol style="list-style-type: none"> 1. Responsibilities – Curate mutually beneficial relationships between Ventura College Advanced Manufacturing Program and Ventura County’s manufactures and industrial firms. 2. 2. Target Markets – Business & Industry (employees and new hires) 3. Survey Potential Participants – top 3 Duty Areas of interest to industry 4. Next 90 Days – initialize pilot 		Darrel Gooden
Apprenticeship Program Update	California Tooling and Machining Apprenticeship Association (CTMAA) are aware of 60 job opening in Ventura County manufacturing companies, but, not enough qualified candidates available.		Dick Herman
	Set up Technician Training Program – eight people enrolled. Skyworks model West Holsters audition this class and he is actually going to be the instructor in January. Industry are invited to send their employees to this affordable training.		Steve Niel
	Hovercraft – Amateur whole kit for a Hovercraft. John Clark gave Paul a project to flush out an amateur shole kit for a Hovercraft. Getting ready for the high school summer bridge program present to HS students. Kit was for college but changed for high school. Important High school student have a fun hands-on project that introduces them to manufacturing. Working with VC Business faculty developing workplace readiness component. Combining Technical skills with soft skills workforce (resume writing and interview techniques) preparation all at once, so that students come out of the class ready for immediate job.		Paul Montgomery K - 12
Job & Career Center	The Career Center is invested in the success of students and dedicated to the manufacturing program. Offers resources and staff to assist students who pursue the apprenticeship track or looking for direction, assistance and job placement. Strong employer partnerships who are invest in students recognize the value that students bring to their organization and provide competitive compensation.		Raquel De Los Santos

	<p>Purpose of the career center is job internship search and finding the best employer and position for that particular student. Hiring preparation to ensure that they have quality application documents interview preparation to help them with their presentation and ability communicate effectively. Support employers by meeting with them and try to understand the organization to discuss the recruitment. Current and future opportunities for students. Create a recruitment plan. March 7 – 11 will hosting Spring Career Fair.</p>		
	<p>Comment: Want to highlight and acknowledge Steve and West's work. Sat in a couple of sessions in this ideal setting for companies to and collaborate with Ventura college. Like following the Sky Works model. Ideal is to have several companies participate.</p> <p>Replicate who Steve and West have done</p> <p>Aerospace and Additive Manufacturers contacted VC to customized trainings. Ventura College is ready to meet business needs for Ventura county.</p>	<p>Holly will sent out surveys.</p>	<p>Darrell Gooden, Holly Correa</p>
<p>Adjournment</p>	<p>Meeting adjourned at 1:30 p.m.</p>		<p>John Clark</p>