

Manufacturing Technology Advisory Board Agenda

Meeting: Tuesday, 9/13/2011 @ 6:00pm

Location: Ankeny, Building 3E, Room 111 (conference room in Southwestern corner of 3E)

Recorder: Sue LaZella, Administrative Assistant, I & T Programs

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ATTENDEES: John Neumayer, Scott Ocken, Bryan Compart, Mike Rahn, Tom Kilkenny, Dennis Knittel, Mark Rosenberry, Vince Basile, David Kercheval

Absent: Richard Kacmarynski

Dinner was served at 6:00 to show our appreciation for members attending. Meeting was called to order at 6:15 pm.

Introduction of members

Background of Manufacturing Technology and Welding programs – John Neumayer gave a brief overview of the program. It began in the late 1990's as the "John Deere Team Scholars" program. Generic classes in courses such as Principles of Electricity were offered to students who could be potential employees of the John Deere Corporation and replace retirees etc. The classes that were offered were taught at DMACC by DMACC instructors. The program was renamed in early 2000 as the Manufacturing Technology program, but the classes offered were basically the same. Many of these courses are also found in the Tool and Die and welding programs.

Mike Rahn gave a brief overview of the current Welding program. Students earning a diploma in Welding must complete 750 clock hours of training, which usually takes about one year. It takes students taking the classes at night approximately 3 years to complete, since they don't go as many hours a week as the daytime students do.

Issues with current classes are that some courses in the Manufacturing Tech program are only offered once in awhile because they are unique to this program or due to low class numbers, the courses couldn't be offered as often. Also, there weren't classes in the curriculum that dealt with metal fabrication. Many of the Welding students are interested in becoming Certified Welding Inspectors. His current program does not offer any fabrication or inspection classes. Therefore, John and Mike have been in discussions about how these two programs could be combined into one new program that satisfies all these issues. We will need to vote on a name for the program and the tentative schedule of classes this evening so that this can be taken to the DMACC Curriculum Commission in October. The plan is to begin offering this program next fall, 2012.

Core Curriculum for any Associate's degree – John handed out a spreadsheet that shows the current classes the students in the Welding and Manufacturing Technology programs take, as well as a layout for the program we are proposing this evening. John and Scott explained how many credit hours it takes to earn an Associate Degree. The program must have:

- A minimum of 64 credit hours total
- 3 of these credits must be in Math
- 3 credits in English

- 3 credit distributed core class which we usually use Math
- 3 credits in Humanities

Our proposal has students earning 71 credits over a five semester period.

Project Lead The Way (PLTW) – John described this program as being a national program for middle and high school students. The curriculum is designed by PLTW, but taught by community college instructors who have to be PLTW certified to teach. Courses are typically broad based in nature, and we cannot change the curriculum. Mike Hoffman of the Program Development Office is the DMACC liaison for this program. According to him, there are approximately 800 students taking courses that can be accepted as DMACC college credit, this school year, and they are expecting this number to be approximately 1600 next year. After discussion, the committee decided to add PLTW courses as an option in the 2nd semester that students can take for credit. John will work with Mike Hoffman on what courses are available that would meet this program requirement.

New courses proposed –

- **Fabrication** – Mike Rahn discussed his desire to have Fabrication classes added to the Welding program as currently his students do not get much experience in this. Scott O. proposed have two Fabrication classes (4 credit hours each) as part of this program.
 - *Fabrication I could give students the directions, blueprints etc. for projects and students would have to build it. This could be set up as Capstone projects
 - *Fabrication II would give partial directions. Students would have to design the blueprints and make the project.
 Classes would be capped at 16 students per class due to space and equipment needs.
- **Welding Inspection** – The curriculum for this course would be set up so that students become familiar with American Welding Society codes and codes of other professional welding organizations. This course would prepare students to be able to pass the Certified Welding Inspection Test. After discussion, the committee decided to offer this class as an “option course” in the 5th semester as not everyone may want to become certified inspectors.
- **GD&T** – Mark Rosenberry talked about this course. Discussion followed.
- **Internship option** – Scott Ocken explained how internships work. The main thing is, we would need businesses to support this and hire the students to be interns. All Industry & Technology program internships are paid internships due to liability and workman’s comp. MFG 818, IMT Internship was part of the curriculum in the Manufacturing Technology Program, but few students took this class due to the shortage of businesses willing to participate. After discussion, the committee decided to keep this course in the curriculum and offer it as an “option course” in the 5th semester.

Other classes –

- Autocad, Solidworks, Inventor – After discussion, the committee decided to keep these courses in the curriculum. We will give students the option of which 3 credit CAD class they take: CAD 119, CAD 182 or CAD 184.

- Controlling Business Cost, Electricity, Robotics, SPC, TQM, Safety – The committee decided to remove from the existing program to keep all these classes as listed in the proposal.

VOTING: After much discussion, the new program name will be “**Advanced Manufacturing Technology**”. Mike Rahn made the motion that we approve the proposal, as amended. Motion was seconded by Bryan Compart. A vote was taken – all approved. Mike Rahn and John Neumayer will work together to get the paperwork completed so that this proposal can be submitted to the Curriculum Commission before the October 31st deadline.

No date was discussed for a future meeting, but we will send out notifications. John and Mike thanked everyone for participating and for being willing to serve on this Advisory Committee.

Meeting adjourned at 8:15 p.m.