

# Request for Tenure Track Faculty

**Program:** Manufacturing Technology

**Date:** October 13, 2015

**Initiator(s):** Mike Peterson

**1. Program(s) Supported by the Discipline:**

Manufacturing Technology, Industrial Technology, Computer Electronics Technology, Drafting Technology, Construction Technology, Automotive Technology

**2. Job Description. Separate requests are required for each position sought. Please indicate if this request is site specific and the location(s).**

Under the administrative direction of the Dean of Career and Technical Education, the successful candidate for this position will participate in the culture of assessment and continuous improvement to develop curriculum, provide lecture and laboratory instruction, evaluate student performance of students engaged in the study of mechanical sciences through Manufacturing Technology and Machine Tool Technology including turning, drilling, milling, grinding, material science, precision metrology, Computer Numerical Control (CNC), Computer Aided Design and Drafting/Computer Aided Manufacturing (CADD/CAM), Electro Discharge Machining (EDM), Robotics, and Mechatronics. Evening and weekend courses may be included in the regular teaching assignments. This position is based at the Eureka Campus, however some courses will be taught within the local Eureka area at off-site locations.

**3. Please check one of the following categories: Faculty Replacement Position, Growth Position or New Program/Discipline. Provide related information. (0-5 Points)**

**Faculty Replacement Position (check one)**

- Stable or growing discipline or program needs replacement for FT faculty who have left within this academic year
- Stable or growing discipline or program needs replacement for FT faculty who have left within 1-2 years
- Stable discipline or program needs replacement for FT faculty who have left within three-four years
- Stable discipline or program can justify replacement for FT faculty who have left within five years or more
- Outside accreditation is at risk without FT hire

***Provide justification and documentation. Include when the position became vacant and the incumbent to be replaced.***

N/A

### **Growth Position (checkone)**

- Enrollment data over past two years indicate program is *growing*
- Enrollment data over past two years indicate program is *stable*
- Enrollment data over past two years indicate program is *declining*
- Independent marketing or other data indicate growth potential

#### ***Provide justification and documentation.***

Program review data indicate that in 2014-2015, enrollment increased by 21%, establishing a five-year high in program enrollments. The FTES/FTEF ratio increased by 4.94 to 26.36, also a five-year high. The MT program FTES/FTEF ratio was higher than the District average for 2014-2015.

The MT program is a single-full-time-faculty discipline with limited Associate Faculty, thus, the existing faculty routinely works overload every semester. As this program grows, it will be even more difficult to serve students to complete their degree and certificate requirements in a two-year cycle.

Local high schools have requested MT courses as a viable option for concurrent enrollment offerings, which could help expand the program into Del Norte County. The MT program supports one of Humboldt County's "Targets of Opportunity" economic plan areas where niche manufacturing is identified as having experienced higher than average job growth and wages. This area is projected to continue to perform well in creating living-wage jobs.

### **New Program/Discipline Position**

- Program Initialization process complete
- State curriculum approval complete
- Program has grown significantly without FT faculty
- Independent marketing data suggests viability of new program

#### ***Provide justification and documentation.***

N/A

### **4. FT/PT Ratio: Indicate which statement/s are confirmed by the data: (0 -5 points)**

- Program has no full-time faculty
- FT/PT ration below 50/50 percent
- FT/PT ratio below 60/40 percent

- FT/PT ratio below 75/25 percent
- FT/PT ratio results in critical lack of effective oversight for associate faculty
- Reliable pool of well-qualified associate faculty is unavailable

*(In the case of non-teaching faculty positions, the criteria will be the deviation from norms obtained from like institutions)*

**Provide justification and documentation.**

Over the past ten years, the MT program has advertised for Associate Faculty positions with very few responses each time. The college has been advertising MT positions for the past several months and there has been little progress toward finding qualified applicants. Through networking, MT program faculty have identified a few qualified individuals that have expressed interest in part-time work, however these contacts are generally planning future options and are not immediately available. This discipline has a hiring hurdle in that qualified individuals are well-paid in industry and have broad opportunities.

**5. Program/Student Outcomes (0 – 5 points)**

Provide a narrative justifying need for full-time faculty in order to maintain and/or improve program and student learning outcomes (one-page max), based on the following: (0 – 5 points)

- Demonstrate a clear need for FT faculty in order to maintain program outcomes
- Justification demonstrates a clear need for FT faculty in order to achieve student learning outcomes

**Narrative:**

The MT program includes oversight of the CET discipline and certain IT courses. These disciplines share the same difficulty of finding qualified Associate Faculty. In the case of CET, it has been difficult to offer courses regularly and CLOs are not being assessed on a regular basis due to lack of faculty. Hiring a second full-time faculty for the MT program will allow the program to better support the related CET and IT courses as well as offer more courses, in various formats including Distance Education, Experimental, and Noncredit, and in other locations such as the local high schools. By offering a larger variety of courses, a greater number of students will become well-rounded in this discipline and will likely be more successful. For example, a basic PLO for MT is directly related to setting up various manual machine tools. Achieving this outcome is fundamental to college level machine tool technology, but this outcome requires a set of skills relative to basic hand-tool use and general mechanical concepts. So, an additional course could be developed in basic mechanics and hand tools, giving many students better preparation for learning how to set up various manual machine tools.

Similarly, a particular fundamental course outcome is directly related to using precision measuring instruments. Because this outcome is principal in student success of advanced course outcomes, a logical choice is to create a course entirely devoted to precision metrology and quality, giving many students better preparation for understanding precision measurement.

This hire will help to achieve SLOs because students would be much better prepared to achieve principal outcomes to the discipline if they had additional coursework related to those outcomes.

These newly developed courses can be assembled into new MT credential options including stackable and Noncredit certifications.

This discipline is complex and broad, and more courses will give the program an opportunity to broaden the platform of technology that it covers. A new faculty position will help to improve student performance on outcomes, and it will also improve the entire outcomes assessment process by allowing more dialog, more data, new instruments, and more ideas for improving and writing course and program outcomes.

## REDWOODS COMMUNITY COLLEGE DISTRICT

### **RUBRIC FOR PRIORITIZING FULL-TIME FACULTY POSITIONS**

<b>Faculty Replacement Position</b> <ul style="list-style-type: none"><li>• Stable or growing discipline or program needs replacement for FT faculty who have left within this academic year</li><li>• Stable or growing discipline or program needs replacement for FT faculty who have left within 1-2 years</li><li>• Stable discipline or program needs replacement for FT faculty who have left within three-four years</li><li>• Stable discipline or program can justify replacement for FT faculty who have left within five years or more</li><li>• Outside accreditation is at risk without FT hire</li></ul>	OR	Points (0-5):
<b>Growth Position</b> <ul style="list-style-type: none"><li>• Enrollment data over past two years indicate program is <i>growing</i></li><li>• Enrollment data over past two years indicate program is <i>stable</i></li><li>• Enrollment data over past two years indicate program is <i>declining</i></li><li>• Independent marketing or other data indicate growth potential</li></ul>	OR	
<b>New Program/Discipline Position</b> <ul style="list-style-type: none"><li>• Program Initialization process complete</li><li>• State curriculum approval complete</li><li>• New program has shown significant growth without FT faculty</li><li>• Independent marketing data suggest viability of new program</li></ul>	OR	
<b>FT/PT Ratio</b> <ul style="list-style-type: none"><li>• Program has no full-time faculty</li><li>• FT/PT ration below 50/50 percent</li><li>• FT/PT ratio below 60/40 percent</li><li>• FT/PT ratio below 75/25 percent</li><li>• FT/PT ratio results in critical lack of effective oversight for associate faculty</li><li>• Reliable pool of well-qualified associate faculty is unavailable</li></ul> <p>(In the case of non teaching faculty positions, the criteria will be the deviation from norms obtained from like institutions)</p>	Points (0-5):	

<b>Program/Student Outcomes</b>	Points (0-5):
<ul style="list-style-type: none"> <li>• Narrative justification demonstrates clear need for FT faculty in order to maintain program outcomes</li> <li>• Narrative justification demonstrates clear need for FT faculty in order to achieve student learning outcomes</li> </ul>	
<b>Other (Shared Interest)</b>	Points (0-5):
<ul style="list-style-type: none"> <li>• Shared interest determined by the Faculty Prioritization Committee. Scoring rubric will be mutually agreed and will be based on the nature of the shared interest.</li> </ul>	
<b>TOTAL</b>	