



To: Math Department faculty

From: APR response team

Re: Academic Program Review

As one of the first disciplines to undertake Academic Program Review, the Math Department did a stellar job of self-analysis, describing the program to the COCC community, and explaining the program's goals for the future. The level of engagement of both FT faculty and PT faculty members was particularly noteworthy; the passion and commitment of your faculty was evident in your presentation.

The Math Department has some unique characteristics, many of which are related to the collaborative nature of your department. You are a close knit and collegial group with an office space designed to promote regular informal interactions. These informal encounters are supplemented with frequent Departmental meetings including Friday brainstorming/problem-solving sessions where you work together on whatever issues arise. Holding office hours in the math tutoring center is also a great way to build a sense of community. This high level of collaboration extends to your colleagues in other areas, as evidenced by your responsiveness to the needs of specific CTE programs and your strong alliance with high schools through College Now and Cascades Commitment.

Assessment is an area where you have made significant strides and are to be commended on your efforts. 100% of Math courses have SLOs which are assessed regularly. Your approach of collecting and analyzing Outcome data across sections of a single course provides more useful data on student achievement than assessing individual sections in isolation. This systematic process for assessing student learning is well designed to ensure that all sections of the course have appropriate content and rigor. You acknowledge that some course SLOs need updating, the assessment cycle should be more consistently implemented, and that the data could be more deeply analyzed in some cases, but you have made a great start on implementing a thorough assessment of student learning. You are also starting to apply these techniques to assessment of the General Education Outcomes which may further influence the design of your courses.

Another area of excellence is the work you have done on redesigning your developmental math courses. In the past few years you have significantly updated many of the pre-college level courses and, with Title III support, are taking further steps to accelerate student progress through this sequence. Creation of a course sequence for non-STEM students (Math 58-98) is a major innovation intended to provide a parallel pathway for students who might have struggled with the traditional calculus-facing series. By making the material relevant to everyday life and possible careers, you increase the probability of success for this student population. It will be interesting to compare the success rates for students who choose this route with past trends.

You identify the online math courses as an area for improvement, with the developmental courses being particularly challenging. By removing MTH 10 and 20 from the online options and creating an Online Teaching Work Group, you are addressing this issue. As this group establishes minimum standards and best practices for online math courses, student success rates should improve.

Offering classes in Madras and Prineville is another area where external factors present a challenge. The lack of faculty qualified to teach 100+ level courses and long travel times to these campuses makes staffing difficult. Adding low and inconsistent enrollment to the staffing issues creates an environment where it is difficult to meet student needs with the limited resources available. You are to be commended for your persistence in trying to find a viable mechanism for meeting the needs of these students. Hopefully your pilot project with streaming classes will prove to be a partial solution.

As part of the Academic Program Review process, program goals for the next five years are determined, areas are identified where additional support could help reach these goals. Please see below for a response to each of these goals and requests:

Goals:

The Math Department's list of goals is impressive and ambitious:

- Improve technological resources
- Determine a sustainable system for scheduling classes and providing support in Madras and Prineville
- Improve assessment and data analysis
- Improve placement and advising
- Build on collaborations with curriculum stakeholders
- Formalize collaborative professional growth within the department
- Continue to make curriculum improvements

You will need to prioritize these goals and distribute the work among the members of your department in order to make progress in all (or most) of these areas. You are already making progress with placement, improving technological resources, and providing support for Madras and Prineville. These should continue to be top priorities. In addition, you should have completed the calendar for your educational assessment cycle by November 2017, although it will take several years to complete the assessment, analysis, closing-the-loop cycle. Curriculum work, both curriculum improvements and collaborations with other disciplines, is an ongoing process, as is the evolution of departmental professional development.

Requests

Additional full-time faculty - There is a process in place for requesting new faculty positions. Please work with your Department Chair to create this request during Spring term 2018, to be considered by FIAT and the President in early 2019.

Classroom and department technology updates – There are three new flexible learning technology classrooms in Cascades Hall that will become available in Winter 2018. Work with your Department Chair and Instructional Dean to request use of some of these classrooms for some of your courses. If there are specific technology needs, work with your Department Chair and

Instructional Dean to submit a request during Fall term 2017, to be considered by FIAT and the President in early 2018. Depending on the scope of the project, it may need to go through the Technology Advisory Committee, as well.


Technological solutions to North Campus scheduling concerns – The pilot project in Fall of 2017 should provide important information about what resources are needed to make streaming into a viable option. Once this project is underway and you have a better idea of the support needed, work with your Department Chair and Instructional Dean to submit a request during Fall term 2017, to be considered by FIAT and the President in early 2018. Depending on the support needed, it may be possible to make some changes within the existing budget.

Budget to pay part-time faculty for professional development - \$500 per year is available to adjunct faculty members for professional development. Unused funds will accrue up to \$1000 (14.2 (b) of the collective bargaining agreement). At this time, there is no regularly established system in place for PT faculty members to receive professional development funding; all requests are made individually to the Vice President of Instruction. A more systematic approach is needed, however, and the Vice President of Instruction is investigating mechanisms for funding PT faculty professional development.


Technology and/or support services for developmental math acceleration – The Title III grant provides funding and release time for this project. Over the next four years, the goal is to determine what changes need to be institutionalized and what level of additional support is needed for the changes to be sustainable.

The Math Department has one of the most vibrant and collaborative groups of faculty members at COCC, as demonstrated by the high proportion of faculty participating in this program review. With the ongoing Title III efforts at revising the Developmental Math curriculum and the placement process, there will be many changes in the Math Department. This, and the implementation of technological solutions to the challenge of providing support for students at all campuses, will keep the math faculty busy for the coming years. We are confident that you will work towards these goals in your usual collaborative and creative manner.

Respectfully yours,


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