**Academic Program Review Committee**

**Program: MATH CM3**

**Date Reviewed: 10/04/18**

**Re-submission Due Date: Mid-November 2018**

* **General Comments:**  Throughout the document, emphasize the implications of the TEACH program with regard to enrollment, curriculum, vision, and staffing.

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| 1. **Overview of the Program** | **Comments** |
| 1. Provide a brief narrative description of the current program, including the program’s mission statement and the students it serves. | * In 2nd paragraph – if the last sentence is not part of the verbiage of the program mission statement, distinguish it from the previous one (e.g., present the verbiage of the mission in quotes or italics). * As this section represents an “executive summary” for the program, emphasize program ***highlights*** (e.g., alignment with lower-division major requirements for Liberal Studies programs at 4-years; recent CSUDH requirement that MATH sequence be completed at CCC) * Introduce program’s ***key needs***/***recommendations*** in this section (e.g., designation of one of the full-time instructors to teach MATH 115; designated lab for MATH 116; updated software) * Consider ***re-organization of content***:   + In second to last sentence of 3rd paragraph, clarify that MATH 111 has not been offered because it was replaced by MATH 115 and 116 which represent the content in two separate courses (perhaps with a parenthetical note that the background of the curricular change is discussed elsewhere in the section)   + Move 1st full paragraph on P. 4 (“… *courses attract predominantly* …”) so that it immediately follows the 3rd paragraph on P.3   + Insert a heading (e.g., Background of Math for Teachers course sequence”) before the paragraph which begins “*Mathematics content courses for pre-service teachers have been offered* …” |
| 1. Describe the degrees and/or certificates offered by the program. | * Carolyn P. may be able to provide data regarding transfer rate among completers of program courses |
| 1. Explain how the program fulfills the college’s mission and aligns with the strategic initiatives. (see Appendix A) | * P. 6 (#3) – Add verbiage regarding collaboration with counselors, other campus offices/programs, and 4-year institutions * P. 6 (#5) – Refer to program’s work related to learning outcome assessment * P. 6 (#6) – Provide examples of “technology” referenced in the response |
| 1. Discuss the status of recommendations from your previous program review. | * P. 6 – Change status to “Complete” * P. 7 (#4) – Reword the *Notes/Comments* to reflect what is currently happening vs. what is/was recommended * P. 7 (#5) – Reword the *Notes/Comments* to clarify whether or not a plan has been developed or currents versions of software are being used. |
| 1. **Analysis of Research Data (include data provided by Institutional Research & Planning)** | |
| **Provide and analyze the following statistics/data** | **Comments** |
| 1. Head count of students in the program | * Add ***narrative analysis*** of the data * Note that headcounts were higher when the college had a teacher education program and that higher enrollments are expected with new TEACH program |
| 1. Course grade distribution | * Add ***narrative analysis*** of the data |
| 1. Success rates (Discuss your program’s rates in light of the college’s success rate standard. Set a standard for your program.) | * Although no conclusions can be made about performance of subgroups of students, add narrative analysis of overall success rate (e.g., as represented in Tables II and III) * Emphasize the high retention rates |
| 1. Retention rates |
| 1. A comparison of success and retention rates in face-to-face classes with distance education classes | * Add brief statement describing how program courses are not well-suited for distance education based on the importance of hands-on instruction and practice (e.g., manipulatives) |
| 1. Enrollment statistics with section and seat counts and fill rates | * P. 12 – Present again some explanations for the decrease in enrollment (e.g., loss of target student population when teacher training program discontinued; students interested in teaching being advised to transfer first then complete the coursework at 4-year institution) |
| 1. Scheduling of courses (day vs. night, days offered, and sequence) |  |
| 1. Improvement rates (if applicable) | * P. 19 – Describe the plan in general in this section, and move the enumerated recommendations to item #J |
| 1. Additional data compiled by faculty |  |
| 1. List any related recommendations. | * Emphasize collaboration with the TEACH program in particular in 1st recommendation * Consider recommendation related to alternate strategies for identifying and addressing any performance gaps among student subgroups |
| 1. **Curriculum Review** | **Comments** |
| 1. Provide the curriculum course review timeline to ensure all courses are reviewed at least once every 6 years. |  |
| 1. Explain any course additions to current course offerings. |  |
| 1. Explain any course deletions and inactivations from current course offerings. |  |
| 1. Describe the courses and number of sections offered in distance education. (Distance education includes hybrid courses.) |  |
| 1. Discuss how well the courses, degrees, or certificates are meeting students’ transfer or career training needs: |  |
| 1. Have all courses that are required for your program’s degrees and certificates been offered during the last two years? If not, has the program established a course offering cycle? |  |
| 1. Are there any concerns regarding program courses and their articulation? |  |
| 1. How many students earn degrees and/or certificates in your program? Do students take licensure exams? If so, what is the pass rate? If few students receive degrees or certificates or if few students pass the licensure exam, should the program’s criteria or courses be re-examined? Set an attainable, measurable goal |  |
| 1. List any related recommendations. |  |
| 1. **Assessment and Student and Program Learning Outcomes (SLOs & PLOs)** | **Comments** |
| 1. Provide a copy of your alignment grid, which shows how course, program, and institutional learning outcomes are aligned. |  |
| 1. Provide a timeline for course and program level SLO assessments. |  |
| 1. State the percent of course and program SLO statements that have been assessed. |  |
| 1. Summarize the SLO and PLO assessment results over the past four years and describe how those results led to improved student learning. Analyze and describe those changes. Provide specific examples. | * P. 18 – Provide anchor points for the rubric scoring scale |
| 1. Describe how you have improved your SLO process and engaged in dialogue about assessment results. |  |
| 1. Discuss any findings from SLO/PLO assessments that help to justify recommendations. |  |
| 1. List any related recommendations. | * Include any no-cost recommendations related to specific action items from learning assessment reports (particularly as they subsequently may be used as rationale for requesting funding for related professional development activities):   + Explore alternate instructional strategies for teaching binary operations and for teaching students how to solve and design application problems   + Enhance instruction related to error recognition and explaining geometric formulas |
| 1. **Analysis of Student Feedback** | **Comments** |
| 1. Describe the results of relevant surveys in each of the following areas: |  |
| * + 1. Student Support |  |
| * + 1. Curriculum |  |
| * + 1. Facilities, Equipment, and Technology |  |
| * + 1. Program Objectives |  |
| 1. Discuss the implications of the survey results for the program. |  |
| 1. Discuss the results of other relevant surveys. |  |
| 1. List any related recommendations. | * Add recommendation for ongoing funding support for professional development activity related to the points made in #B on P. 31 (e.g., students communicating mathematical ideas both verbally and in writing) * Add recommendation related to collaboration with Library to identify ways to support students * Consider recommendation about collaborating with Institutional Research and Planning to explore the relationship between PLO performance and various class behaviors or student attributes. |
| 1. **Facilities and Equipment** | **Comments** |
| 1. Describe and assess the existing program facilities and equipment. |  |
| 1. Explain the immediate (1-2 years) needs related to facilities and equipment. Provide a cost estimate for each need and explain how it will help the program better meet its goals. |  |
| 1. Explain the long-range (2-4+ years) needs related to facilities and equipment. Provide a cost estimate for each need and explain how it will help the program better meet its goals. |  |
| 1. List any related recommendations. | * Add recommendations presented in #B and #C on P. 33 * Add the renewal of warranties to the recommendation related to creating a cycle for maintenance, repair, and replacement of any facilities and equipment * Link recommendations to the assessment and survey results, as applicable (e.g., need for additional manipulatives to support instruction related to communicating mathematical concepts) |
| 1. **Technology and Software** | **Comments** |
| 1. Describe and assess the adequacy and currency of the technology and software used by the program. |  |
| 1. Explain the immediate (1-2 years) needs related to technology and software. Provide a cost estimate for each need and explain how it will help the program better meet its goals. |  |
| 1. Explain the long-range (2-4+ years) needs related to technology and software. Provide a cost estimate for each need and explain how it will help the program better meet its goals |  |
| 1. List any related recommendations. | * Include renewal of licenses to the recommendation related to creating a cycle for maintenance, repair, and replacement of any technology and software |
| 1. **Staffing** | **Comments** |
| 1. Describe the program’s current staffing, including faculty, administration, and classified staff. | * In line #7 of the 1st paragraph, clarify that program is **not** requesting a *new hire* but rather the designation of an existing full-time instructor to teach MATH 115. |
| 1. Explain and justify the program’s staffing needs in the immediate (1-2 years) and long-term (2-4+ years). Provide cost estimates and explain how the position/s will help the program better meet its goals. |  |
| 1. List any related recommendations. | * In line #7 of the 1st paragraph, clarify that program is **not** requesting a *new hire* but rather the designation of an existing full-time instructor to teach MATH 115 * Consider recommendation for additional SI coaches to support student success (link to learning outcome assessments and student surveys, where applicable) |
| 1. **Future Direction and Vision** | **Comments** |
| 1. Describe relevant changes within the academic field/industry. How will these changes impact the program in the next four years? |  |
| 1. Explain the direction and vision of the program and how you plan to achieve it. |  |
| 1. List any related recommendations. | * Add recommendation related to future collaboration with the TEACH program * Add recommendation related to future collaboration with local 4-years (e.g., designated faculty to represent the program/college on advisory boards of Liberal Studies and other education-related programs) |
| 1. **Prioritized Recommendations** | **Comments** |
| 1. Provide a single, prioritized list of recommendations and needs for your program/department (drawn from your recommendations in sections 2-8). Include cost estimates and list the college strategic initiative that supports each recommendation (see Appendix A). Use the following chart format to organize your recommendations. | * Ensure that all recommendations enumerated in previous sections are included in this single prioritized list |
| 1. Explain why the list is prioritized in this way. |  |