



PROGRAM REVIEW

Instructional Program Review Template

| Year : | Plan Type: | Program : | | |
|-------------|------------------------|------------------------|-------------------------|---------------------------|
| 2018-2019 🗸 | (select a plan type) 🗸 | Mathematics | v | Save My Work |
| | | | Last edited on 4/3/207 | 19 by R-EUREKA\Angelina-H |
| | | | Submitted on 11/1/207 | 18 by R-EUREKA\Angelina-H |
| | | | Reviewed on 3/1/2019 by | R-EUREKA\Stephanie-Burre |
| Drogram | Data Critical Defle | ation of Evoluation of | (Decourse) Aut | hor DDC |

| Program | Data | Critical Reflection of | Evaluation of | | Resource | Author | PRC |
|-------------|----------|------------------------|----------------|----------|----------|----------|----------|
| Information | Analysis | Assessment Activities | Previous Plans | Planning | Requests | Feedback | Response |

5.1 Program Plans

Based on data analysis, student learning outcomes and program indicators, assessment and review, and your critical reflections, describe the actions to be taken for the next academic year in order of importance (from #1 at the top = highest priority and down from there).

Please be specific. This section and section 6 should include a detailed justification so that the resource prioritization committees understand your needs and their importance. Plans should be actionable, measurable and <u>not just resource requests</u>.

List related institutional planning goals.

| Program Plans | Related Institutional | Relationship to | Expected Impact on | Resources | |
|---|---|---|--|-----------|----------------------------------|
| Consider consolidating program learning outcomes for the Liberal Arts and Associate for Transfer mathematics degrees. | Planning Goals Educational Master Plan: Employ clear and transparent processes for core operations and decision- making | Previous Assessment This plan came out of dialogue regarding assessment of the LA-Math PLO#2. And, a similar discussion occurred with assessment of the Math for | Program/Student Learning Having one set of outcomes should allow better focus on improving both programs and ensuring student achievement of program outcomes | Needed | Edit Delete Raise Priority |

| 2 | Develop a "Foundations of Algebra" course for potential STEM students who place below the College Algebra level (using new AB705 guidelines). | Related to Educational Master Plan (EMP) goals: 5) Strive to eliminate achievement gaps across student groups. a) Enhance support of basic skills students. Also related to Annual Plan initiative to increase persistence and students transferring to 4-year institutions. | Faculty discussed the low success rate and assessment results in math classes overall, and in courses such as Math 380, Math 120, Math 30 specifically. Assessments of CLOs in these courses show that 10% to 40% of the students in these course typically do not achieve the course outcomes (Math 380, CLO #1, Sp17; Math 120 CLO #1,14-15 report; CLO #2 14-15 report; Math 30. The purpose of this plan is to improve success at the pre-transfer algebra level and increase success in Math 30 (for STEM majors). | Delivery of this course will allow students at the "below Algebra II" level in high school to have access to College Algebra. Additionally, a "foundations" course should improve learning through the STEM sequence of mathematics course (through Calculus). | No | Edit Delete Raise Priority Lower Priority |
|---|--|---|---|---|-----|--|
| 3 | Develop more online transfer- level math options to provide access to students. Develop online contemporary Mathematics course (Math 5). | Educational Master Plan: Effectively use all learning modalities to provide s tudents the knowledge and skills they need to succeed. • Enhance quality and expand access to distance learning education. | This is a plan about access, and was supported as a "high priority" through the contractual process. | This will provide additional student access. Administrators at the KT campus have requested this option. | Yes | Edit Delete Raise Priority Lower Priority |
| 4 | Provide faculty training and workshops related to implementation of the support courses for Math 15 and Math 30. | This plan supports EMP goal #1: "provide accessible, affordadable, high-quality education". This also supports the following initative under the Annual Plan goal of student success: "Carry out recommendations of the Transfer Task Force to increase transfers to 4 - year colleges" | Faculty discussed low success rate and assessment results in assessments of Math 15 and 30. Assessments of CLOs in these courses show that 10-40% of students in thse courses typically do not achieve the course outcome: Math 30, CLO#1 14-15 report; Math 15, CLO #1,Sp17. | Improved success in Math 15 and Math 30, and consequently an increase in degree completions. This should also allow more students to complete their math degree requirements within the first year of attending CR. | Yes | Edit Delete Raise Priority Lower Priority |

| 5 | Provide computer-based learning resources that allow students to effectively engage in group work and to use the wide array of visualization and learning resources available through software and online. This mode of learning requires students have access to a computer classroom. | Education Master Plan Goal: Employ state -of-the -art technology, equipment, and facilities throughout the District to support learning and institutional performance. • Improve technology throughout the District • Carry out technology infrastructure upgrades at each location • Carry out facility infrastructure upgrades at each location. | Dialogue related to PLO #1 of the F17 assessment led to a discussion regarding the need for additional computer facilities. Math 55, CLO#1, S18 cites the difficulty in achieving course outcomes with the current computer facilities. An open loop was created to address this need for an additional computer classroom in the science building. | Better acceess to computer- classrooms will aid the learning in a variety of courses. With the AB705 mandated changes, there will be an increased demand for using technology to implement support and review courses, as well as to support the technology needs of classes such as statistics, calculus, differential equations, and programming (Math 3 an 4). | Yes | Edit Delete Raise Priority Lower Priority |
|---|--|--|--|---|-----|--|
| 6 | Evaluate the continued need for Math 380 and Math 376. The CORs for these courses are planned for Spring updates. Since these courses are not planned to be scheduled for the 19-20 academic year, the department needs to consider longer-term need of these courses | S.P.Goal#1: SP.1. Focus on Learners: Developmental, Career Technical, and Transfer Education. Also P.1 Ensure Student Success. Related to objectives: 1. Match student readiness with educational pathways. 2. Continuously assess and evaluate programs to provide effective educational programs and services for all learners | This plan is a consequence of AB705 and the extensive assessment of student performance and advancement through course series. It is not a specific result of CR assessment. | The impact is better advising in terms of the needs for these courses. If there is a need, then they would be retained in the catalog as a potential math course for students. If they are inactivated, then the student would be aided by not assuming these classes are offered on a regular basis. | No | Edit Delete Raise Priority Lower Priority |
| 7 | Provide students with reliable resources to succeed in math review and support courses. Find MyOPen Math replacement models to use in Math 301,302,303 (as replacement for OPTIMATH). | S.P.1, Objective 2: 2. Continuously assess and evaluate programs to provide effective educational programs and services for all learners. And EMP Goal: Employ state -of-the -art technology, equipment, and facilities throughout the District to support learning and institutional performance. • Improve technology throughout the District. | OPTIMATH is referenced in the Math Review course outcomes. Assessment dialogue has included discussions of student and faculty frustrations of OPTIMATH and how it functions on various computers and browsers. | This is anticipated to result in a better student learning environment, where students and faculty can focus on content rather than software issues. | Yes | Edit Delete Raise Priority Lower Priority |

| 8 | Evaluate Math Lab curriculum and physical location. The faculty will consider only offering a non-credit Math Lab option. The faculty will also consider a move of the Eureka Campus Math Lab to a different location within the LRC. | S.P.1, Objective 2: 2. Continuously assess and evaluate programs to provide effective educational programs and services for all learners. | This plan is based on faculty dialogue regarding the popularity of the non-credit Math Lab option as well as the large amount of work required to assess outcomes from multiple Math Lab courses. Assessment would be streamlined, and potentially more meaningful, if there was only one Math Lab course (252). | Non-credit option is more flexible for student schedules and finances. A new consolidated location may make the lab more visible to students. | No | Edit Delete Raise Priority Lower Priority |
|---|---|---|---|---|------|--|
| 9 | Ensure successful Math Lab coordination. This includes recording of student hours, scheduling of faculty and student tutors, calculator rentals, and other logistical aspects of the Math Lab | SP1.3 Students will be able to complete their desired educational goals; SP1.4 Enhance student support and student engagement; . EMP1.2 Improve support for students and EMP1.4 Increase transfers and degree and certificate completions | Each of the Math Lab courses include outcomes that require support within the lab to be achieved. | Students will be supported in the Math Lab and receive appropriate instruction. Calculators will be available to students to support their success in courses. | Yes | Edit Delete Raise Priority Lower Priority |
| | | | | | No v | Add |

The vision for success goals are institutional planning priorities for the next several years. You can find the full Vision for success document at this link (<u>Vision for Success Goals</u>). Please comment on how your area is planning to address the following during this academic year:

- 1. Increase the number of completers (including AA-T degrees, AA/AS degrees, and certificates)
- 2. Decrease the number of average total units a student must take to complete (For example, a discussion of Guided Pathways work in your area might be appropriate here, or larger efforts your area is undertaking to decrease total units to completion)
- 3. Equity (What is your area doing to promote equity across student groups?)
- 4. Increase the number of students finding living-wage work in a related field of study (CE areas only need to complete this section)

Many of these plans are related to moving the District toward compliance with AB705. The intent of AB705 is to increase persistence by allowing students to meet their degree and transfer mathematics requirements in a more efficient manner. Plans #2 through #8 all facilitate better support of students as they pursue their mathematics requirements. For example, the implementation of a "Foundations of Algebra" course (plan #2) will support students who have an academic goal of transferring as a STEM major. The implementation of this plan would allow a student to progress to College Algebra by the end of their first year. This persistence is improved from the previous longer series of developmental course that may have led to a longer sequence and ultimately to a student not persisting in their goal to pursue a STEM degree.