Mathematics Program Review Spring 20014

1. Briefly outline the department’s/program’s core goals and priorities for the next three years using the table below, and describe the rationale (e.g., supporting data, information, reasoning, etc.) for the goals in a short narrative following the table.

Complete the table by: 1) stating your department’s/program’s goals for the next three years; 2) selecting if the goals are ongoing or new (all of your goals will be “new” this time); 3) aligning each department/program goal with LAMC’s Strategic Plan/Educational Master Plan goal(s), department/program SLOs/PLOs, and/or LAMC’s ILOs; 4) selecting the status of each goal (this time all of your goals will be “ongoing” or “delayed pending resources” because all of your goals are new); 5) reporting progress on stated goals and/or your planned activities to achieve the goals (this time you will only be reporting on planned activities since all of the goals are new); and 6) stating the anticipated outcome(s) and timeline of completion of the stated goals. There is no minimum or maximum number of goals you should set, but you may add rows to the table as needed.

### DEPARTMENT/PROGRAM 3-YEAR PLAN

<table>
<thead>
<tr>
<th>Department/Program Goal</th>
<th>Type of Goal</th>
<th>Alignment with LAMC Strategic Plan/ Educational Master Plan Goal(s), Department/Program SLOs/PLOs, and/or LAMC’s ILOs</th>
<th>Status</th>
<th>Progress Made Toward Goal and/or Planned Activities to Achieve Goal</th>
<th>Anticipated Outcome(s) of Goal and Timeline of Completion</th>
</tr>
</thead>
</table>
| Evaluate/develop Mathematical Literacy curriculum (Non-STEM pathway to graduation) | New | 1. Reduce exit points in remedial Math pathway.  
2. Create alternate path for CTE/Non Stem students  
3. Prepare students to effectively use practical mathematics and critically interpret data. (Math/Info Competency) | Ongoing | 1. Research best practices (PCC), 3CSN Cap schools, etc.  
2. Consult with CTE disciplines.  
3. Decide whether to proceed with curriculum development. | 1. Begin curriculum development if applicable.  
2. Curriculum developed and through committee. Spring 2015.  
3. Schedule pilot sections in Fall 2014 (with funding) or when course is listed in current catalog. Fall 2016.  
4. Review effectiveness of pilot program and scale up offerings if applicable. |
| Scale up Math 137 course offerings (Non-STEM pathway to transfer) | Ongoing | 1. Reduce exit points in remedial Math pathway to Math 227.  
2. Create alternate transfer path for Non Stem students. (Math/Info Competency) | Ongoing | 1. Two sections of Math 137 were taught in the 2013 academic year. Analyses of the results were encouraging.  
2. Two faculty will attend training in June 2014 to prepare them to teach this course.  
3. Two sections of Math 137 are scheduled for fall 2014. Math  | 1. Gather data to further analyze the effectiveness of the course, spring 2015.  
2. Add additional sections for the 20015 academic year if applicable, fall 2015. Reduce Math 115 and M125 125 offerings  
3. Evaluate the STEM track |
Evaluate effectiveness of Math 129 accelerated STEM track courses

| Evaluate effectiveness of Math 129 accelerated STEM track courses | Ongoing | Reduce exit points in remedial Math pathway. (Math/Info Competency) | Ongoing | 1. The Math 129 A,B sequence is being offered in the 2013 academic year. 2. Offer the sequence again in the 2014 academic year. | remedial curriculum and possibly recommend changes to better serve these students, spring 2015 |

**What is the rationale (e.g., supporting data, information, reasoning, etc.) for these goals that you have stated for your department/program?**

District-wide, more than 67% of students take Statistics, Math 227. Since the prerequisite course, Math 125, is sufficient for graduation, it is reasonable to assume that most of these students take Math 227 to meet transfer requirements in the non-STEM disciplines. Curriculum that would reduce the exit points and preparation time required for Math 227 should increase success rates and prepare students for transfer earlier.

The following is a summary of LAMC data from the CCC Chancellor’s office for the period Fall 2011 to Spring 2013.

<table>
<thead>
<tr>
<th>Beginning Cohort</th>
<th>Completed Course</th>
<th>Enrolled/Completed Math 115</th>
<th>Enrolled/Completed Math 125</th>
<th>Enrolled/Completed Transfer Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 112 (363)</td>
<td>244</td>
<td>160/90</td>
<td>64/38</td>
<td>13/10 (Math 227: 5/4)</td>
</tr>
<tr>
<td>Math 115 (287)</td>
<td>139</td>
<td>116/73</td>
<td>29/16 (Math 227: 20/13)</td>
<td>Enrolled/Completed Transfer-Level</td>
</tr>
<tr>
<td>Math 125 (192)</td>
<td>110</td>
<td>64/42</td>
<td>(Math 227: 48/32)</td>
<td>Enrolled/Completed Transfer-Level</td>
</tr>
</tbody>
</table>

The data clearly show that the number of exit points between a student’s first course and Math 227 is strongly correlated to his or her chances of completing the program. For example, if a student begins the math program in Math 112, he has a less than 2% chance of passing Math 227 over the next four semesters. Similar numbers for a student beginning in Math 115 or Math 125 are 4.5% and 22% respectively. Math 137 requires Math 112, but students successfully completing Math 137 can enroll in Math 227. The traditional curriculum requires both Math 115 and Math 125 before Math 227.

Our data for students who took Math 137 in the fall 2013 shows that 58% were successful. And of those, 87% took Math 227 in the winter 2014 or enrolled in Math 227 in the spring 2014. A persistence rate of 87% is extremely good. More data gathered over the next two or three semesters
is needed to better understand the effect of this course. Anecdotally, 100% of all Math 137 students who took Math 227 in the winter passed the course. All four of them.