Mathematics Discipline Meeting  
Wednesday, Dec. 2, 2015  
Minutes

Present: Clayton Akatsuka, Jean Okumura, Navtej (Johnny) Singh, Jody Storm  
Excused: Weiling Landers

The meeting was called to order at 2:33 pm in the Mana’opono Conference Room 107.

1. The minutes of the Nov. 18, 2015 meeting were accepted as circulated.

2. Pathway from existing Math courses to new Math course in fall 2016  
   Faculty members verified that the pathway was correct before sending it out. The pathway is:  
   o Students who completed Math 21A with a C grade or better may take Math 75X.  
   o Students who completed Math 21, 21B, or 24 with a C grade or better may take Math 75X or Math 82.  
   o Students who completed Math 28 with a C grade or better may take Math 75X or Math 82 or Math 100 or Math 101.  
   o Students who completed Math 25, 26, or 29 with a C grade or better may take Math 100, 101, 103, 111, or 115.

3. Math Graduation Requirement Revision  
   o Ardis sent, via email, some comments regarding the math graduation requirement.  
     ➢ Question 1: Was the previous policy/requirement ever evaluated for effectiveness?  
       ▶ Faculty members were not aware that this needed to be done.  
       ▶ Has the effectiveness of other requirements for the AA degree evaluated?  
       ▶ How do we do this? Please share the process used for evaluating the effectiveness of the AA degree or other AA degree requirements.  
     ➢ Question 2: What outcome(s) for students are being achieved through this policy/requirement?  
       ▶ The outcome of demonstrating a basic proficiency in essential skills in mathematics.  
       ▶ The outcome of upholding the integrity of the AA degree.  
       ▶ None of the other general education requirements meet the first outcome.  
     ➢ Question 3: What is the proposed mechanism and timeframe for evaluation of the effectiveness of this policy/requirement if implemented?  
       ▶ It is the same as the AA degree requirements.  
     ➢ Question 4: What are the larger impacts of this policy/requirement?  
       ▶ How many students exactly are prevented from attaining the AA degree via reverse transfer because of the math graduation requirement?  
       ▶ What other things impact the awarding of the reverse transfer degree?  
       ▶ We have provided ways help improve the number of reverse transfer degrees. Clayton had volunteered to look at UHM courses to see which ones would require essential skills in math and then this list could be used to determine if the math graduation requirement was being met via UH Manoa courses.  
       ▶ What is the impact of the AA degree on  
         ▶ Workforce success?  
         ▶ Success on transfer?  
       ▶ Do the outcomes attained by the AA degree requirements merit the consequences on degree attainment?
Question 5: What is the specific characteristic of our target population that compels this additional requirement (i.e. no other population in the state has a similar requirement)?
- What additional requirement is being referred to here?
- Our population scores low on the placement test.
- Other community colleges have a similar math requirement for their AA degree. However, it may not be listed as a graduation requirement. It may be listed as a general education requirement.
- High schools have a math requirement.
  - What happens if administration blocks this proposed change? In that event, the math graduation requirement would default to placement into Math 100 since we won’t have Math 25 or 28 anymore.

4. Student Success Council Task Force Subcommittee on Placement Test
- There was a meeting held on 12/2 at 3 pm – the same time as our discipline meeting so no one from our Math discipline could attend that meeting.

5. Developmental Math Position
- The screening committee finished the interviews and a letter of recommendation was submitted to Charles on 12/2.
- It is hoped that the position is filled before spring 2016.

6. Math Center & Russell Uyehara – Status
- Charles submitted paperwork to Karen Cho and nothing has happened since then.
- Clayton was planning to talk to Ardis and Doug and ask if the funds could be carried over to spring going into summer.

7. UHCC Math Initiative
- The Dec. 15 meeting is cancelled. Instead, reserve Jan. 4 for a math summit or professional development for this initiative.
  - It was requested that someone from WCC’s Math faculty serve on a committee to create an agenda for the Math meeting on Jan. 4.
  - Johnny communicated that we are too busy right now. Charles Sasaki volunteered to represent us and will communicate with us via email.
  - Math 82
    - It was decided to keep the Lial & Miller textbook that we are currently using.
    - It was decided to use the COMPASS cut off for Math 26 until COMPASS is no longer used.
    - It was decided to eliminate Chapter 1 and keep all other chapters.
    - In Chapter 2, we should start with section 2.3 (Combining the use of the Addition and Multiplication Properties of Equality).
    - In Chapter 3, Functions will be optional.
    - Cover all of Chapter 4.
    - In Chapter 5, Section 5.6 (Special Products) will not be covered as a separate section.
    - Cover all of Chapter 6.
    - In Chapter 7, Section 7.3 (Least Common Denominators) will not be covered as a separate section – discuss it as part of Section 7.4 (Adding and Subtracting Rational Expressions).
    - Cover all of Chapter 8.
    - Cover only Sections 9.1, 9.3, and 9.5
    - The next thing that needs to be done is to streamline the sections.
8. In a future meeting, we need to revisit the retest policy about offering retesting for all students.

9. In a future meeting, we need to discuss the MMT Alternative Placement and how to scale it up.

10. The meeting was adjourned at 4:22 pm. (Minutes by J. Okumura)
<table>
<thead>
<tr>
<th>Instructor's Assessment Form ID:</th>
<th>267</th>
</tr>
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<tbody>
<tr>
<td>Status:</td>
<td>Completed</td>
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<tr>
<td>Date Completed:</td>
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<tr>
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<td>Discipline:</td>
<td>Mathematics</td>
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<tr>
<td>Course:</td>
<td>MATH 24</td>
</tr>
<tr>
<td>Course Sections (CRNs):</td>
<td>63028, 63029, 63269</td>
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<tr>
<td>Section Property:</td>
<td>Face-to-Face</td>
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<td>Number of Sections:</td>
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<tr>
<td>Course SLO:</td>
<td>All course (MATH 24) outcomes.</td>
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<tr>
<td>Task that demonstrates this Learning Outcome:</td>
<td>1. Test/Quiz</td>
</tr>
<tr>
<td>Program/Degree:</td>
<td>General Education/Associate in Arts in Liberal Arts (08252014 - 05262016)</td>
</tr>
<tr>
<td>Semester of Assessment:</td>
<td>SPRING 2015</td>
</tr>
<tr>
<td>Program SLO:</td>
<td>Critical Thinking and Creativity (GE/AA in Liberal Arts)</td>
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</table>

**Connection (Program SLO):** Students are expected to make judgments, solve problems and use analytical, critical & creative thinking skills to achieve learning outcomes set forth at Math 24, Elementary Algebra I level.

**Course/Program SLO Matrix:**

1. Alignment M 24 Course SLO1 vs GE SLO.docx (Math 24 SLO1 vs Program SLO)
2. Alignment M 24 Course SLO3 vs GE SLO.docx (Math 24 SLO3 vs Program SLO)
3. Alignment M 24 Course SLO5 vs GE SLO.docx (Math 24 SLO5 vs Program SLO)
4. Alignment M 24 Course SLO7 vs GE SLO.docx (Math 24 SLO7 vs Program SLO)
5. Alignment M 24 Course SLO4 vs GE SLO.docx (Math 24 SLO4 vs Program SLO)
6. Alignment M 24 Course SLO2 vs GE SLO.docx (Math 24 SLO2 vs Program SLO)

**Describe the task and how it links to the Program and Course SLO.**

Embedded assessment questions in the cumulative final exam Form E.

SLO1,#1, 2, 21, 22 of Final Exam, students identify the mathematical terminologies, symbols and write answers in appropriate symbolic forms.

SLO2,#4,5,6,7,8, of Final Exam, students demonstrate proficiency in performing operations with rational numbers, and variable expression.

SLO3,#10,11,13,14,23,26,27,28,24,25, students demonstrate proficiency in solving equations, inequalities and systems of equations.

SLO4,#29,30,31,32,33, students analyze data and information, develop strategies to solve applied problems. The final answer is articulated in the context of each given problem.

SLO5,#17,18,19,20, students use the given data/information to find slope of a line and apply it to find the equation of a line.

SLO7, #6,12,15,16, students demonstrate proficiency in the use of the rules of exponents and its application.

**Connection (GenEd/AA SLO):** Same as above.

**Course/GenEd/AA SLO Matrix:**

1. Alignment M 24 Course SLOs vs GE AA SLO.docx (Math 24 Course SLOs Alignment GenEd AA SLO)
<table>
<thead>
<tr>
<th><strong>Describe the task and how it links to the GenEd/AA and Course SLO.</strong></th>
<th>same as above.</th>
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</table>
| **Tool that measures achievement of this Learning Outcome.** | 1. Test/Quiz  
2. Rubric |
| **Describe how the tool links to the Common Learning Outcome Rubric.** | Program Outcome Rubrics will be used |
| **The following academic support labs and services were required or recommended in this course:** | 1. Trio  
2. Supplemental Instruction  
3. Math Lab |
| **% of Students Met Expectations:** | 19 of Students Meet or Exceed / 28 of Total Student Assessed = 67% |
| **Analysis of the Assessment For the Course SLO(s):** | SLO1: 21/28 = 75% of the students achieve the SLO1.  
SLO2: 18/28 = 64.3% of the students achieve the SLO2.  
SLO3: 23/28 = 82.1% of the students achieve the SLO3.  
SLO4: 21/28 = 75% of the students correctly analyze 3 of 5 problems.  
19/28 = 67.9% of the students correctly solve 3 of 5 problems.  
SLO5: 18/28 = 64.3% of the students use data/information to find slope.  
17/28 = 60.7% of the students obtain the equation of a line.  
SLO7: 20/28 = 71.4% of the students demonstrate proficiency in operations of scientific notation numbers, which are applications of rules of exponents.  
10/28 = 35% of the students demonstrate proficiency in the use of rules of exponents. |
| **Analysis of the Assessment For the Program SLO(s):** | Same as above. |
| **What changes, if any, do you plan to make in response to the results of this assessment and your analysis to improve student learning?** | 1. State criteria for grading more explicitly  
2. Revise activities leading up to and/or supporting assignment/activities  
3. Increase student collaboration and/or peer review  
4. Provide more frequent or more comprehensive feedback on student progress  
5. Increase in-class discussions and activities  
6. Increase guidance for students as they work on assignments  
7. Ask a colleague to critique assignments/activities |
| **What steps can the department take to address the needs and issues revealed in your analysis?** | 1. Analyze course curriculum, so that the department can build a progression of skills as students advance through courses  
2. Visit classrooms to provide feedback (mentoring)  
3. Encourage faculty to share activities that foster competency  
4. Have a collections of sample assessments, rubrics, and results  
5. Other: Math 24 students have difficulties to solve application problems. They need more time and assistance to build up skills at this level. The success rate was poor 35% when they were rushed through with a new concept. Some concepts must be repeated. |