1. Type of Action
   - A. Addition
   - B. Deletion
   - C. Modification:
     - in credits
     - in title
     - in number or alpha
     - in prerequisites or co-requisites
     - Other catalog description

2. New Alpha, Number and Title
3. Credits

4. Old Alpha, Number and Title
   - Math 135
   - Pre-Calculus: Elementary Functions
5. Credits
   - 4 credits

6. New Catalog Description
   An analysis of elementary functions. A study of polynomial, rational, exponential and logarithmic functions. Topics also include graphing techniques, transformations, applications, systems of equations and inequalities, linear programming, partial fractions and related topics. Emphasis is placed on topics which will prove useful to students planning to take calculus and also to those who are interested in pursuing math-related careers.

7. Select box and type specific information in text box.
   - Prerequisites
   - Corequisites or Recommended Preparation
   - Grade of "C" or better in Math 103, Math 27 or equivalent, satisfactory math placement test score, or consent of instructor.

8. Student Contact Hours Per Week
   - Lecture: 4
   - Lecture/Lab
   - Lab
   - Other (click to specify)

9. Proposed Date of First Offering
   - Semester: Fall
   - Year: 2003

10. This course is proposed for the * Program. * can fulfill * If Other, specify

11. This course * the number of credits required for the program/core.

12. Equivalent or similar courses offered in the UH System:

<table>
<thead>
<tr>
<th>Campus</th>
<th>Alpha, Number, Title</th>
<th>Campus</th>
<th>Alpha, Number, Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HonoluluCC</td>
<td>Math 135 Pre-Calculus: Elementary Functions</td>
<td>KauaiCC</td>
<td>Math 135 Pre-Calculus: Elementary Functions</td>
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<tr>
<td>KapiolaniCC</td>
<td>Math 135 Elementary Functions</td>
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<tr>
<td>LeewardCC</td>
<td>Math 135 Pre-Calculus: Elementary Functions</td>
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<tr>
<td>HawaiiCC</td>
<td>Math 104F Pre-Calculus Mathematics: Elementary Functions</td>
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</tr>
<tr>
<td>MauiCC</td>
<td>Math 135 Pre-Calculus: Elementary Functions</td>
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</tbody>
</table>

13. This course is (check one and click in appropriate textbox and provide details):
   - Already articulated with the UHCCs.
   - Provide details of existing or desired articulation (date, college(s), purposes, pre-major, etc.) in this space:
     This course satisfies AA degree quantitative/logical reasoning general education requirements at all the other UHCC campuses except for Honolulu CC and Foundations symbolic requirement at Honolulu CC.
   - Appropriate for Articulation with
     Provide details of existing or desired articulation (date, colleges(s), purposes, pre-major or major, etc.) in this space:
   - Not yet appropriate for Articulation.

14. Reason for Initiating, Modifying or Deleting Courses or Other Pertinent Comment:
   1. A course modification was submitted for Math 27 to change its number to Math 103. Math 27 is the prerequisite for Math 135. Assuming that the modification of Math 27 to Math 103 is approved, then the prerequisite for Math 135 needs to reflect the change from Math 27 to Math 103.
   2. Sequences, series, and either binomial theorem or math induction are covered in Math 140 instead of Math 135 so the catalog description needed to be changed to more accurately reflect the course coverage in Math 135.

Requested by: [Signature]
Department Chairperson
2/20/03

Approved by: [Signature]
Curriculum Committee Chairperson
Date
3/11/03

Faculty Senate Chairperson
Date
3/18/03

CCCM #6100 (Amended for WCC use October 2002)
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course

Dean of Instruction

Provided

Date

Date

CCC M #6100 (Amended for WCC use October 2002)
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course

Levels of Review of Course Proposal at Windward Community College

Course Alpha, Number, and Title: Math 135 Pre-Calculus: Elementary Functions

<table>
<thead>
<tr>
<th>Signatures</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Department Area (more than one departmental instructor’s signature required)</td>
<td>2/20/03</td>
</tr>
<tr>
<td>Wei Liao</td>
<td>2/20/03</td>
</tr>
<tr>
<td></td>
<td>2/20/03</td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Department

Jean Harrison
Department Chairperson

Was this course discussed in a department meeting? □ Yes ☑ No
It was discussed with the department over email.

3. Division

John C. Mulliken

4. Curriculum Committee Review

Approved ☑ 7-0
Disapproved ☐

Reason:

Jean Shibuya
Curriculum Committee Chairperson

CCCM #6100 (Amended for WCC use October 2002)
University of Hawaii Community Colleges  
Proposal to Initiate, Modify or Delete a Course  
Course Modification Form – Go to next page for Articulation Form

WCC Form for Course Modifications

Course Math 135 Pre-Calculus: Elementary Functions  
Submitted by Jean Okumura  
Date February 19, 2003

1. What change is proposed in the course? Provide specific information comparing both the "new" and "old" course.

   Two changes are proposed. One change is due to a change in the pre-requisite course number from Math 27 to Math 103. The second change is in the catalog description.

   New Catalog Description:  
   An analysis of elementary functions. A study of polynomial, rational, exponential and logarithmic functions. Topics also include graphing techniques, transformations, applications, systems of equations and inequalities, linear programming, partial fractions and related topics. Emphasis is placed on topics which will prove useful to student planning to take calculus and also to those who are interested in pursuing math-related careers.

   Old Catalog Description:  
   An analysis of elementary functions. A synthesis of polynomial, rational, exponential and logarithmic functions. Topics also include graphing techniques, transformations, applications, sequences, series, math induction, binomial theorem and related topics. Emphasis is placed on topics which will prove useful to student planning to take calculus and also to those who are interested in pursuing math-related careers.

2. What is the rationale for the change?

   The change in pre-requisite is necessary because we submitted a modification to change our Math 27 to Math 103. All the other community colleges on Oahu will have the Math 103 number.

   The change in catalog description is necessary to more accurately reflect the course coverage in Math 135 since some of the topics listed in the old description is covered in Math 140 instead of Math 135.

3. Is the change substantive enough to require a change in course identification? If so, explain thoroughly.

   No

4. Is the course articulated with any 4-year program? Yes

   If yes, give details of the agreement(s) and explain any impact the proposed modifications may have on articulation.

   UHH: satisfies general education requirements - I.B.Math  
   UHWO: satisfies general education requirements - NS

   No impact to current articulation

5. Provide details of any additional staff, equipment, facilities, library/media material, faculty preparation and other financial considerations that would be required to implement this course modification. What has been done to provide for these additional costs? Who will teach the course? Is additional preparation needed?

   No change

CCCM #6100 (Amended for WCC use September 2002)  
Original dated WCC 9/91
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Course Modification Form – Go to next page for Articulation Form

6. Will this course modification result in any alterations in the number of hours required to attain a certificate or degree? * If yes, provide details and justification for these alterations.

No

7. If the course is renumbered to 100 or above, does it meet the criteria for transfer level courses? (Go to next page for transfer course criteria.) *