Remedial/Developmental Proposal:
Entry-Level Math Course Integration of Computerized Learning

1. Description of the proposed project

This proposal is for the purchase of the ALEKS (Assessment and Learning in Knowledge Spaces) artificial intelligence software system for one year to augment the curriculum in our current Math 20BCD course (Foundation Math). This project will pilot the use of the ALEKS system to provide students with additional assignment problems and quizzes with immediate feedback on their progress and comprehension. This program has the ability to target gaps in an individual’s skill level and provide appropriate remediation exercises without removing the student from the current class or section of material. This allows students at different skill levels to be successful in the entry level math course and advances them to their respective education programs faster. The software system has proven to be highly successful at other colleges. It is available 24/7 over the internet and allows instructors to gauge individual and class performance.

The ALEKS basic math skills software has the flexibility to be used in both online courses and traditional in class course instruction. The purpose of this proposal is to introduce ALEKS into the remedial math coursework. Key instructors will be used to work with other colleagues at other institutions, who have effectively integrated computer mediated technologies, to determine how ALEKS will most effectively work with HonCC’s instruction. The pilot program will allow release time for faculty to closely integrate, review and evaluate the effectiveness in assisting with the success of underprepared students and eventually integrating these tools into all other sections of basic skills math.

2. New or ongoing project?

This is a new project for HonCC. There is currently no supplemental computerized instruction within any of the Foundation Math course instruction.

3. Refer to any research that influences or serves as foundation for the project.

This project will pilot the use of the ALEKS software in a remedial/developmental mathematics project similar to the “Math My Way” program used at Foothill College in California. At Foothill College the Math Department has had significant increase in the completion rates of their entry level math courses. Cleveland State has also had great success in utilizing computer mediated supplemental instruction. At Foothill College, of those students who completed the “Math My Way” program at the Pre-Algebra level, 73% passed Beginning Algebra.
4. **List partners in the CC system or explain how the design lends itself to export.**

This proposal does not include other CC’s, however many other CC’s are moving toward integrating computer mediated supplemental instruction into their curriculum either with ALEKS or MyMath Lab. The HonCC Math 20BCD courses totaled 549 students for the AY 08/09. This project will allow changes to all MATH 20BCD instruction. Once the project is completed, HonCC can provide consultative support to other CC moving in this direction.

5. **Refer to the Campus and the System Strategic Plan section that demonstrates the relevance of this project.**

**HonCC Strategic Plan 2010 – 2015**

**Goal A: Promote Learning and Teaching for Student Success**

The Community Colleges will focus on student success by being learning colleges, providing access to quality programs which are affordable, adaptable, flexible, and responsive to the changing needs of students and their outcomes.

**Strategic Outcome – Hawaii’s Educational Capital**

Performance Measure c: Increase the number of students enrolled in a developmental intervention that successfully complete at least one course in the developmental sequence within their first academic year by 3% per year to 260 in English and 335 in mathematics by 2015. This is also listed as the third Performance Measure of Strategic Outcome B under Goal A of the UHCC Strategic Plan 2008 – 2015.

6. **Discuss how this project promises to sustain itself after funding pulls back.**

This project is very important in dealing with underprepared student population at HonCC. As a campus priority, the sustainability of this project will continue through an increase in the college skills budget to cover the cost of the software licensing. This proposal will allow for the first phase of computer purchases to incorporate the software into the instruction. The college will use other sources of funding to expand the computer purchases, if reallocation and sharing of computer lab space on campus is unachievable. Cost of eventual replacement of computers will be included in the computer replacement plan for the department offering these courses.

7. **Indicate the way in which the success or failure of the project will be visible through measurable and reportable outcomes.**

The project will be evaluated by comparing overall completion rates with the project’s completion rate, comparable persistence rates, and student satisfaction surveys. An evaluation of the success at HonCC will also be
compared to other institutions using computer mediated supplemental education. The HonCC performance measures will also be used to determine the level of success at the campus level, as indicated by the campus strategic plan and performance measures.

8. How does this project address reduction in delivery costs and time to readiness for students?

The ALEKS system will allow individual students to receive individualized problem sets along with assistance that would have required the instructor or an assistant to go over the student on a one-to-one basis. The program has the ability to recognize where students need to improve and provide practice material in the area to succeed in the needed improvement. Instructors will better track student progress through the course work. This would provide more students with the assistance they need to pass the course in one semester and move on into their respective fields of study or CTE programs sooner.

9. Approval (see next page)

10. Budget

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>ALEKS software</td>
<td>$4,200</td>
</tr>
<tr>
<td>2 semester/student ($70) x 60 units for 4 classes</td>
<td></td>
</tr>
<tr>
<td>Computers</td>
<td>$24,000</td>
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<tr>
<td>1 computer ($1,200) x 20 units</td>
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<tr>
<td>Professional Consultation from Foothill CC</td>
<td>$3,000</td>
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<tr>
<td>Travel, per diem, accommodations, travel</td>
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<tr>
<td>Honorarium</td>
<td>$4,000</td>
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<tr>
<td>Instructor Release Time (lecturers to cover 2 classes for the first semester of implementation)</td>
<td>$9,500</td>
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<tr>
<td>6 credit release time for two full-time primary instructors for this course</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>$44,700</strong></td>
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9. Approved by:

Erika Lacro
Vice Chancellor of Academic Affairs