# Assessment of the Associate in Arts Degree at Leeward Community College

## (2005 - 2010)

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**Assessment of the Associate in Arts Degree (2005-2010)**

Prepared by:

Leeward Community College Faculty Senate

Program Review, Institutional Research, and Assessment Committee

Eunice Leung Brekke, Chair

Helmut Kae

Melanie Van der Tuin

Jay Sakashita

In collaboration with:

Paul Lococo, Faculty Senate, Chair

James Goodman, Arts and Sciences, Dean

Della Anderson, Office of Policy, Planning, and Assessment

Guy Nishimoto, Office of Policy, Planning, and Assessment

Alicia Brown, Office of Policy, Planning, and Assessment

Donna Matsumoto, Accreditation Liaison Officer

Mike Pecsok, Vice Chancellor of Academic Affairs

***Executive Summary***

In 2011, Leeward Community College conducted an assessment of its Associate in Arts (AA) degree to determine to what extent the degree's general education outcomes are being met. The assessment strategy aligned the 20 courses with the highest enrollment to the general education outcomes, and using course level assessment data reported to Office of Policy, Planning, and Assessment (OPPA) between 2005 to 2010, determined to what extent each general learning outcome was being met (i.e., 70 percent or above met).

Overall, this assessment found that the college met four of seven of its general education outcomes. However, the more reliable finding is that the college's assessment process needs improvement and that the college should consider additional or alternative assessment strategies for the AA degree. Most submitted course data often reflected two student learning outcomes which are a) likely not reflective of all existing student learning outcomes for courses and b) not necessarily the outcomes that are best aligned to or reflective of the general education outcomes. Additionally, there is no mechanism to include courses supporting the degree's writing intensive and Hawaiian Asian Pacific focus requirements.

Recommendations include communicating to faculty that assessment of degree programs and certificate programs rely on course level assessment results; clarifying that the reporting process includes all student learning outcomes; and initiating discussion on additional or alternative assessment strategies.

*Introduction*

In 2011, Leeward Community College conducted an assessment of its Associate in Arts (AA) degree. The assessment was conducted as part of the college's analysis of institutional effectiveness and to meet University of Hawaii expectations on program review - of which assessment of student learning is part.

The AA degree consists of seven general education outcomes, which also serve as the degree's program learning outcomes:

| 1. Critical Thinking | Make critical judgments and apply critical reasoning to address challenges and solve problems. |
|---|---|
| 2. Technology and Information Literacy | Make informed choices about uses of technology and information literacy for specific purposes. |
| 3. Oral Communication | Gather information appropriately and communicate clearly both orally and in writing. |
| 4. Quantitative Reasoning | Use numerical, symbolic, or graphical reasoning to interpret information, draw valid conclusions, and communicate results. |
| 5. Written Communication | Use writing to discover, develop, and communicate ideas appropriately. |
| 6. Arts, Humanities, and Sciences | Understand the content and use the methodology of the major areas of knowledge: art, humanities, natural sciences, and social sciences. |
| 7. Cultural Diversity and Civics | Appreciate the values and beliefs of diverse cultures and recognize responsibility for local, national, and global issues. |

To determine the extent of how well students meet these outcomes, this assessment involved:

1. Determining which courses and instructional support services best align with each general education outcome, and
2. Analyzing course and instructional support service student learning outcomes.

*About the AA degree*

To fulfill the requirements for the AA degree, students must complete 60 credits – 31 in the general education core, 26 in electives, 3 in oral communication, and three courses in focus requirements. These are:

| Degree Requirement | Description | Types of Courses |
|---|---|---|
| Foundation Requirements (12 credits) | These courses are intended to give students skills and perspectives that are fundamental to undertaking higher education. | Written communication (3 credits) (FW)<br>Symbolic Reasoning (3) (FS)<br>Global and Multicultural Perspectives (6) (FG) |
| Diversification Requirements (19 credits) | These courses are intended to assure that every student has a broad exposure to different | Arts, Humanities and Literature (6) (DA, DH, DL)<br>Social Sciences (6) (DS) |

| Degree Requirement | Description | Types of Courses |
|---|---|---|
| | domains of academic knowledge. | Natural Sciences (7) (DB, DP, DY) |
| Oral Communication (3 credits) | Students receive training in oral delivery and give individual and group reports. | Oral Communication ( 1 course) (OR) |
| Focus Requirements (3 courses) | Important additional skills and discourses necessary for living and working in diverse communities. | Hawaiian, Asian, and Pacific Issues ( 1 course) (HAP) Writing Intensive (2 courses) (WI) |

*Source: University of Hawaii Leeward Community College, Catalog 2011-2012.*

The various designations for the foundation, diversification, and focus requirements (e.g., FW, FS, FG, DA, DL, DS, DB, DP, HAP, WI, OR) reflect courses whose content meet specific hallmarks as determined by various faculty-led boards. For details, see Appendix A.

*Sample Selection*

Between the years 2005 to 2010, 1,894 students earned an AA degree from Leeward Community College. Among these students, AA degree required courses with the highest enrollments were:

| Course | Course Title | Head Count (unduplicated) |
|---|---|---|
| HIST 151 | World Civilizations I | 1246 |
| HIST 152 | World Civilizations II | 1211 |
| HWST 107 | Hawai'i: Center of the Pacific | 1033 |
| SP 151 | Personal and Public Speech | 999 |
| PSY 100 | Survey of Psychology | 990 |
| ENG 100 | Composition I | 940 |
| ART 101 | Intro to the Visual Arts | 828 |
| SOC 100 | Survey of General Sociology | 754 |
| ICS 100 | Computing Literacy and Applications | 714 |
| REL 150 | Intro to the World's Major Religions | 710 |
| MATH 103 | College Algebra | 670 |
| POLS 110 | Intro to Political Science | 597 |
| PHIL 110 | Intro to Logic | 578 |
| BIOL 100 | Human Biology | 521 |
| ASTR 110 | Survey of Astronomy | 504 |
| SP 251 | Principles of Effective Public Speaking | 399 |
| PSY 240 | Developmental Psychology | 398 |
| ECON 130 | Microeconomics | 396 |
| GEOG 101 | Natural Environment | 375 |
| MICR 130 | General Microbiology | 371 |

The college collects course assessment data on a five-year cycle. Using a standard form (see Appendix B), faculty conduct assessment in a series of phases that are reported to the Office of Policy, Planning,

and Assessment (OPPA). The first phase (1A) is pre-assessment where student-learning outcomes may be refined, an assessment strategy is developed, and measures are created. The second phase (1B) represents the first round of data collection and analysis and discussion of plans for action if warranted. The third and last stage of reporting (2) represents the second round of data collection and analysis and discusses results of plans for action if taken.

Based on course assessment data reported to OPPA, the following presents each course by its assessment phase.

| # | Course | Last reported assessment activity | Current Phase of Assessment |
|---|--------|-----------------------------------|-----------------------------|
| 1 | HIST 151 | Fall 2007 | Phase 2 |
| 2 | HIST 152 | Fall 2007 | Phase 2 |
| 3 | HWST 107 | Fall 2010 | Phase 1a |
| 4 | SP 151 | Fall 2010 | Phase 2 |
| 5 | PSY 100 | Spring 2010 | Phase 1a |
| 6 | ENG 100 | Fall 2011 | Phase 1b |
| 7 | ART 101 | Fall 2009 | Phase 1a |
| 8 | SOC 100 | Spring 2010 | Phase 2 |
| 9 | ICS 100 | Spring 2011 | Phase 1b |
| 10 | REL 150 | Spring 2005 | Phase 1b |
| 11 | MATH 103 | Spring 2010 | Phase 2 |
| 12 | POLS 110 | Spring 2011 | Phase 1b |
| 13 | PHIL 110 | Fall 2010 | Phase 1b |
| 14 | BIOL 100 | Fall 2010 | Phase 2 |
| 15 | ASTR 110 | Spring 2011 | Phase 2 |
| 16 | SP 251 | Fall 2004 | Phase 2 |
| 17 | PSY 240 | Fall 2011 | Phase 2 |
| 18 | ECON 130 | Spring 2011 | Phase 1b |
| 19 | GEOG 101 | Spring 2011 | Phase 1b |
| 20 | MICR 130 | Fall 2010 | Phase 2 |

For purposes of this assessment, only courses that have reported at the 1b level and above are included for a sample of 17 courses. Additionally, the library provides instruction on finding and using information, conducting research and using library resources. Assessment of the library's instructional services are thus included in this analysis (n=18).

As displayed below, the 17 courses and one instructional support service used in this analysis represent assessment data reported between 2005 and 2010. Assessment data are commonly reflective of two student learning outcomes.  While embedded exam questions are common, other assessment measures include: papers and presentations, activities and assignments and pre-post analysis of student outcomes.

| # | Course | Reported on | Number of SLOs | Measures |
|---|--------|-------------|----------------|----------|
| 1 | HIST 151 | 3/24/2007 | 12 | Pre-post student survey |
| 2 | HIST 152 | 3/24/2007 | 12 | Pre-post student survey |
| 3 | SP 151 | 9/21/2009 | 1 | Student presentation |
| 4 | ENG 100 | 9/6/2005 | 2 | Research paper (random assessment conducted by faculty) |
| 5 | SOC 100 | 2/8/2010 | 2 | Exam questions |
| 6 | ICS 100 | 4/12/2010 | 3 | Project |
| 7 | REL 150 | -- | 2 | Exam Questions |
| 8 | MATH 103 | 9/30/2008 | 2 | Exam Questions |
| 9 | POLS 110 | 4/15/2010 | 1 | Written assignment. |
| 10 | PHIL 110 | 10/14/2010 | 1 | Exam question |
| 11 | BIOL 100 | 9/30/2008 | 2 | Activity and Assignment |
| 12 | ASTR 110 | 2/24/2011 | 2 | Exam questions |
| 13 | SP 251 | 12/2004 | 1 | Speech outlines |
| 14 | PSY 240 | 1/30/2011 | 1 | Written assignment |
| 15 | ECON 130 | 3/10/2010 | 2 | Exam questions |
| 16 | GEOG 101 | 2/28/2010 | 2 | Exam questions |
| 17 | MICR 130 | 9/30/2008 | 2 | Exam questions |
| 18 | Library | 10/27/2008 | 2 | Post-course quiz results and activity log |

**Alignment to General Education Outcomes**

In determining which courses best align to the college's general education outcomes, we first identified 1) degree requirements that align to each general education outcome and 2) mapped this to each course's designated degree requirement. Currently, the college does not have a specific designation for critical thinking in its degree requirements. Thus, courses which are identified as connected to the general education outcomes of critical thinking are used.

Table 1. Alignment of General Education Outcomes to Degree Requirements and Courses

| Area | General Education Outcome | Degree Requirement | Course |
|---|---|---|---|
| 1. Critical Thinking | Make critical judgments and apply critical reasoning to address challenges and solve problems. | -- | SOC 100, ICS 100, POLS 110, PHIL 110, BIOL 100, ASTR 110, PSY 240, ECON 130, GEOG 101, MICR 130 |
| 2. Technology and Information Literacy | Make informed choices about uses of technology and information literacy for specific purposes. | FW (see Hallmark 4) | ENG 100<br>ICS 100<br>Library |
| 3. Oral Communication | Gather information appropriately and communicate clearly both orally and in writing. | OR (3 credits) | SP 151<br>SP 251 |
| 4. Quantitative Reasoning | Use numerical, symbolic, or graphical reasoning to interpret information, draw valid conclusions, and communicate results. | FS (3 credits) | MATH 130<br>PHIL 110 |
| 5. Written Communication | Use writing to discover, develop, and communicate ideas appropriately. | FW (3 credits), WI (6 credits) | ENG 100 |
| 6. Arts, Humanities, and Sciences | Understand the content and use the methodology of the major areas of knowledge: art, humanities, natural sciences, and social sciences. | DA, DL, DH<br>DS<br>DB(+DY),<br>DP (+DY)<br>(19 credits) | DS: SOC 100, POLS 110, PSY 240, ECON 130<br>DB: BIOL 100, MICR 130<br>DP: ASTR 110, GEOG 101 |
| 7. Cultural Diversity and Civics | Appreciate the values and beliefs of diverse cultures and recognize responsibility for local, national, and global issues. | FG (6 credits)<br>HAP (1 credit) | HIST 151<br>HIST152<br>REL 150 |

***Achievement of General Education Outcomes***

The following presents the analytical framework in assessing each general education outcome. For each outcome, courses and instructional services aligned to the outcome are evaluated. For each course, "Yes" or "No" is based on whether or not (on average) the reported course assessment results were at 70 percent or higher. Details can be found in Appendix C, Course and Instructional Support Service Level Data.

**Critical Thinking - Make critical judgments and apply critical reasoning to address challenges and solve problems.**

| # | Course | Results (70%+) |
|---|--------|----------------|
| 1 | SOC 100 | Yes |
| 2 | ICS 100 | Yes |
| 3 | POLS 110 | Yes |
| 4 | PHIL 110 | No |
| 5 | BIOL 100 | Yes |
| 6 | ASTR 110 | Yes |
| 7 | PSY 240 | Yes |
| 8 | ECON 130 | Yes |
| 9 | GEOG 101 | No |
| 10 | MICR130 | No |
| | | 7 out of 10 = "Yes" |

Conclusion: This general education outcome is "Met."

**Technology and Information Literacy - Make informed choices about uses of technology and information literacy for specific purposes**

| # | Course | Results (70%+) |
|---|--------|----------------|
| 1 | ENG 100 | No |
| 2 | ICS 100 | Yes |
| 3 | Library | Yes |
| | | 2 out of 3 = "Yes" |

Conclusion: This general education outcome is "Met."

**Oral Communication - Gather information appropriately and communicate clearly both orally and in writing.**

| # | Course | Results (70%+) |
|---|--------|----------------|
| 1 | SP 151 | Yes |
| 2 | SP 251 | No |
| | | 1 out of 2 = "Yes" |

Conclusion: This general education outcome is "Not Met."

**Quantitative Reasoning - Use numerical, symbolic, or graphical reasoning to interpret information, draw valid conclusions, and communicate results.**

| # | Course | Results (70%+) |
|---|--------|----------------|
| 1 | MATH 103 | No |
| 2 | PHIL 110 | No |
| | | 0 out of 2 = "Yes" |

Conclusion: This general education outcome is "Not Met."

**Written Communication - Use writing to discover, develop, and communicate ideas appropriately.**

| # | Course | Results (70%+) |
|---|--------|----------------|
| 1 | ENG 100 | No |
| | | 0 out of 1 = "Yes" |

Conclusion: This general education outcome is "Not Met."

**Arts, Humanities, and Sciences - Understand the content and use the methodology of the major areas of knowledge: art, humanities, natural sciences, and social sciences.**

| # | Course | Results (70%+) |
|---|--------|----------------|
| 1 | SOC 100 | Yes |
| 2 | POLS 110 | Yes |
| 3 | PSY 240 | Yes |
| 4 | ECON 130 | Yes |
| 5 | BIOL 100 | Yes |
| 6 | MICR130 | No |
| 7 | ASTR 110 | Yes |
| 8 | GEOG 101 | No |
| | | 6 out of 8 = "Yes" |

Conclusion: This general education outcome is "Met."

**Cultural Diversity and Civics - Appreciate the values and beliefs of diverse cultures and recognize responsibility for local, national, and global issues.**

| # | Course | Results (70%+) |
|---|--------|----------------|
| 1 | HIST 151 | Yes |
| 2 | HIST 152 | Yes |
| 3 | REL 150 | Yes |
| | | 3 out of 3 = "Yes" |

Conclusion: This general education outcome is "Met."

As summarized below, the college met four of its seven general education outcomes. These are: critical thinking, technology and information literacy, arts, humanities, and sciences, and cultural diversity and civics. General education outcomes not met are: oral communication, quantitative reasoning, and written communication.

| Area | General Education Outcome | Results | Analysis |
|------|--------------------------|---------|----------|
| 1. Critical Thinking | Make critical judgments and apply critical reasoning to address challenges and solve problems. | 7 out of 10 "Yes" (70%) | Met |
| 2. Technology and Information Literacy | Make informed choices about uses of technology and information literacy for specific purposes. | 2 out of 3 "Yes" (67%) | Met |
| 3. Oral Communication | Gather information appropriately and communicate clearly both orally and in writing. | 1 out of 2 = "Yes" (50%) | Not Met |
| 4. Quantitative Reasoning | Use numerical, symbolic, or graphical reasoning to interpret information, draw valid conclusions, and communicate results. | 0 out of 2 = "Yes" (0%) | Not Met |
| 5. Written Communication | Use writing to discover, develop, and communicate ideas appropriately. | 0 out of 1 = "Yes" (0%) | Not Met |
| 6. Arts, Humanities, and Sciences | Understand the content and use the methodology of the major areas of knowledge: art, humanities, natural sciences, and social sciences. | 6 out of 8 = "Yes" (75%) | Met |
| 7. Cultural Diversity and Civics | Appreciate the values and beliefs of diverse cultures and recognize responsibility for local, national, and global issues. | 3 out of 3 = "Yes" (100%) | Met |

***Conclusion and Recommendations***

Course and instructional support services assessment has been an ongoing process at Leeward Community College; however, assessment of its degree program outcomes is a relatively more recent process. This analysis was conducted to determine how well students are meeting general education outcomes (e.g., the degree's program learning outcomes). While the data suggest that students are meeting some general education outcomes, and not meeting others, the more solid conclusion is that, overall, the college needs to improve its assessment process.

For example:

1. The majority of the courses in this analysis likely have more student learning outcomes (and data); yet, what is reported to OPPA often reflect assessment of no more than two student learning outcomes.

2. Reporting of student learning outcomes is currently done every five years – the college may need to reevaluate this time frame as courses have begun or have already embedded ongoing assessment.
3. The AA degree requires students to fulfill credits in Writing Intensive (WI) and Hawaiian, Asian, and Pacific Issues (HAP). The current reporting system does not collect assessment data on these requirements.
4. Faculty and instructional service staff should be made aware that assessment of the AA degree is reliant upon their assessment data.

Additionally, the college should recognize that other program level assessment strategies and methods are available. For example:

1. The use of common rubrics and assessment strategies across courses to assess a common general education outcome (e.g., written communication could be the shared assessment of the ENG100 faculty and WI Board).
2. The use of portfolios submitted periodically by students as they progress through the program to document what they are learning.
3. The use of a capstone experience or standardized test at the end of degree completion.

Each of these strategies and methods has various pros and cons and should be discussed as a campus. Other methods the college could consider involve data that reflect more indirect methods that could provide insight on a) what students' in their own perspectives view as "outcomes" they achieved as a result of the program, and b) process measures such as what student support services were accessed and beneficial, as well as challenges and barriers faced during their achievement of the degree.

Other methods may involve following a cohort of incoming students – documenting their experiences, successes and "failures," as well as learning outcomes, and post degree completion. As one of the college's largest degree programs, it is also possible that the college should consider specific program learning outcomes in addition to the general education outcomes currently being used in this assessment.

Regardless of which specific assessment strategies, the college chooses in the future, the purposeful assessment of what students are achieving and learning will be a valuable tool for campus-wide discussion and determination of how the college can best achieve its mission.

**Appendix A: AA Degree Requirements - Designation Descriptions**

1. Foundation Requirements (http://emedia.leeward.hawaii.edu/GenEdFoundations/ )
2. Diversification Requirements
   (http://emedia.leeward.hawaii.edu/genedfoundations/Diversification/Diversification.html )
3. Focus Requirement: Hawaiian, Asian, and Pacific Issues (http://www.leeward.hawaii.edu/hap )
4. Focus Requirement: Writing Intensive (http://emedia.leeward.hawaii.edu/writing/WIProg.htm )

**Leeward Community College**
**Foundations Hallmarks and Explanatory Notes**
Explanatory Notes approved: FW, 4/21/06; FS, 9/19/06; FG, 1/27/06

Below are the official Foundations Hallmarks and Explanatory Notes adopted by Kapiʻolani CC, Honolulu CC, and UH-Mānoa. When joining with these institutions and the Foundations core curriculum category, Leeward CC agreed to accept these Hallmarks and Explanatory Notes when designating courses for the Foundations category. The LCC Gen Ed Foundations Board (with appropriate Campus approval) may supplement the Hallmarks and Explanatory Notes, however, with any additional requirements or information that might be useful to future Boards.

**Foundations Requirements**
[Hallmarks in Bold; Explanatory Notes in Italics

**Written Communication FW (3 credits, 1 course)**
To satisfy the Written Communication requirement, a course will:

**1. Introduce students to different forms of college-level writing, including, but not limited to, academic discourse, and guide them in writing for different purposes and audiences.**
- *The primary goal of W Foundation classes is learning to write. Course reading should serve as a basis for writing rather than as a body of material to be mastered per se.*
- *The primary reading focus should be on expository texts. The course should consider a variety of college-level readings (e.g., summary/abstract, narrative, analysis, argument).*

**2. Provide students with guided practice of writing processes--planning, drafting, critiquing, revising, and editing--making effective use of written and oral feedback from the faculty instructor and from peers.**
- *There should be a coherent sequence of various types of writing studied and assigned in the course. Generally, such a sequence will move from presumably simpler to more complex rhetorical tasks (e.g. from summary to analysis/interpretation to argument, or from narrative/serialization to comparative analysis to research-based inquiry).*
- *Types of interaction concerning student writing will vary and may include in-class collaborative group work (including online or hybrid instruction), instructor/student conferencing (in person and/or online), student/student peer review, and tutorial feedback as available.*

**3. Require at least 5000 words of finished prose--equivalent to approximately 20 typewritten/printed pages.**
- *"Finished prose" is defined as writing which has received peer and/or instructor feedback, has usually undergone student revision, and has been formally evaluated by the instructor. Writing such as journal entries, email letters, pre-writing exercises, unrevised in-class writing, or feedback to peers should not normally be considered "finished prose."*
- *E-mail letters, pre-writing exercises, unrevised in-class writing, or feedback to peers should not normally be considered "finished prose."*

**4. Help students develop information literacy by teaching search strategies, critical evaluation of information and sources, and effective selection of information for specific purposes and audiences; teach appropriate ways to incorporate such information, acknowledge sources and provide citations.**

- *"Information literacy" includes knowledge of and competence using Internet as well as print materials.*

**5. Help students read texts and make use of a variety of sources in expressing their own ideas, perspectives, and/or opinions in writing.**

### Symbolic Reasoning FS (3 credits, 1 course)

*Introduction: Courses in Symbolic Reasoning (FS) should present symbolism as a means to facilitate reasoning and not merely as a technique to represent course content. They should engage students in the active use and application of symbolic techniques, but should not present the use of symbolization strategies and techniques in a strictly mechanical way. Rather, they should focus on presenting concepts and tools of symbolic reasoning to further understanding of the course material. The majority of a FS course should address issues of symbolic reasoning, and impart an appreciation of the power and clarity that such reasoning brings to our thinking and understanding. Courses that apply for the FS designation should meet all six hallmarks.*

To satisfy the Symbolic Reasoning requirement, a course will:

**1. Expose students to the beauty, power, clarity and precision of formal systems.**
- *Students should understand the impact of formal or symbolic reasoning in its application to other disciplines and/or its historical place in civilization.*
- *An objective of the FS requirement is to enhance students' appreciation of abstraction and formal systems of analysis and to elevate their power of critical thinking through logical analysis and use of evidence.*
- *Students may be exposed to the power, clarity and precision of formal systems by reading and understanding proofs, derivations of formulae, or expositions of applications. Students may also be exposed to the power, clarity and precision of formal systems by constructing proofs (including symbolic proofs of validity), deriving formulas of appreciable applicability, or justifying the uses of applications in concrete context. In any of these situations, formal reasoning and/or symbolism should play a significant or essential role.*
- *The exposure to the beauty of formal systems can be provided by the presentation of elegant proofs, tricky, i.e., creative, applications of formulae, or the derivation of unexpected applications.*

**2. Help students understand the concept of proof as a chain of inferences.**
- *A non-trivial component of the course should be deductive proof.*
- *Students should be required to demonstrate an understanding of the difference between a correct and incorrect proof.*
- *Students should understand the distinction between inductive and deductive, formal and informal reasoning.*
- *Students should be familiar with all aspects of basic argumentation: (1) the recognition of premises, given statements or hypothesis, (2) the recognition of the conclusion as well as noticing that a proof has appropriately come to an end since the conclusion has been justified, (3) the recognition of the application of the principles of logic to the premises, earlier steps or recognized truths to justify subsequent steps.*
- *Students should be able to construct formal arguments and be expected to justify most steps of an argument.*

**3. Teach students how to apply formal rules or algorithms.**
- *Students should be able to correctly apply rules of a formal system.*

- *Students should be introduced to a process of applying formal rules, so that students will understand the importance of paying attention to detail and why precision is crucial, and how rule generation works in carrying out a mechanical, logical, and/or computational procedure.*

**4. Require students to use appropriate symbolic techniques in the context of problem solving, and in the presentation and critical evaluation of evidence.**
- *Students should be able to recognize the elements, structure and standards of rigorous arguments and distinguish between correct and incorrect argument.*
- *Students should be able to recognize appropriate and inappropriate use of words and symbolism, statements as opposed to meaningless sentences, valid and invalid arguments, as well as valid and invalid applications of symbolic reasoning.*

**5. Not focus solely on computational skills.**
- *Students should be challenged to use symbolic trails of reasoning not only minimally but in maximally efficient and elegant ways.*
- *Students should not be simply trained in mechanical, computational or formulaic techniques.*

**6. Build a bridge from theory to practice and show students how to traverse this**
- *Students should be able to abstract from a real-world situation to formal, symbolic representation.*
- *Students should be able to translate word problems or arguments into an appropriate symbolic formalism.*
- *Students should see the development of a "useful" application from a theoretical or formal idea. In that development it should be made especially clear that the use of symbolism facilitated the exposition that lead from theory to practice.*
- *Students will learn that arguments and procedures expressed in ordinary language can be checked with great precision by placing the reasoning patterns in symbolic form and manipulated via symbolic rules of inference.*

**Global & Multicultural Perspectives FG (6 credits, two courses)**
To satisfy the Global and Multicultural Perspectives requirement, a course will:

**1. Provide students with a large-scale analysis of human development and change over time. (Note: the two FG courses will together cover the whole time period from pre-history to present.)**
- *The course must fall into one of the following categories: Group A (content primarily before 1500 CE), B (content primarily after 1500 CE), or C (pre-history to present).*

**2. Analyze the development of human societies and their cultural traditions through time in different regions (including Africa, the Americas, Asia, Europe, and Oceania) and using multiple perspectives.**
- *Students will study multiple perspectives across time, space, and cultures. Some of the cultural material studied should reflect cultural differences.*
- *The course should not be solely about a people or a country; it needs to be a global course.*
- *Clear emphasis on multiple ideologies and methodologies (e.g., capitalism vs. socialism, individualism vs. communalism, globalism vs. protectionism, or humanistic vs. scientific).*

**3. Offer a broad, integrated analysis of cultural, economic, political, scientific, and/or social development that recognizes the diversity of human societies and their cultural traditions.**
- *The course should offer an integrative perspective on global change and diverse cultural traditions.*
- *The course should identify common themes across multiple cultures.*

- *The course should recognize diversity (examples could include within and between cultures and religions, subcultures within political units, or socio-economic class differences).*

**4. Examine processes of cross-cultural interaction and exchange that have linked the world's peoples through time while recognizing diversity.**
- *The course should address how processes of interaction have shaped the world's cultural mosaic through time.*
- *The course should convey an understanding of how unique cultural traditions have survived cross-cultural interactions as well as how cultures have been changed through interaction.*
- *The proposal should clearly identify the parts of the course that are cross-cultural, rather than isolating cultural groups or characteristics.*
- *Dimensions of cross-cultural interaction such as religion should be examined as well as modes of interaction, e.g., migration, conquest, and trade.*

**5. Include at least one component on Hawaiian, Pacific, or Asian societies and their cultural traditions.**
- *Students will study the development of unique cultural traditions and cross-cultural interactions from a wide variety of regions including Hawaii, the Pacific, or Asia.*

**6. Engage students in the study and analysis of writings, narratives, texts, artifacts, and/or practices that represent the perspectives of different societies and cultural traditions.**
- *Students will gain an appreciation of the multiplicity of sources; there should be some balance between western and non-western sources of information (e.g., documents and text, oral traditions and performances, art, archaeological artifacts at different scales, paleontological remains, paleoenvironmental materials, or cultural landscapes).*
- *Students will learn how to identify, assess, and analyze various sources of information on cultural behaviors, to organize them into systems of meaning, and to evaluate conclusions relative to the kinds of information available.*
- *Students will learn how different materials can reveal different aspects of contemporary and past human development.*

## Diversification Requirements

### DA (Arts) Hallmarks
1. Uses the definitions, descriptions, and terminology of the visual arts, performing arts, or other creative arts;
2. Emphasizes the acquisition of practical and theoretical skills necessary to produce visual, performing, or other creative arts for primarily aesthetic purposes;
3. Develops creative abilities in which artistic conventions are applied and originality is sought.

### DH (Humanities) Hallmarks
1. Uses the terminology of historical, philosophical, language or religious studies;
2. Involves texts, artifacts, concepts, processes, theories or issues of concern in these studies;
3. Demonstrates inquiry that involves the methods of study, reflection, evidence-gathering, and argumentation that are employed in these studies.

**DL (Literatures) Hallmarks**

1. Uses the terminology of literary and/or cultural analysis;
2. Involves the study of texts, concepts, forms, figures, styles, tonalities, processes, theories, or issues relating to literary and/or cultural analysis;
3. Demonstrates inquiry that is guided by qualitative, argumentative, and/or quantitative methods employed in literary and/or cultural analysis.

**DS (Social Sciences) Hallmarks**

1. Uses the terminology of theories, structures, or processes in the social or psychological sciences;
2. Involves concepts, models, practices, or issues of concern in the scientific study of these theories, structures, or processes;
3. Demonstrates inquiry that is guided by quantitative and/or qualitative methods employed in the scientific study of structures or processes of these sciences.

**DB (Biological Science) Hallmarks**

1. Uses the terminology of the biological sciences;
2. Involves knowledge and theories relating to processes in the biological sciences;
3. Demonstrates inquiry that is guided by observation/experiment and reasoning/mathematics.

**DP (Physical Science) Hallmarks**

1. Uses the terminology of the physical sciences;
2. Involves knowledge and theories relating to processes in the physical sciences;
3. Demonstrates inquiry that involves observation/experiment and reasoning and mathematics.

**DY (Natural Science Lab)**

1. Uses the laboratory methods of the biological or physical sciences;
2. Involves processes and issues of design, testing, and measurement;
3. Demonstrates the strengths and limitations of the scientific method.

**Hawaiian, Asian, and Pacific (HAP) Focus Hallmarks and Explanatory Notes**

The Hallmarks and Explanatory Notes (italicized notes in blue following hallmarks) are used to designate a class as an official Hawaiian, Asian, and Pacific (HAP) Issues Focus class.  There are no prescribed percentages for individual Hallmarks, but 2/3 of the course must address the one or more Hallmarks, and each Hallmark must be addressed. This can include but is not limited to texts, videos, guest speakers or field trips.

**HALLMARKS**

To fulfill the Hawaiian, Asian, and Pacific Issues Focus requirement, at least two-thirds of a class must satisfy the following Hallmarks:

A. The content should reflect the intersection of Asian and/or Pacific Island cultures with Native Hawaiian culture.

> *The concept of intersection of Native Hawaiian culture with either or both of the other two regions is key to a HAP designation. A course exclusively about Hawai'i, the Pacific Islands, or Asia is not eligible for an H designation. A course that does not include relationships with Native Hawaiian culture is not eligible for an H designation.*

B. A course can use any disciplinary or multi-disciplinary approach provided that a component of the course uses assignments or practica that encourage learning that comes from the cultural perspectives, values, and world views rooted in the experience of peoples indigenous to Hawai'i, the Pacific, and Asia.

> *The course design must include both the Native Hawaiian voice and the Native voice from the indigenous people of the area of intersection. These could be represented through publications, videos, guest speakers, or field trips, for example.*

C. A course should include at least one topic that is crucial to an understanding of the histories, or cultures, or beliefs, or the arts, or the societal, or political, or economic, or technological processes of these regions; for example, the relationships of societal structures to the natural environment.

D. A course should involve an in-depth analysis or understanding of the issues being studied in the hope of fostering multi-cultural respect and understanding

**LEEWARD COMMUNITY COLLEGE HALLMARKS OF WRITING-INTENSIVE COURSES**
**The Leeward Community College Writing Committee uses these Hallmarks as they evaluate Writing-Intensive proposals:**

1. **The course uses writing to promote the learning of course materials.** Instructors assign formal and informal writing, both in class and out, to increase students' understanding of course material as well as to improve writing skills.

2. **The course provides interaction between teacher and students while students do assigned writing;** in effect, the instructor acts as an expert and the student as an apprentice in a community of writers. Types of interaction will vary. For example, a professor who requires the completion of one long essay may review sections of the essay, write comments on drafts, and be available for conferences. The professor who requires several short papers may demonstrate techniques for drafting and revising in the classroom, give guidance during the composition of the papers, and consult with students after they complete their papers.

3. **Writing contributes significantly to each student's course grade.** Writing assignments, not including in-class exams and drafts, must make up at least forty percent (40%) of each student's course grade.

4. **The course requires students to do a substantial amount of writing--a minimum of 4000 words, or about 16 pages.** This may include informal writing. Depending on the course content, students may write analytic essays, critical reviews, journals, lab reports, research reports, or reaction papers, and other types of writing. In-class exams and drafts are not counted toward the 4000-word minimum.

5. To allow for meaningful professor-student interaction on each student's writing, **the class is restricted to 20 students**.

**Appendix B  Leeward Community College SLO Assessment Form**

**Appendix C Course and Instructional Support Service Level Data**

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|---|---|---|---|---|---|
| HIST 151 | World Civilizations I | Distinguish the characteristics of the world's major civilizations in their geographic settings.<br><br>Trace the development of traditional civilizations and recognize their enduring influence.<br><br>Describe the interactive roles which social, religious, political, economic, scientific, and technological forces have played among the civilizations of the world.<br><br>Describe global processes (e.g. agricultural and urban revolutions, human migration, disease, industrialization, ecological forces, imperialism, neo-imperialism, decolonization, and technological revolutions).<br><br>Manifest a sense of historical time.<br><br>Evaluate such historical theories as the "great person" in history or deterministic interpretations. | 120 | 89 to 96 percent | Yes |

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|---|---|---|---|---|---|
| | | Discuss the historical dimensions of contemporary world affairs and issues.<br><br>Compare and contrast responses of the world's peoples as a result of intercultural contacts and the diffusion of ideas, institutions and inventions.<br><br>Draw upon their knowledge of the varieties of human experiences, and their sympathetic understanding of cultures other than their own, as they define their roles as citizens of the contemporary world.<br><br>Express informed judgments on the behavior of peoples and their institutions.<br><br>Analyze cause and effect relationships in history.<br><br>Discuss the major attempts to explore the ethical and fundamental questions of life posed throughout history. | | | |
| HIST 152 | World Civilizations II | Distinguish the characteristics of the world's major civilizations in their | 102 | 81 to 91 percent | Yes |

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|--------|-------------|---------------------------|---------------------|-----------------|-------------------------------|
|  |  | geographic settings.<br><br>Trace the development of traditional civilizations and recognize their enduring influence.<br><br>Describe the interactive roles which social, religious, political, economic, scientific, and technological forces have played among the civilizations of the world.<br><br>Describe global processes (e.g. agricultural and urban revolutions, human migration, disease, industrialization, ecological forces, imperialism, neo-imperialism, decolonization, and technological revolutions).<br><br>Manifest a sense of historical time.<br><br>Evaluate such historical theories as the "great person" in history or deterministic interpretations.<br><br>Discuss the historical dimensions of contemporary world affairs and issues. |  |  |  |

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|---|---|---|---|---|---|
| | | Compare and contrast responses of the world's peoples as a result of intercultural contacts and the diffusion of ideas, institutions and inventions.

Draw upon their knowledge of the varieties of human experiences, and their sympathetic understanding of cultures other than their own, as they define their roles as citizens of the contemporary world.

Express informed judgments on the behavior of peoples and their institutions.

Analyze cause and effect relationships in history.

Discuss the major attempts to explore the ethical and fundamental questions of life posed throughout history. | | | |
| SP 151 | Personal and Public Speech | The student should be able to use visual aids effectively to enhance a presentation | 109 - 135 | 76 to 87 percent met | Yes |
| ENG 100 | Composition I | Use and combine sources without | 110 | 25 percent met | No |

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|---|---|---|---|---|---|
| | | plagiarizing. <br><br> Give credit to others when using their words or ideas in writing. | | | |
| SOC 100 | Survey of General Sociology | Assess the advantages and disadvantages of common research methods used in the scientific study of the social world. <br><br> Demonstrate the use of the sociological imagination in the study of sociology. | 143 - 227 | 71 to 100 percent met | Yes |
| ICS 100 | Computing Literacy and Applications | Utilize the basic features of computer applications to communicate effectively. <br><br> Utilize online resources for research and communication. <br><br> Describe ethical issues involved in the use of computer technology. | 30 | 90 to 97 percent met | Yes |
| REL 150 | Intro to the World's Major Religions | Identify fundamental terms, concepts and practices for each religion <br><br><br> Identify key principles and values revealed though the historical, literary | -- | 93 percent | Yes |

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|---|---|---|---|---|---|
| | | and cultic stories of each tradition. | | | |
| MATH 103 | College Algebra | Analyze in context the results of mathematical operations and procedures<br><br>Select and correctly utilize precise mathematical language and symbols to effectively communicate procedures and results | 55 to 60 | 12 to 51 percent | No |
| POLS 110 | Intro to Political Science | Analyze the politics in everyday life. | -- | 100 percent met | Yes |
| PHIL 110 | Intro to Logic | Prove the validity of arguments by means of formal proofs. | 183 | 55 percent met | No |
| BIOL 100 | Human Biology | Apply the scientific method to construct and design an experiment, and to determine the validity of a scientific claim.<br>Evaluate the implications of genetic engineering and biotechnology to humans. | 49 to 124 | 94 to 100 percent | Yes |
| ASTR 110 | Survey of Astronomy | Describe the properties of light, production of light and how astronomers use light as a tool to learn all there is to know about stars and galaxies.<br><br>Describe the formation and the | 31 to 74 | 70 to 84 percent | Yes |

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|---|---|---|---|---|---|
| | | properties of the solar system and apply the concepts to the existence of extra solar planets circling other star systems. | | | |
| SP 251 | Principles of Effective Public Speaking | The student will be able to conduct an audience analysis. | 25 | 36 to 65 percent | No |
| PSY 240 | Developmental Psychology | Apply developmental psychological concepts to students' lives | -- | 95 to 96 percent | Yes |
| ECON 130 | Microeconomics | Define economic resources, scarcity, and opportunity cost.

Calculate and analyze demand, supply, and market equilibrium and their implications in real world markets. | 31 | 73 to 76 percent | Yes |
| GEOG 101 | Natural Environment | Analyze the underlying processes affecting the earth's climate, landforms, soils, and biota.

Apply and analyze the distribution of natural phenomena on the earth's surface | -- | 61 to 66 percent | No |
| MICR 130 | General Microbiology | Compare and contrast the different kinds of microorganisms, especially their similarities and differences at the biochemical and cellular levels. | 73 to 100 | 56 to 69 percent | No |

| Course | Course Title | Student Learning Outcomes | Sample Size (Range) | Results (Range) | Average = 70 percent and above |
|---|---|---|---|---|---|
| | | Compare and contrast the growth requirements of various microorganisms, and apply these principles to the control of microbial growth. | | | |
| Library | Library | The student will evaluate information and its sources critically. Required for completion of English 22 or 100.<br><br>The student will use researched information to complete course assignments | 681 | ENG 100/E: 94 percent | Yes |