AUTHORIZATION TO PLAN (ATP) AN ACADEMIC PROGRAM

Please complete all sections with an emphasis on items 7, 8, 9 and 10. The ATP is not to exceed 5 pages.

1. School/College and Department/Unit
   Hawaii Community College      Liberal Arts/Humanities Dept.

2. Chair/Convener of Planning Committee
   Violet Murakami, 974-7533

3. Program Category:  X New  ___Modified  ___ Interdisciplinary

4a. Degree or Certificate Proposed:
   Associate in Science Degree (A.S.) in Digital Media Arts (DMA)

4b. List similar degrees or certificates offered in UH System:
   A. S. degree in Digital Media, Leeward Community College
   A. S. degree in New Media Arts, Kapi’olani Community College
   A. S. degree in Communication Arts, Honolulu Community College

5. Planning
   Planning period January 2010 to December 2010
   a. Activities to be undertaken during the planning phase
      • Develop course curriculum and course outlines.
      • Recruit lecturers for specific courses.
      • Work with Administrative staff through the Vice Chancellor for Academic Affairs office to identify additional classroom/lab space.
      • Actively recruit students for the program.
      • Quantify needs assessment through survey of local high tech industries, graphic and communications arts businesses on Hawaii Island through the EMIS Database.
      • Analyze industry employment outlook for students completing this program.
      • Develop student learning outcomes for the Associate in Science degree in Digital Media Arts.
      • Determine the appropriate mix of courses required to meet the competencies and SLO’s of the A.S. degree in DMA.

   b. Submission date of program proposal
      Proposed Date of Implementation: Fall 2010

   c. Workload/budget implications during planning period
      The program coordinator is receiving three (3) credits of reassigned time per semester to work on the planning and development of the A.S. degree proposal during the Academic Year: 2009 - 2010.

6. Program Description (Objectives and relationship to campus mission and strategic plan)
The Digital Media Arts program at Hawaii Community College will prepare students for professional work in the various fields that are coming together (or converging) under the general heading of Digital Media Design and Production, i.e. interface design, digital photography, animation, digital video production, multimedia design, etc.

The proposed A.S. degree in Digital Media Arts embraces Hawaii Community College’s Mission Statement: “to provide the community with a responsive educational environment that empowers learners to develop skills and to be responsible and productive in a complex world.” In addition, the proposed A.S. degree in D. M. A. also meets the UHCC’s System Plan’s criteria expressed in Goal A: “The UH Community Colleges will focus on student success by being learning colleges, providing access to quality programs which are affordable, adaptable and responsive to the changing needs of students and their communities.” Further, in Goal C, it states “To promote workforce and economic development by responding quickly with education and training programs to meet the changing workforce requirements . . . .” Accordingly, the A.S. degree in D. M. A. would provide students and in-service personnel with much needed education and training to meet not only their educational and professionals goals, but would also play a crucial role in the revitalization of the Big Island economy.

In addition, our program is currently supported by a grant from Alu Like Native Hawaiian Career and Technical Education Project (NHCTEP) in Honolulu. We received a 3-year $750,000 grant for the development of an A.S. degree in Digital Media Arts. This grant supports Native Hawaiian students going into Technology (STEM) programs by awarding tuition waivers to NH students going into this field as well as other materials for the development of our current Certificate of Completion in Digital Media Arts into an A.S. degree. Furthermore, this project also supports the system-wide Achieving the Dream initiative that supports Native Hawaiians entering higher education and eventually into the workforce.

7. Program Justification (Needs and Rationale. Include, as appropriate, internal and external factors driving need for this program; description of needs assessment; number of interested student per year; need for such a program in relation to workforce development, graduate studies, etc.)

State Need

According to both the former and current Governors, Hawai`i needs to develop a quality workforce in order to meet the demands of the emerging high-tech industry of the state.

Due to the current economic conditions of the State of Hawai`i, the unemployment rate rose to 9.1%. There are pockets of higher unemployment in remote communities on the Big Island. Additionally there are shortages of skilled workers and underemployed workers throughout the rural areas on all the neighbor islands. East Hawaii is particularly an area of high unemployment and low per capita income and with many students vulnerable to high social risks. The communities of Pahoa, Keaau, Hilo, Central Hilo and Ka`u have similar poverty rates. The major town area of Hilo has the lowest percentage of families headed by a married couple (meaning
most families are single-parent families). While Ka`u received the state’s highest rate (39%) for “idle teens,” 12th graders, who neither attend school nor work - East Hawai`i youth also have high incidence of alcohol, tobacco, and other drug usage. The East Hawaii has a higher than the state average rate for 6th graders who start using drugs and needed treatment for drug or alcohol dependence or abuse.

The Office of Hawaiian Affairs has stated that improving education for Native Hawaiians (and ALL students) offers the greatest hope for breaking out of cycles of poverty, dependence, and low self-esteem. Yet many Hawaiians have not had adequate access to quality educational experiences. This is the basis for supporting Hawai`i Community College’s Digital Media Arts program to provide the skills that can be used in a variety of high wage, high tech careers and offering the possibility of a high tech industry in the East Hawaii area.

In the 2009 Emerging Industry Benchmark Summary report published by the Department of Business, Economic Development and Tourism (DBEDT), the Computer and digital media industry was identified as one of the high growth industries by outperforming the overall state job growth rate of 13%.

In addition, according to a comprehensive data report on the growth of science and technology industries in Hawaii released by the Hawaii Science & Technology Council (HIScTech) in October 2008, the technology sector in Hawaii has experienced significant growth between 2002 and 2007, and it is poised for significant growth in the future – from the Economic Outlook report of the DBEDT website.

Opportunities for the State exist in the several industry clusters including Film and Digital Media – (traditional film and television production and post-production work, digital media (content development, enablers, and delivery), video games, computer animation, and advanced web design), identified by the Hawaii Statewide Comprehensive Economic Development Strategy (CEDS).

According to the Long-Term Occupational Projections for the State of Hawaii, between 2006 and 2016, the growth rates for the following digital media arts-related occupations are:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Ten-year Growth Rate (%)</th>
<th>Annual Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Publishing and Broadcasting</td>
<td>66.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Audio &amp; Video Equipment Technicians</td>
<td>15.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Film &amp; Video Editors</td>
<td>11.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Motion Picture and Sound Recording Industries</td>
<td>10.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Camera Operators, Television, Video, &amp; Motion Picture</td>
<td>10.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Media &amp; Communication Workers, All Other</td>
<td>10.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Media &amp; Communication Workers</td>
<td>6.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Media &amp; Communication Equipment Workers</td>
<td>4.3</td>
<td>0.4</td>
</tr>
</tbody>
</table>
Media & Communication Equipment 
Workers, All Other 
Producers & Directors 

<table>
<thead>
<tr>
<th>Category</th>
<th>Hawaii</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media &amp; Communication Equipment</td>
<td>4.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Workers, All Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producers &amp; Directors</td>
<td>3.8</td>
<td>0.4</td>
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</table>

Source: Hawaii State Department of Labor and Industrial Relations (DLIR), Research and Statistics Office, November 2009.

On the website of the Bureau of Labor Statistics, USA Dept. of Labor, National Occupational Employment Projections to 2016, computer technology related occupations are projected to grow the fastest among the eight professional subgroups (24.8%).

Hawaii County

Recently, an on-line needs assessment survey was conducted in the Fall 2009 semester asking local (Hawaii County) businesses whether an Associate of Science degree was desirable or needed in our community. 91% of the companies surveyed who responded were in favor; 99% also were interested in internships at their companies.

In addition, Long-Term Occupational Projections reports that computer-related professions will grow by 27.4% percent in Hawaii County by 2014 according to the Hawaii Workforce Informer, a web-based information-disseminator for DLIR.

Digital Media Arts represents a viable industry with growing economic implications for the state. There are three Media Arts programs that offer A.S. degrees that have been initiated in the CC’s in the past eight years that are steadily maintaining and even showing growth; all on O’ahu. Currently, digital media arts courses are offered in the local high schools on the Big Island (Waiakea, Kea’au, Hilo, Pahoa High School and Kamehameha) and by offering this degree at HawCC, high school students will not have to move or relocate themselves to O’ahu in order to further their education in this field.

By offering this A.S. degree program, Hawai’i Community College will be preparing students to enter the workforce in this emerging high-tech field. The program has demand from both students and industry and much potential for growth (see below). As Hawai’i retools its industries to incorporate information technologies such as e-commerce and multimedia design, this program will grow in demand.

The number of majors in our program continues to grow from 12 in the Fall 06 to 54 majors in the 08-09 year. The *Hawaii County Jobs 2006 – 2017 by Standard Occupational Code (SOC)* lists several categories of Job Descriptions by SOC Code that our DMA students could apply for: for instance, Graphic Designers: SOC Code 27-1024 has 22 New and 11 Replacement Jobs. Also Photographers: SOC Code 27-4021 has 24 New and 64 Replacements Jobs and Film and Video Editors: SOC Code 27-4032 has 8 New and 3 Replacement Jobs. Our program trains and prepares our students for all of these jobs as well as SOC Code of 27-1014 for Multimedia Artists and Animators which has new and replacement jobs as 5. This is from the Economic Management Systems Inc. (EMSI) 4/07.
Furthermore, the Academy for Creative Media (ACM) at the Manoa campus offers students an option to pursue further studies in a four-year degree after completing our program should they wish to do so. This program currently has doubled the number of majors in the program to 58 students as of Fall 2009 (from their website). Currently, there are articulation agreements between the CC’s that offer Digital Media courses/programs across the system (i.e. LCC, KapCC, HonCC and HawCC) and with some courses to Manoa’s ACM program (some of the advanced Animation courses). With the development of more courses for our A.S. degree, the program plans to pursue articulation agreements with ACM so that our students may transfer their credits to Manoa for courses taken at HawCC.

8. Description of resources required
   a. Faculty (existing and new FTEs)
      Currently there are one (1.0 FTE) Instructor/Coordinator and a half (.25 FTE) faculty dedicated to Digital Media Arts. At least one more (1.0 FTE) full time faculty teaching in DMA would be needed based on a 400% growth from Fall 2004 to Fall 2008 when the program was initiated.

   b. Library resources (including an evaluation of current resources and an estimate of the cost of additional resources required). Very minimal library resources are anticipated.

   c. Physical resources (space, equipment, etc.)
      1. Currently, the DMA program has one dedicated lab equipped with 15 iMac workstations and a shared 10 PC lab for the high-end 3D Animation software that is shared with the Agroforestry program in another building.
      2. An additional classroom/lab is needed where more classes can be taught since we are not able to offer all the program classes in the current lab.
      3. A small office space in the ART Building is used to house the two full-time faculty along with two support staff.

   d. Other resources required (staff, graduate assistants, etc.)
      • We currently have a three-quarter time Admin and Fiscal Specialist and another three-quarter time Educational Specialist position that are funded through a grant from Alu Like Inc. These positions will need to be institutionalized.
      • In addition, 2 student workers are needed as Lab Monitors to assist students and monitor the lab during open lab hours.

9. Five-Year Business Plan. Provide a five-year projected budget for the program that includes:
   a. Annual costs to implement the program
      See table

   b. Projected enrollment and estimated tuition revenue
      See attached table

   c. How will be program be funded?
      Currently, the program is funded through a grant from Alu Like Inc, Native Hawaiian Career and Technical Education program. One of the goals of the project is the creation of an A.S. degree in DMA.
However, the program will eventually need to be funded through Campus tuition and General Funds.

d. Does the current or proposed budget (Department/College/Campus) include funds or a request for funds for the proposed program? Please provide details.
The campus has a 4-year replacement plan for all computers on campus in place. The replacement plan has cycled (replaced) 11 G5 computers in the DMA lab this past fall 09 semester with newer computers.

e. Given a “flat budget” situation, how will the proposed program be funded?
The College will eventually need to fund the program through revenues, tuition and General Funds.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROGRAM COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty w/o fringe (1.0 FTE)</td>
<td>63,936</td>
<td>66,139</td>
<td>66,139</td>
<td>68,123</td>
<td>70,167</td>
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<tr>
<td>Faculty w/o fringe (1.0 FTE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Faculty w/o fringe (FTE,25)</td>
<td>12,093</td>
<td>12,726</td>
<td>12,726</td>
<td>13,108</td>
<td>13,501</td>
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<tr>
<td>Other personnel costs w/o fringe Lecturer (1.0FTE)</td>
<td>28,800</td>
<td>30,312</td>
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<td></td>
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<tr>
<td>Other personnel costs w/o fringe Staff/APT (.75% x 2)</td>
<td>58,392</td>
<td>58,392</td>
<td>58,392</td>
<td>60,144</td>
<td>61,948</td>
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<tr>
<td>Equipment/Supplies</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
<td>40,000 (16 iMacs + software)</td>
<td>2,000</td>
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<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>TOTAL Expenses</strong></td>
<td>165,221</td>
<td>169,569</td>
<td>187,017</td>
<td>230,568</td>
<td>198,285</td>
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<thead>
<tr>
<th></th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
</tr>
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<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Projected Enrollment (# Majors)</td>
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<tr>
<td>No. of Courses</td>
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<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
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<tr>
<td>No. of Credits</td>
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<tr>
<td>SSH</td>
<td>675</td>
<td>675</td>
<td>675</td>
<td>675</td>
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<tr>
<td>Tuition Rate/Credit</td>
<td>88</td>
<td>97</td>
<td>97</td>
<td>97</td>
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<tr>
<td>Total Revenue from Tuition</td>
<td>59,400</td>
<td>65,475</td>
<td>65,475</td>
<td>65,475</td>
<td>65,475</td>
</tr>
<tr>
<td><strong>TOTAL Revenues</strong></td>
<td>59,400</td>
<td>65,475</td>
<td>65,475</td>
<td>65,475</td>
<td>65,475</td>
</tr>
</tbody>
</table>

10. Impact on current courses or programs.

Currently, the DMA program offers a 21 credit Certificate of Completion; six classes that are required and one option class from a list of growing courses that are offered. Currently, there are 15 option (divided between interface/graphic design, digital video/animation and photography) courses being offered that the student can choose from. The college also offers a strong core of foundation art classes that can be included in the A.S. degree to augment the skills learned in the DMA classes. The proposed A.S. degree will augment the current Certificate of Completion program by meeting the needs of our students’ career objectives.
11. If this program is multidisciplinary, provide evidence of commitment for support from the colleges, departments, programs, and/or individuals expected to participate. An Entrepreneurship course titled ENT 120 Starting A Small Business is currently required as part of the Certificate of Completion in DMA. The Business Education program is planning to offer at least 1 section of ENT 120 every semester.

Reviewed by: (The ATP has completed the campus approval process prior to review by Council of Chief Academic Officers)

Campus Chief Academic Officer:
Comments and Recommendations:

__________________________  __________________________  ________________
Print Name                              Signature                        Date

Council of Chief Academic Officers (Systemwide Consultation):
Comments/Recommendations:

__________________________  __________________________  ________________
Print Name                              Signature                        Date

Chancellor: ___ Approved   ___ Disapproved

__________________________  __________________________  ________________
Print Name                              Signature                        Date

(Final signed copy is provided to the Vice President of Academic Planning and Policy for Program Action Report)