1. Program or Unit Description

Mission
The mission of the Information Technology (IT) department is to assist faculty and staff in the advancement of knowledge through the use of technology and to make available such technological tools that serve to promote the mission of the college.

Vision
The overall vision of IT is to develop, maintain and expand state of the art technologies to provide a learning environment that enables faculty, staff and students the opportunity to develop knowledge and skills to succeed in the 21st century and beyond.

Description
IT is a service-oriented department that plays a critical role in support of the daily operations of the college by providing high quality technical services. IT plans, obtains funding, acquires, installs, and supports the necessary technological tools and resources for education, training, and the use of technology for instructional, academic, and administrative support for the college on the Kahului campus and its Outreach centers in Hāna and Lahaina, and on Molokaʻi and Lānaʻi.

IT is located in the Kaʻaʻike Building, the central hub for the college's telecommunications network, integrating a broad range of computing, multimedia, and telecommunication technologies. The department is subdivided into Computing Services and Media Services. Each of these units work in partnership to deliver the utmost in quality customer service, training, support, and assistance. The IT team is composed of dedicated staff (figure 1) who make certain that campus technology runs smoothly. It should be noted that at this time, there is no Director of IT leading the unit due to the hiring freeze. However, the rest of the staff continuously strives to improve the technology resources on campus to support the overall mission of UH Maui College (UHMC).

The target student or service populations include face to face and distance learning students and faculty, the administration, the staff, other government agencies, and the community.

Computing Services supports:
- hardware
- software
- peripherals
- servers
- networks (ethernet and wifi)
- cybersecurity
- UHMC website
- VoIP (telephony)
- UHMC Help Desk
- Banner data requests
- Systems integration and design
- Custom developed software solutions

Media Services supports:
Program: Academic Support Services – Technology Resources

- distance learning
- audio visual (AV) services
- electronics
- AV production
- digital asset management
- closed captioning
- copyright assistance
- duplication
- graphic arts services
- instructional design services
- training

Figure 1. UHMC IT Organizational Chart
2. Analysis of the Program/Unit

IT is tasked with providing a wide variety of academic and institutional support services. These services are organized into thirteen major categories:

1. **Provide, install, service and assess computer and peripheral equipment**
   Computer and peripheral equipment and support services for classrooms, labs, faculty and staff offices.

2. **Provide, install, assess and service audio/visual equipment**
   Audio/visual equipment and support services for classrooms, labs, and special events.

3. **Provide and maintain campus network services**
   Wired and wireless internet access, VoIP services.

4. **Provide technical and production services for classroom instruction and distance learning (DL)**
   Technical and instructional support for course instruction taught via face to face and DL.

5. **Provide technical and production services for the campus and administration**
   Audio/video production support for campus programs to support marketing and the administration.

6. **Provide graphics and marketing support, printing, photocopying and duplication services and a faculty/staff work room**
   Duplication, printing, desktop publishing, laminating, velo-binding, graphic arts services, including catalog and schedule of classes development, informational and marketing publications and other promotional activities.

7. **Provide website design, development and support for UHMC homepage**
   Content development, design and consultation services, miscellaneous external website support, video streaming support, workshops, training and marketing services.

8. **Provide Help Desk operations and support services**
   Computer and multimedia troubleshooting and repair services for faculty, staff, and students.

9. **Provide orientation and training for multimedia and computing technology**
   Computing technology support and multimedia design services for course instruction, program development, and content creation.

10. **Provide marketing support services for the college’s programs**
    Technology and consultation services to assist with program information dissemination and overall college marketing and advertising.
11. **Respond to programmatic and management Banner data request**  
Provides programs and executive management with customized Banner student data requests. Implements and enforces distribution and access to data in a manner consistent with UH data integrity and security standards.

12. **Provides IT systems integration design and support for college**  
Works with college departments and programs to assess programmatic technical needs. Helps to select, deploy, and support customized IT systems to ensure needs of campus are met.

13. **Provide customized software solutions and support for college**  
Works with college departments and programs to assess, design, deploy, and support customized software requirements. Services include off the shelf software customizations, augmentation, or in-house software development services.

Table 1 - Quantitative Indicators of UHMC IT Department.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>AY 18-19</th>
<th>AY 19-20</th>
<th>AY 20-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus Student Headcount</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Unduplicated</td>
<td>3,818</td>
<td>3,740</td>
<td>3,612</td>
</tr>
<tr>
<td>Fall</td>
<td>3,092</td>
<td>2,992</td>
<td>2,936</td>
</tr>
<tr>
<td>Spring</td>
<td>2,753</td>
<td>2,746</td>
<td>2,628</td>
</tr>
<tr>
<td>FTE faculty</td>
<td>123</td>
<td>119</td>
<td>109</td>
</tr>
<tr>
<td>FTE staff</td>
<td>167</td>
<td>166</td>
<td>162</td>
</tr>
<tr>
<td>FTE Student</td>
<td>1,540</td>
<td>1,497</td>
<td>1,393</td>
</tr>
<tr>
<td>Efficiency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation hours per week</td>
<td>65</td>
<td>65</td>
<td>60</td>
</tr>
<tr>
<td>Student hire hours per week</td>
<td>65</td>
<td>57</td>
<td>40</td>
</tr>
<tr>
<td>Casual hire hours per week</td>
<td>35</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Completed Work Requests (via OS ticket, email, phone and f2f)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computing</td>
<td>1,740</td>
<td>1341</td>
<td>1319</td>
</tr>
</tbody>
</table>
Engineering/AV (total #)
- Workorders
- Zoom Room Installs
- Other Equipment Installs, Design & Consultation

<table>
<thead>
<tr>
<th></th>
<th>2,199</th>
<th>1,683</th>
<th>298</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>280</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 rooms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>see narrative</td>
</tr>
</tbody>
</table>

Instructional Design (indicates total #)
- Number of Appointments
- Workshops/Webinars Delivered

<table>
<thead>
<tr>
<th></th>
<th>515</th>
<th>536</th>
<th>446</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>478</td>
<td>58</td>
<td>380</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>66</td>
</tr>
</tbody>
</table>

Graphic Arts

|                          | 142   | 300   | 377 |

Duplication

|                          | 54    | 33    | 375 |

Number of copies generated

|                          | 301,925 | 26,486 | 2,671 |

Media Production (total hours)

|                          | 1,293  | 2,924  | 1,450 |

DL/Cable/Videoconferencing (total hours)

|                          | 3,909  | 3,672  | broken out below |

Cable Course Production & Support

|                          | -      | -      | 2,080 |

Zoom Hosting

|                          | -      | -      | 200  |

Tech Classroom & Online Tech Support

|                          | -      | -      | 1,020 |

Production & Zoom Host Planning

|                          | -      | -      | 150  |

Closed Caption Services

|                          | -      | -      | 1,790 |

Number of Instructional Computers (Kahului and Outreach Centers)

|                          | 1,800  | 1,975  | 1,451 |

Number of Virtual Desktop Infrastructure (VDI) Accounts

|                          | -      | -      | 266  |
ducts. One positive is that due to covid and the dearth of in-person classes on campus, the Media Services were housed in 3 classrooms and a conference room in the Ka Lama building. All classes that were conducted via the interactive system were moved over to Zoom with instructors teaching either from home or their offices. This required the staff to do more tech support for those classes, especially for those that were teaching from home. Cable classes were pre-recorded a week ahead of time for broadcast according to the regular schedule. Productions were done in a makeshift studio in a classroom. All of this required the staff to move key equipment to the building for the entire Fall 2020 semester and implement creative ways to accomplish tasks and projects in the makeshift spaces. The Kaʻaʻike building was re-occupied in Spring of 2021.

With the retirement of the Senior Engineer in December of 2020, the Electronic Technician took on his duties, which included not only the lead on installs, repairs, and maintenance, but consulting, design and equipment specs for new and upgraded installs. Some of these included 8 new Zoom ready rooms. These installs occurred in Spring 2021 and required the 2 Media Techs and 2 student assistants to help.

Covid required a shift in services for the Media department from running the audio/video for interactive classes to providing fuller service training and tech support for Zoom classes. Also, the Producer/Director duties increased with requests to host complex Zoom meetings and webinars for programs and departments.

Due to a requirement for all online video to be closed captioned by May of 2021, the Media team began closed-captioning all videos online which includes promotional videos, course videos and other productions including the Preserving Our Recollections oral history project which consists of over 400 hours of interviews. This required the Media team to add closed-captioning services to their regular list of services for the campus.

Moving forward, the Media side of the house expects to continue these added duties of Zoom room training, including the move to hybrid and/or hyflex for some classes, tech support for those rooms (currently, there are 8 Zoom ready rooms with approximately 8 more to be installed in various buildings on campus), Zoom webinar hosting, Zoomcasts (live broadcast of Zoom webinars), closed-captioning and assisting the Electronics Technician with installs.

There were several factors which lead to the decrease in the need for support by the Instructional Designer.

1. Due to professional development opportunities, more faculty have become more proficient with our LMS, and learning technology
2. Through appointments with the Instructional Designer and professional development opportunities, faculty have learned that there are other support resources available to them. The University of Hawaii System’s Information Technology Services (UH ITS) provide 24/7/365 support.
3. Weekly Zoom Cafe’s, open workshops, allowed for faculty to be able to ask questions during this time instead of having to make a scheduled appointment with the Instructional Designer.

The transition to Zoom has affected multimedia support. Although the use of media production, cable and video conferencing has decreased, support for Zoom has increased. Faculty and students needed to be assisted and trained how to use Zoom. This included production and planning for virtual events that historically have been face-to-face such as campus Open House, student orientation and virtual conferences.
The increase in duplication services was a result of more marketing material needed to help recruit students and the rebranding of the college. Although most courses were online, there were a few face-to-face that required duplication services.

The upgrade of eight classrooms to Zoom Rooms involved research, planning and installation of the equipment by the lone AV Engineer.

**Strengths**

The major strength of the IT department is its people. The staff are extremely dedicated to the campus and will go the extra mile to ensure that the technology needs of the faculty, staff, students, and administration are met. This includes both the credit and the non-credit programs. Staff will arrive early, stay late, work double shifts and even come in on weekends to ensure that the campus networks are up and running and DL and face to face classes are covered and receive needed support. There is no price that can be put on this kind of commitment.

**Areas to Improve**

Technology continues to be an important component of the campus. There is a continual need to upgrade, maintain, and repair computer hardware and software, and AV equipment. Adapting to the changing business models of software and hardware companies is a challenge. Companies have been switching to a subscription type of service which will continue to have an impact on how the campus budgets for certain software and hardware. The department continues to implement technology, such as virtual labs, to improve the administration and decrease the cost of administration of hardware and software.

### 3. Unit/Service Outcomes

- a) Provided webinars, presentations, and virtual workshops for faculty and staff (Table 2)
- b) Provided faculty, staff, and students access to mobile hardware, hotspots, and access to virtual computing labs so teaching, learning, and campus operations could continue at home during lockdown.
- c) Upgraded network speed to three buildings (Kaaike, Kupaa, and Ka Lama) to 10 GB.
- d) Expanded the outdoor network by redeploying wireless access points around campus to provide better campus WiFi coverage
- e) Upgraded faculty and staff desktop computers to laptops with docking stations with the use of CARES funds
- f) Expanded virtual labs for 24x7 computing lab access for students.
- g) Upgraded classrooms to Zoom rooms with the use of CARE funds

**Table 2 - Webinars, Presentations, and Virtual Workshops**

<table>
<thead>
<tr>
<th>Name</th>
<th>Qty</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laulima Workshops</td>
<td>9</td>
<td>Including one system webinar for Laulima Upgrade to v19</td>
</tr>
</tbody>
</table>
Creating and Sharing Digital Files

<table>
<thead>
<tr>
<th>Event Title</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom Café</td>
<td>25</td>
</tr>
<tr>
<td>Other Zoom Related:</td>
<td>2</td>
</tr>
<tr>
<td>● Zoom Basics and Security</td>
<td></td>
</tr>
<tr>
<td>● Zoom Basics for Teaching Online (partnership with UHM CTE)</td>
<td></td>
</tr>
<tr>
<td>Mixed Plate PD Series</td>
<td>17</td>
</tr>
<tr>
<td>Kapiʻolani CC Summer Camp Virtual Conference</td>
<td>1</td>
</tr>
<tr>
<td>Kauhale CoP in Collaborative Leadership</td>
<td>1</td>
</tr>
<tr>
<td>NF 101 Present on Organization and Time Management</td>
<td>1</td>
</tr>
<tr>
<td>Computer Clean Up and Organization</td>
<td>1</td>
</tr>
<tr>
<td>Adventures in Visual Design</td>
<td>1</td>
</tr>
<tr>
<td>Active Learning by Design</td>
<td>4</td>
</tr>
<tr>
<td>UHCC Online T/P and Contract Renewal Applicant Training</td>
<td>1</td>
</tr>
<tr>
<td>Civil Service PD Day</td>
<td>1</td>
</tr>
</tbody>
</table>

4. **Action Plan**

The UHMC Technology Plan addresses a range of technology and services on campus. Some of these projects were started in earlier years and are still active. All action plans meet the College’s Mission and Strategic Plan in moving the College forward.

- Continue to transition campus computers to a virtual lab using a Virtual Desktop System (VDI)
- Continue to upgrade wireless coverage around campus
● Continue to upgrade campus-wide network upgrade
● Deploy a second firewall when upgrading the network. Allows upgrades regularly without network disruption.
● Continue to upgrade classrooms to Zoom rooms to provide for HyFlex course options
● Provide more comprehensive training for Zoom rooms for faculty, staff and administrators
● Provide tech support for Zoom rooms for community users
● Provide workshops and professional development opportunities for faculty and staff
● Work with academic support units

5. Resource Implications

UHMC needs to continue to keep up with the advancement of technology. Although there have been some equipment upgrades and replacements, there will continually need to be upgrades and replacements.

The transition to Zoom has not decreased the need for video production support and training. Not only has there been an increase in the need for support for Zoom, but there continues to be a demand for video and audio content from the entire campus, not only instruction. There is also a high demand for distance learning services with the increase in demand for online learning.

The Information Technology and Audio Video department support is not limited to just instructional support. The department is responsible for supporting all of the UHMC campuses, including the remote education centers (Molokai, Lanai, and Hana) and remote learning. To continue to provide a high level of technical support for the ever-changing needs of our campus and the community. In order to assist us in this, IT is requesting:

● a full-time Media Design & Production Band B position to assist with additional requests for video production and instructional design support in the hybrid course transition

● an 11-month faculty position as Distance Learning coordinator due to the increase in online classes. As we plan to offer more classes via this medium post-covid, this position can support all DL classes in all modalities and coordinate DL functions and support on campus and with other campuses.

● the filling of the Senior AV Engineer position to meet the demand of AV maintenance, installation, and repair. Without this position, we will have to, on occasion, reassign other personnel to assist with electronic tech and engineer duties, both in AV, which is specialized.

● Additional funding to cover upgraded instructor and student computers for classrooms, AV upgrades in classrooms, updates to the campus wifi network to allow for continued growth and purchasing software licenses to ensure network functionality and security.