Academic Support Service
Technology Resources

2020
ANNUAL REVIEW OF PROGRAM DATA

UNIVERSITY *of* HAWAI'I®
MAUI COLLEGE

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 comprised 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, and the staff.

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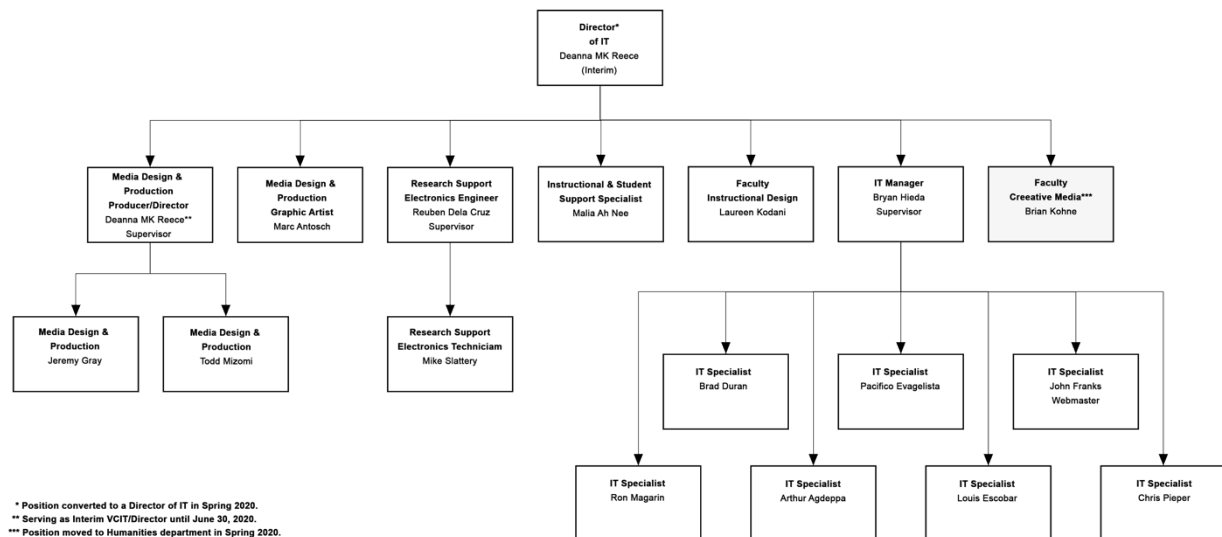- · instructional design services
- · training

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 multi-media 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 shows the quantitative indicators used in measuring the workload and effectiveness of the unit.

Table 1

Quantitative Indicators of UHMC IT Department.

Indicator	AY 18-19	AY 19-20	% diff
Demand			
Campus headcount			
Fall	3,092	2,992	-3.29
Spring	2,753	2,746	-0.25
FTE faculty	123	119	-3.31
FTE staff	167	166	-0.60
Efficiency			
Operation hours per week	65	65	0
Student hire hours per week	65	57	-12.3
Casual hire hours per week	35	19	-59.26
Completed Work Requests (via OS ticket, email, phone and f2f)			
Computing	1,740	1341	-25.90
Engineering/AV	2,199	1,683	-26.58

Instructional Design (indicates total #)
        Number of Appointments
        Workshops/Webinars Delivered
	515	536
		478
		58
			4.00

Graphic Arts	142	300	71.49
Duplication	54	33	-38.9
Number of copies generated	301,925	26,486	-91.2
Media Production (total hours)	1,293	2,924	77.35
DL/Cable/Videoconferencing (total hours)	3,909	3,672	6.25

Number of Instructional Computers (Kahului and Outreach Centers)	1,800	1975	9.27

Quantitative Indicators

Table 1 shows that campus enrollment has slightly decreased, the number of faculty has decreased, and the number of staff has decreased. In keeping with the slight decrease in enrollment, the number of hours of interactive classes has decreased but the number of online classes has increased. Cable class offerings remain the same. When the Spring 2020 semester was disrupted by covid-19, the demand for online class support grew with the immediate increase of online classes per mandates by the system. There was no longer a need to continue the one casual hire, but Media continued to employ one student assistant to allow the Producer/Director time to serve as the interim Vice-Chancellor of IT, which added significantly to her workload.

The decreases in the number of workorders completed by computing, engineering/av, and duplication services is indicative of few faculty and staff working on campus. This decrease does not accurately capture the work performed by the department during this period. Many of the initiatives adopted during the covid-19 period were initiated from the support end, requiring the technicians to reach out to employees to get them setup remotely and to ensure their home offices were functioning properly. In these cases, work requests were not needed. The department also relied heavily on our remote support platform to service our customers. This shift led to a high number of phone calls and email threads between support staff and remote employees, which did not generate a ticket request.

There continues to be dramatic increases in production hours, instructional design services (IDS), and graphic support services due to added support needed for covid-19 related signage, content creation to support online classes, workshops and outreach events, and IDS training for online instruction.

Indicative of the move to online due to covid, requests for duplication services and the number of copies made both decreased.

As the department's workload increases and shifts to different workflows, we will need to reassess how work is quantified and make adjustments to ensure our efforts are accurately documented.

It should be noted here that interim contract for the Producer/Director to serve as VCIT ended on June 30, 2020 and as such, the department is without a director. The unit also lost an 11-month faculty position that served as the Media Coordinator, first with the temporary assignment of the person to VCIT, second to his subsequent retirement. In Fall 2015, the Media Coordinator position had been defunded so an agreement was made to loan the position to the Humanities department to hire the Creative Media faculty. The agreement stipulated that another faculty position that would become vacant due to a retirement in Humanities would be transferred to IT. Before that could happen, the State legislature swept all vacant positions. Another retirement is pending at the end of the 2020 calendar year of the Senior AV Engineer. With the current hiring freeze, it is unlikely that the department will be able to hire a replacement and will be left with only one AV electronic technician.

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

Upgrading, maintaining, and repairing computer hardware, software, and AV technology in classrooms has been a constant challenge. The current combined IT budget, which includes both the computing and media sides of the house, is severely inadequate considering the department is tasked with purchasing, maintaining and upgrading all technology in all classrooms on the Kahului campus and the four Outreach centers. Basic software, which includes software for network functionality and firewalls for security, takes up about 40% of the budget. Computer and AV personnel need to travel to Moloka'i and Lāna'i for repairs and installations which adds to the drain on the budget. As technology has improved, there are certain types of consumer equipment that has dropped in price, however, the demand for newer technologies such as interactive display boards have been cost prohibitive. As many software vendors switch to subscriptions, this could add to the already inadequate budget. The demand for technology to facilitate the increase in online learning has also added to the drain. There has been some temporary relief with the infusion of CARES funding, but these monies are not sustainable given the severe budget shortfalls faced by the University and the State. A such, a lack of funding will continue to be an external factor with significant impact on the unit.

3. Unit/Service Outcomes

a) Increase the number of workshops to support online learning for faculty
b) Assess student readiness for online learning
c) Increase the number of workshops to support online learning for students
d) Create workshops to support learning object creation for all classes
e) Coordinate and collaborate with other units to better support students, faculty, staff, and administration without duplicating services.

Due to covid-19 and the increase in demand on IT personnel, there was no assessment done this year. However, table 2 shows some of the workshops that were delivered this past academic year via the TechBits series.

Our series called TechBits was implemented to assist in fulfilling requests for training. These workshops are conducted via Zoom desktop video conferencing about once per month for a duration of one hour each. They were led by different personnel in IT. The response has been positive and requests for more training via this medium has continued. Table 2 shows the topics and attendance from the TechBits workshops conducted this academic year.

Table 3 shows other webinars and workshops conducted, specifically by the instructional designer.

Table 2

TechBits Webinars Conducted

Name	Qty	Notes
25Live	24	● Dashboard ● Create/Edit/Cancel Events ● Add Event to GCal ● Email Event confirmation
Media Center Copier	4	● How to use the Copier
Maintaining your UHMC Wordpress Site	14	● Maintaining your UHMC Wordpress Site
Google Part 2	15	● Google Drive ● Google Keep ● Google Tasks
Basic Visual Design	7	● Basic Principles of Visual Design ● Best Practices of Design ● Available Tools to Help You Succeed

Table 3

Other webinars conducted

Name	Qty	Notes
Creating a Learning Path in Laulima Using G.U.I.D.E.	3	Includes HISSI
Laulima	8	
Zoom and Zoom Café	20	
Muʻo Aʻe Staff/Peer Mentor Laulima Training	1	
Nursing Program Laulima Course Redesign	5	
Laulima Student Orientation	2	
Distance and Online Learning for Students	2	
Moving Courses Online NOTE: A variety of topics to support tech lite, tech moderate, and tech strong faculty with moving their courses online.	12	Quick response to support faculty with moving their courses online due to the pandemic.
New Faculty	3	
Tips on How to Work from Home	1	

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.

- Transition campus computers to a Virtual Desktop System (VDI)
    - A proof-of-concept test of two computer classrooms was done with positive results. Plans to move ahead to expand to other classrooms are in process.
- Upgrade network connection speeds to support 10 GB at individual buildings. (in process)
- Deploy a second firewall to allow for better threat protection performance and provide redundancy in the event we lose our primary firewall. (in process)
- Upgrade AV in classrooms (equipment has been procured via CARES funding and is in the process of being installed).
- Upgrade wireless access points, bandwidth speed, and campus coverage.
- Provide more workshops and training via Zoom and face to face.
- Transition ITV classes to Zoom to provide more class opportunities for students.
    - This process has begun by reducing the number of ITV classes and increasing the number of classes offered via Zoom. This will also be done in partnership with UH-Academic Technologies.
- Create an Instructional Design team
- Work with entities to increase marketing efforts according to the Enrollment Management Plan
- Continue to work with campus at large to promote the IT department's growing list of support and technical services. New areas include systems integration consultations and customized software solutions to help modernize antiquated processes.

5. Resource Implications

Keeping up with technological advances requires UHMC to invest in campus needs which requires support from the entire campus. Equipment purchases and replacements have been possible only with the assistance of external grants, gifts, departmental partnerships, equipment replacement funds, Student Tech Fees, and recently, CARES funds. There is also the increase in subscription-based software for various functions for the campus networks and curriculum support. Additionally, the demand for video production support and training services has continued to increase. This demand comes from a variety of programs including credit, non-credit, and grants. As UHMC moves forward in adding more hybrid courses, the demand for high quality video and audio content is increasing. There is also high demand for instructional design services to support the transition to more hybrid courses.

As we continue to experience the impacts from covid-19, our department will continue its efforts to meet the spike in demand for technical support. The media services, instructional services, and IT services groups all work together to support each other to make things work. This allows our faculty, staff, and students to continue to receive the outstanding technical support and services they require.

Technical support is not limited to the academic side of the house but includes extending our campus business operations to the homes of all employees who continue to work from home per system suggestions. This is the new reality of working remotely and providing technical support for all employees while the campus continues to be operational.

The additional demand for technical services has led to a sharp uptick for services our department offers. We have been able to adopt a host of new, innovative services which benefit our faculty, staff, and students. This has been a positive change and has contributed to a new openness towards the adoption of modern communication and learning platforms, as well as a greater appreciation for remote support. There is much uncertainty as to what the future holds, however we are confident that as a department, we 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.