

**SAN DIEGO MESA COLLEGE  
SCHOOL OF BUSINESS AND TECHNOLOGY  
GEOGRAPHIC INFORMATION SYSTEMS ADVISORY COMMITTEE MEETING  
WEDNESDAY, NOVEMBER 7, 2018, 5:00 PM ROOM K105**

**MINUTES**

**Members Present**

Rick Hendrickson, Michael Baker International  
Timo Luostarinen, Qualtrics Solutions  
Kevin Highland, City of Encinitas

**Faculty/Staff Present:**

Rachel Russell  
Robert Flamenbaum

**Members Excused**

Robin Gilson, City of San Diego  
David VanPelt, City of Encinitas

**Faculty/Staff Excused:**

Casey Cook  
Michelle Kinzel

**1. CALL TO ORDER**

The meeting was called to order at 5:05 PM by Rachel Russell and introductions were made.

**2. APPROVAL OF MINUTES**

T. Luostarinen motioned to approve minutes, R. Hendrickson seconded. Minutes were approved.

**3. PROGRAM OVERVIEW AND UPDATES**

a. ENROLLMENT

R. Russell provided an overview on 2017-18 statistics on enrollment, student success, and student characteristics. She discussed ongoing efforts to attract more students, particularly in the 18-24 age group. Student successes over the past year was presented including 7 students with maps at the ESRI User Conference Map Gallery, a student who won the National Geospatial Technology Center of Excellence Student Competition, and highlighted students who became employed in the industry over the past year.

B. GRANT PROPOSALS: PERKINS 2018-19, STRONG WORKFORCE

R. Russell reviewed funding received for the 2018-19 academic year for software licenses, desktop computers, and instructional laptop to support ArcGIS Pro. Status of the budget augmentation was never communicated.

C. NEW BUILDING: OCCUPANCY SPRING 2019

R. Russell discussed new GIS facilities in the new building and plans for GIS lab grand openings.

**4. CURRENT AND RELEVANT CURRICULUM INFORMATION**

A. UPDATE: CERTIFICATE OF ACHIEVEMENT APPROVED AT STATE LEVEL

R. Russell updated the Committee on the changes from the CP to CA. Evaluations office will be coming to GISG 112 class this fall to get students started on the application for graduation. With the CA approval, work can start to update course outlines and offerings. The A.S. was updated to include JavaScript as a programming language as requested by the committee last year.

B. UPDATE: REMOTE SENSING CERTIFICATE PROPOSAL

R. Russell reviewed that no major changes have been made to the RS proposal, however, she has been in contact with Miramar's Drone pilot certificate program to figure out how to connect the programs as suggested by the Committee last year.

C. NEW CA COMMUNITY COLLEGE FUNDING FORMULA

R. Russell briefly discussed the new funding formula for community colleges and how this will impact the GISG students, including ensuring students that entered the program in the last year will be able to complete coursework this spring. Growing course fill rates and enrollments are prioritized to keep course periodicity and time to completion. A schedule for the next 3 years to modify course periodicity, overlap, and offering type has been presented to the Dean and VPI.

D. PROPOSED CERTIFICATE SUPPLY CHAIN MANAGEMENT

R. Russell reviewed interest from Supply Chain Management Certificate program at Mesa's interest in including at least GISG 110.

E. MIRAMAR- A CERTIFICATE OF ACHIEVEMENT FOR REMOTE PILOT PROGRAM

R. Russell reviewed conversations with Miramar's drone program that would have students taking GISG 110 and GISG 130.

ACTION: Work will continue with Mirarmar and new certificates to help boost enrollments and course fill rates.

**5. NEW BUSINESS**

A. DISCUSSION/CURRENT AND FUTURE TRENDS AND NEEDS

The following questions were posed to the committee:

- i. What skills do you expect an employee with a Certificate/A.S. level students to have when entering the workforce?

K. Highland discussed the need for basic editor support, using the Collector App, and basic map making skills. T. Luostarinen suggested more training on QC methods, editing, understanding the difference between ArcServer and ArcSDE. R. Hendrickson suggested experience reading "as built", and conversion between GIS and AutoCad, a familiarity with topology, joins and relates, installing and configuring licenses. All committee members mentioned the importance of 21<sup>st</sup> Century Skills such as collaboration, professional communication, general professionalism, resilience, thinking about results, and (independent) problem solving. The committee discussed report writing and creating Crystal Reports.

- ii. What emerging technologies, tools, and skills are important to prepare students for the industry?

R. Russell wanted to know specifically about data collection methods and tools. All committee members were seeing a rise in data collection on tablets and smart phones using Bluetooth GNSS receivers. All committee members mentioned the use of ESRI's Collector App and Survey 123 in their company or using these apps to create data collection tools for clients.

DECISION: R. Russell will look into acquiring these devices to give students hands-on training for the technology and software they would use in the real world.

- iii. R. Russell discussed the need for Python or Programming in GIS class. Currently, Python and SQL are taught in upper level classes. Committee affirmed the benefit Python for students.
- iv. GIS in the Web environment was stressed by all members, including ArcGIS Online, the Collector App, Portal for ArcGIS, and publishing services, and Widgets in AppBuilder. R. Flamenbaum suggested finding a way to build a server environment at Mesa so students could gain more experience in Portal.

ACTION: R. Russell will start to incorporate more WebGIS/ArcGIS Online into GISG 113 and other courses as appropriate and building a Portal environment for students to practice.

B. OTHER BUSINESS

R. Russell asked committee members about software. All committee members work primarily on ESRI products, including ArcGIS Pro, Collector, and Survey 123. ENVI was recommended as the remote sensing software.

R. Russell encouraged committee members to recommend any female or underrepresented GIS professionals that would be willing to speak in class about their experience. Additionally, she suggested if any of their colleagues need outreach credit for GISP certification to contact her for opportunities to guest lecture in class.

**6. NEXT MEETING**

- a. Tentatively early October 2019

**7. ADJOURNMENT**

- a. R. Russell adjourned the meeting at 6:05 pm