BOARD OF TRUSTEES FREDERICK COMMUNITY COLLEGE

February 19, 2020 Board Conversation Chris T. Matthews Board Room (A201)

In Attendance:

Trustees Dr. John Molesworth, Chair; Tom Lynch, Vice Chair; Ellis Barber; Nick Diaz; Carolyn Kimberlin; and Dr. April Miller. Trustee Gary Fearnow was unable to attend. Also in attendance: President Elizabeth Burmaster, Secretary/Treasurer of the Board; Janice Spiegel, Director of Education and Special Initiatives; Jerry Boyd, Special Assistant (SA) to the President for Institutional Effectiveness; Dr. Nora Clark, Vice President (VP) for Learning Support; Dr. Tony Hawkins, Provost/Executive Vice President (EVP) for Academic Affairs, Continuing Education, and Workforce Development (AACEWD); Joseph McCormick, Chief Information Officer (CIO); Dana McDonald, VP for Finance; Natasha Cleveland, Professor, Physical Science; Dr. Gregory Coldren, Professor, Mathematics; Dina Yagodich, Professor, Mathematics; and Kari Melvin, Recording Secretary.

Board Chair Molesworth opened the meeting at 6:00 p.m.

The Board received FY 2019 Sabbatical Reports:

- 1. Natasha Cleveland created lab manuals for PHSC 112-online and PHSC 121 to save students money and engage a variety of learning preferences. Each of the seven online modules for PHSC 112-online class contain several different lab activities (virtual and pen-and-paper) provided to students for no additional cost. Several of the lab activities utilize Google Earth as a way to explore earth systems. Beginning Spring 2019, a separate and costly published lab manual was no longer required in the course. In Fall 2019, a PHSC 121 lab manual filled with a diverse set of engaging lab activities, several of which with local applications, was sold in the FCC Bookstore. The cost for this full color lab manual was \$13.00. Each class (PHSC 121-online and PHSC 121) now includes a field trip excursion to Catoctin Mountain Park offered either as an optional assignment (for PHSC 112-online) or as a requirement (PHSC 121). Ms. Cleveland also expressed appreciation for the time to be able to create, innovate, and reconnect with the natural world.
- 2. Dr. Gregory Coldren conducted research projects using proprietary data to estimate air travel itinerary share models and state transition probabilities for customers deciding whether or not to purchase an opaque product. The research will allow him to demonstrate real world business and mathematical applications into his Statistics and Calculus classrooms by developing the following projects for

his students: Direct & Cross-Elasticity Project (Calculus I, II, & III); Optimization Project (Calculus III); Correlation & Linear Regression Project (Statistics courses); Probability Project (Statistics courses); and Inferential Statistics Project (Statistics courses). The other part of Dr. Coldren's sabbatical was to take CMIS 111E (Spreadsheets) and BMGT 103 (Introduction to Business) to continue his progress toward an Accounting A.A.S. degree at FCC. The spreadsheets course improved his Excel capabilities, allowing him to continue to transition FCC Statistics courses from being calculator-based to Excel-based. Using Excel in classes saves students from having to purchase an expensive and unpractical in the real world calculator, and any exposure our students have to Excel will help them in their current and future careers.

3. Dina Yagodich took online courses through Mathworks and DataCamp, which is a MOOC (Massive Open Online Course), to improve and build upon her skills in MATLAB (a programming language for mathematicians and engineers), R (an open source statistical programming language), and Python (a general-purpose, high-level open source programming language). Because MATLAB and R can be used by math and science faculty, her goal is to work with CTL to develop STEM-focused classes that can be offered to faculty members in both departments. Ms. Yagodich is focusing on MATLAB this school year, leading two one-hour mini sessions on an introduction to MATLAB for adjunct night and will be offering a six-week online MATLAB class this semester through the CTL with a focus on adjunct faculty. For the next academic school year, she will be creating a similar course for R, focusing on how it can be used in both math and science classes, specifically evaluating lab and research results. Examples of MATLAB code to use in classroom instruction will also be uploaded to a shared department drive so instructors, both full-time and adjunct, can use without needing much additional training.

The written reports are available from the President's Office.

The meeting was adjourned at 6:55 p.m.

Elizabeth Burmaster Secretary/Treasurer

Prepared by Kari Melvin Office of the President Frederick Community College