MONTHLY REPORT: September 2018 - COMMITTEE ON CURRICULUM

To: Joel Kuszai, Academic Senate Steering Committee

From: Todd Holden, September 7, 2018

Subject: Committee on Curriculum September 2018 Monthly Report for the September 2018 Senate

CC: College Archives (CWilliams@qcc.cuny.edu)

The Committee on Curriculum has voted to send the following recommendations to the Academic Senate:
1 course revision
1 new course

1. **COURSE REVISION**

PHYSICS DEPARTMENT
Departmental approval: August 28, 2018
PH-450 Introduction to Physics Research

FROM	TO
PH-450	PH-450
Introduction to Physics Research	Introduction to Physics Research
~~3~~ class hours ~~3~~ laboratory hours ~~4~~ credits	2 class hours 2 laboratory hours 3 credits
Pre-requisite: none	Pre-requisite: none
Co-requisite: none	Co-requisite: none
Course Description (for College Catalog): An introduction to ~~current physics laboratory techniques, methods and approaches, such as near field optical diffraction, microscopy-based motion analysis, biophysical analysis, and optical spectroscopy. Other~~ topics include laboratory safety; research integrity; scientific literature review; analysis and interpretation of data; and written and oral communication of results. In the second half of the course, students will be expected to carry out research projects under the direction of the instructor. Students will prepare a final written report ~~and give a presentation of their results at an undergraduate conference~~.	Course Description (for College Catalog): This course provides an introduction to responsible and conscientious research techniques that can be applied to a variety of research areas. Topics include laboratory safety; research integrity; scientific literature review; experiment design; analysis and interpretation of data; and written and oral communication of results. In the second half of the course, students will be expected to carry out research projects under the direction of the instructor. Students will prepare a final written and oral report.

Rationale:
The reduction in the credits will make the course more accessible for students to fit it into their schedules. The updated course description will allow the students to be better prepared to continue on to more specialized research in courses like PH900. These two changes will also make the course more versatile to increase the enrollment.

2. NEW COURSE

ENGINEERING TECHNOLOGY DEPARTMENT
Departmental approval date: August 23, 2018

ET-574 Programming and Applications with Python
2 Lecture Hours, 2 Lab Hours, 3 Credits
Prerequisite: none
Co-requisite: ET-704 Networking Fundamentals I

Course Description for college catalog:
The course introduces computer programming, network programming and elementary data science using the Python programming language. Topics include: procedural programming, Python data structures and aspects of object oriented programming. Introductory examples of network socket and security programming, data analysis, data visualization and machine learning will be explored. Hands-on lab activities will complement lecture topics.

Rationale:
The purpose of this entry-level course is to offer students an introductory hands-on experience in Python computer programming and related modern applications for the Computer Engineering Technology (CT) and Internet and Information Technology (IIT) degree programs.   The Python programming language merges an easy to understand syntax with sophisticated feature libraries making it an ideal choice for novice programmers. Additionally Python is prominently utilized in the expanding areas of data science, cybersecurity, networking and web development. These topics are of significant interest for employers in the CT and IIT fields. They are also prominent areas of concentration in numerous associated baccalaureate programs.