QUEENSBOROUGH COMMUNITY COLLEGE

CITY UNIVERSITY OF NEW YORK
CURRICULUM COMMITTEE

To: Emily Tai, Academic Senate Steering Committee

From: Philip A. Pecorino, Chairperson, Committee on Curriculum

Date: March 27, 2013

Subject: Monthly Report for APRIL 2013

The Committee on Curriculum has acted to send the following recommendation to the Academic Senate.

NEW COURSES

DEPARTMENT OF BIOLOGY and GEOLOGY

GEO-132 Earth Resources: Gems, Metals, and Energy 3 Class hrs , 3 Lab.hrs, 4 Credits
Pre-Co/ Requisites: None
Description: An introduction to how natural resources such as gems, metals, and energy resources are formed, located, and mined or produced and alternatives, such a synthetic gems and environmentally low impact energy resources are introduced. Emphasis is placed on gems and the New York City gem industry to draw examples of utilization, but world mining industries such as diamonds, gold, and the petroleum industry are described in terms or resource exploration, marketing, and distribution. Environmental impacts and social issues are addressed.

Rationale:

Geology is a subject that has many economic applications; introduction to the subject for early non-science majors (non-STEM students) may alter their attitudes towards science. A related course, GE-105 has run since at full capacity of two sections, 64 students per semester since its introduction in 2005. The new course will fulfill a need for a lecture science for non-STEM students in earth science. Because it is an introductory course a wide range of liberal arts students will be attracted. Informal student surveys suggest that at least 50% of past students would have preferred the course to have had a laboratory component. Another reason to have a laboratory course on gemology and the economics of geology is that New York City is the gem capital of the USA and New York State's biggest export is gems and jewelry. Thus there is a great economic incentive and this course will supply information and training to students that may be interested in this industry. Part of the course requirement is to complete a research project on a gem material and give a group report; this will give students exposure to research, allowing them to collect data and draw hypotheses from the data using the scientific method. The materials for the course and the testing equipment used in the course are sufficient to support the Foundations level course of The Gemmological Association of Great Britain.

The course will be transferable to the senior colleges within CUNY as part of 4 credit, 6 hour laboratory science course.

DEPARTMENT OF PHYSICS

PH-112 Space, Astronomy, and our Universe Laboratory 2 laboratory hours, 1 credit
Corequisite: PH-111
Description: Topics related to space and astronomy, such as our planet and moon, stars, galaxies and the universe and physical processes and laws that govern the motion and evolution of all objects in the universe will be studied through laboratory exercises.

Rationale: needed to meet the one credit science laboratory requirement for AA degree programs. Projected enrollment – 500 per semester once pathways is fully implemented.

PH-311 College Physics 1C 3 class hours, 1 recitation hour, 2 laboratory hours, 4 credits

Prerequisites: MA-441 or equivalent or permission of the department

Description: First part of a two-semester introduction to physics with applications to biology, primarily for students majoring in biology or planning careers in optometry, dentistry, and other medically related fields. Topics include conservation laws, vectors, laws of motion, linear and angular momentum, energy, gravitation, fluid mechanics and thermodynamics. Strong algebra skills and knowledge of the ideas of calculus are required

Rationale: The course will run concurrently with PH301 in the same classroom with the same instructor. The course is needed for those students whose wish to transfer to universities such as SUNY Stony Brook and Columbia that require a calculus prerequisite for their algebra-trig based physics (required for biology and pre-professional students)

PH-312 College Physics 2C 3 class hours, 1 recitation hour, 2 laboratory hours, 4 credits

Pre-Co/ Requisites: PH-311

Description: Second part of a two-semester introduction to physics with applications to biology, primarily for students majoring in biology or planning careers in optometry, dentistry, and other medically related fields. Topics include electromagnetism, optics, acoustics, and radiation phenomena. Strong algebra skills and knowledge of the ideas of calculus are required.

Rationale: The course will run concurrently with PH302 in the same classroom with the same instructor. The course is needed for those students whose wish to transfer to universities such as SUNY Stony Brook and Columbia that require a calculus prerequisite for their algebra-trig based physics (required for biology and pre-professional students)

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION and DANCE

IS 221 , Natures pharmacy II 3 class hrs. 3 credits

Prerequisite:IS 220

Description:

Will provide a continuation of the exploration and examination of herbs as they pertain to specific conditions and disorders. The course will have many "hands-on" projects for students and a field trip to recognize and collect herbs that grow in our own backyard. Current research will also be discussed on the safety and efficacy of these botanicals. The course will provide students the opportunity to evaluate and expand their knowledge of the benefits of natural medicine

Rationale:

Nature's Pharmacy I has been offered for over 7 years with continued increase in registration; classes have filled to capacity over the last few years. Students pursuing health professions would find the information an invaluable benefit in both their personal and professional endeavors. Having completed a year of comprehensive study, (approval of Nature's Pharmacy II), students transferring from Queensborough to advance their careers would have attained vast knowledge, thereby giving them confidence in any profession that lends itself to the application of alternative medicine.

74% of the American population desires a natural approach to health care. According to CNN, one half of all medical schools now offer courses in holistic health care; one-third of American medical schools (among them Harvard, Johns Hopkins and Yale Universities) now offer courses in holistic methods; Worldwide, 70-90% of people use naturopathic health care.
With the increasing number of people seeking alternative methods of treatment, this course provides information, not only for nursing, allied health and massage therapy students, but students who are looking for a free elective, as well as retired individuals who wish to take the course for non-credit (audit).

The statistics indicate the increased use and effectiveness of alternative medicine. More and more people have a desire to learn about the proper use of herbs as an alternative way to address health issues.

The need for this course is evidenced by the statistics above. Students pursuing health careers such as nursing and massage therapy can benefit and utilize a course of this nature to implement their knowledge into their practicum. Holistic nursing is becoming a mainstream pathway in many facilities.
Having this course available to students at QCC can allow them to further their education and career endeavors in a field which includes many different career choices.

Student demand is high; student evaluations always noted and requested a Part II of Nature's Pharmacy.
90%+ of students who take IS220 would enroll in Part II of Nature's Pharmacy.

The course will be offered once a year, alternating with Part I of Nature's Pharmacy (IS220)