# Minutes of The Lehman College Senate Meeting Wednesday, February 5, 2014 Senate Meeting

Senators Present: Angeli, A.; Bayne, G.; Becker, S.; Bergmann, R.; Choudhary, A.; Cintrón, N.; Clark, V..; Deas, M.; Delgado Jr., M.; Dellapina, M.; DiRaimo, S.; Ewul, E.; Fera, J.; Fernández, R.; Georges, A.; Gil, M.; Harcourt-Smith, W.; Holloway, J.; Jervis, J.; Jordan, S.; Larimer, A.; Marianetti, M.; Mazza, C.; Mibenge, C.; Morales, I.; Morrobel-Sosa, A.; Okipi, G.; Philipp, M.; Prasannavallabha, C.; Rachlin, J.; Schlesinger, K.; Shetty, N.; Tananbaum, D.; Tavarez, D.; Trinidad, V.; Valentine, R.; Vargas, J.

Senators Absent: Ajdini, A.; Akan, A.; Amend, A.; Aragon, D.; Bamshad, M.; Buckley, M.; Calvet, L.; Carey, R.; Cheng, H.; Coke, T.; Conner, P.; Esteves, C.; Farrell, R.; Fayne, H.; Gerry, C.; Gross, C.; Hurley, D.; Huynh, M.; Jacobson, B.; Jafari, M.; Kabat, D.; Machado, E.; Magdaleno, J.; Markens, S.; Martín, O.; Matthews, E.; Maybee, J.; Mazo, S.; Nadeem, S.; O'Connor, N.; O'Hanlon, T.; Peréz, M.; Pettipiece, D.; Prince, P.; Prohaska, V.; Rice, A.; Ricourt, M.; Rivera-McCutchen, R.; Rodriguez, C.; Saccomano, S.; Sailor, K.; Silverman, H.; Spence, N.; Stuckart, D.; Troy, R.; Waring, E.; Washington, E.; Williams-Gray, B.; Zucchetto, V.

The meeting was called to order by President Ricardo R. Fernández at 3:39 p.m.

#### a. Announcements and Communications--

President Fernández welcomed those everyone back for the spring 2014 semester. Due to the inclement weather, there was not a quorum. Therefore, the Committee reports were presented but any actions were reserved for the next Senate meeting on March 5, 2014.

The December 11, 2013 Senate minutes will be presented for approval at the next meeting. Prof. Tananbaum recommended that the December 11, 2013 Senate meeting minutes be changed as follows: the last two (2) paragraphs of the minutes starting on line 170 and line 176 respectively, be switched so that current paragraph beginning at line 176 is placed before the current paragraph beginning at line 170. President Fernández asked that this change be made for the next Senate meeting. The President called for any other amendments to the minutes and there were none.

President Fernández announced that on Tuesday, February 11th he will be leading a delegation of presidents from the Bronx CUNY colleges to Albany to meet with the Bronx representatives to the Assembly and Senate. Lehman has five (5) top capital funding requests for over the next five (5) years, including \$21.8 million needed to complete the Nursing building. We are focused on getting this done this year. President Fernández noted the unofficial student enrollment count to date is 11,306 students, which is about 330 students below this time last year. However, the numbers are still changing because students are still enrolling and courses are still being added. The final, official student enrollment numbers will be available by the end of February. Graduate student numbers are up about 10%; transfer students are up; we have very few new freshmen during this time of year; our continuing undergraduate and graduate students are also up slightly, which means that our retention efforts are working. President Fernández asked VP Bergmann to report on the recent malicious email issues. VP Bergmann reported that the malicious emails many faculty and staff have been receiving typically have something to do with email verification. For example, he noted that a malicious email received by a staff member had a subject line about "helpdesk advice". The best thing to do if you do not recognize the email address and/or you cannot verify the link, is to immediately delete the email and not click on the link. In another instance, a faculty member clicked on a link and her email mailbox was flooded with 700 emails a day. As a result, her Lehman email account was compromised and she was unknowingly sent 30,000 emails went to whomever the spammer wanted. VP Bergman cautioned that no one from either Lehman or CUNY would ever ask you to verify your account and to give personally identifiable information in the email. If you receive an email like this, it is fraudulent. IT is implementing tools and techniques using our spam and virus protection services to reduce this occurrence; hopefully, this will subside within a week or so.

#### b. Student Legislative Assembly—

Ms. Madelyn Gil welcomed everyone back to begin the spring semester. There is no report.

#### REPORTS OF STANDING COMMITTEES—

#### 1. Graduate Studies-

Ann Worth presented the report in the absence of Prof. Janet DeSimone. Undergraduate proposals in the department of Music were presented and graduate proposals regarding updates to the policies and procedures were presented.

See Attachment I.

The next committee meeting will be March 5<sup>th</sup> at 11:00a.m. in CA 338.

#### 2. Governance Committee-

Prof. Duane Tananbaum presented the report.

Prof. Tananbaum reported on the proposed Center for Theoretical and Computational Sciences. The proposal was referred to the Governance Committee and the Committee met with Dean Becker on Monday, January 6, 2014 and went over the proposal, making a number of suggestions, particularly to the governance structure. The Governance Committee met again on Monday, January 27<sup>th</sup>, to vote on the resolution, but Dean Becker determined it was not ready for a vote at that time. Dean Becker hopes to present it to the Governance Committee for a vote and then to the Senate by the March meeting. Prof. Tananbaum explained that the Governance Committee was prepared to vote on the Center proposal, but the final version has yet to be presented.

The next Governance Committee meeting will be Monday, February 24<sup>th</sup> at 3:30p.m. in CA 201.

#### 3. Committee on Admissions, Evaluations and Academic Standards—

Prof. Tananbaum noted that Prof. Anne Rice was unable to make it to campus and noted that the Committee has a meeting tentatively scheduled for next week. Anyone interested in attending should contact Prof. Rice directly for meeting date, time and location.

#### 4. Undergraduate Curriculum--

Associate Provost Robert Whittaker presented in the absence of Prof. Barbara Jacobson. He presented proposals from the following departments: Chemistry, Math, and Computer Science.

See attachment II.

Associate Provost Whittaker noted that the Undergraduate Curriculum meeting scheduled for today was postponed.

The next Undergraduate Curriculum Committee meeting will be Wednesday, February 19<sup>th</sup> at 1:00p.m. in CA 263.February 19<sup>th</sup>

#### 5. Academic Freedom--

Prof. Robert Valentine presented the report.

The faculty survey is on SNAP, but they are lacking a faculty list. VP Bergmann offered to work with Prof. Valentine to provide access to a faculty listserv.

The next Committee meeting is Wednesday, February 26th at 3:30p.m. in CA 201.

#### 6. Library, Technology, and Telecommunication—

Prof. Stefanie Havelka presented the report. See Attachment III.

Prof. Havelka made the following five (5) announcements.

- 1. The last Committee meeting was held Monday, February 3<sup>rd</sup> in the Library Treehouse;
- 2. CIO Ronald Bergmann presented the IT Strategic Roadmap, which the Committee enthusiastically endorsed and recommended that Lehman's information technology infrastructure and ambitious growth plan be properly resourced and staffed in order to achieve maximum and timely effectiveness;
- 3. There is a current migration of computers running WindowsXP and Office 2003. As of April 8, 2014, Microsoft will terminate supporting outdated WindowsXP and Office 2003 operating systems. IT is diligently addressing upgrades of all necessary computers to Windows 7. If you have questions or need assistance, please e-mail Vincent Sandella of IT;
- 4. Raymond Diaz reported to the Committee on the Library's successful efforts to create Virtual Desktop Pilot;
- 5. The Student Technology Fee Committee had a launch meeting on January 29<sup>th</sup>. Sadly, this will be final round that Joe Middleton will be chairing due to his retirement. Student attendance and participation in the Tech Fee Committee is excellent. The next Tech Fee meeting will be Monday, February 10<sup>th</sup> at 3:00p.m. in IT Conference Room, CA 162.

The Committee has yet to schedule the next meeting but an announcement will be sent out.

#### 7. Campus Life and Facilities —

No report.

The next Campus Life and Facilities Committee meeting is March 5<sup>th</sup> with a potential change in the location and time.

#### 8. Budget and Long Range Planning —

Prof. Duane Tananbaum reported that there is no committee report in Prof. Haiping Cheng's absence.

The next meeting is Monday, February 10<sup>th</sup> at 3:30 p.m. in S-336.

#### 9. University Faculty Senate Report—

Prof. Philipp presented the report (See Attachment III).

Old Business----None.

New Business----None.

#### **ADJOURNMENT**

President Fernández adjourned the meeting at 4:13 p.m.

Respectfully submitted:

Mary T. Rogan

#### **Senate Meeting – February 5, 2014**

#### Graduate Studies Anticipated Report (as of 12/20/2013)

On behalf of the Grad Studies Committee, I'd like to put forth items from the following departments or offices:

#### **Music**

• New courses: MST 731, MSH 780 and MST 780

#### **Graduate Studies**

- Policy/Procedure Updates:
  - o Dual Graduate Program Matriculation
  - o Registration in Undergraduate Courses (for graduate students)
  - o Registration for Graduate Courses

Does anyone have any questions and/or comments?

All those in favor of approving these proposals, please say I. Anyone opposed. Any abstentions?

Our next meeting will be on March 5, 2014, at 11 a.m. in Carman B33A.

#### **DEPARTMENT OF MUSIC**

#### **CURRICULUM CHANGE**

- 1. Type of Change: New Course
- **2.** <u>Course Description</u>: **MST 731**: **Music and the Brain**. 3 hours, 3 credits. Music cognition, particularly how musical experience is expressed, mediated, and analyzed. Research on music and the brain, from the perspectives of education, health sciences, and music's therapeutic potential.
- **3.** <u>Rationale</u>: MST 731 (Music and the Brain) provides an advanced foundation for an enriched understanding of the role of music, particularly its uses in education and in music therapy. The course is appropriate for students currently enrolled in the Master of Arts in Teaching (MAT) program, as well as those interested in pursuing music therapy.

#### 4. Learning Objectives:

- Demonstrate knowledge of the broad representation of music and the brain in literature and science.
- Report orally and in writing what current science tells us about music and the brain.
- Locate, evaluate, and synthesize research material and scholarly writings about music and the brain.
- Use research and analysis to develop creative arguments about music cognition and its implications for education, human development, and therapy.
- Communicate research findings effectively in oral presentations using appropriate vocabulary and analytical techniques, following accepted norms of disciplinary styles.
- Analyze the implications of new understandings of the musical experience on education, child develop, health, and society as a whole.
- 5. Date of Departmental Approval: November 22, 2013

#### **DEPARTMENT OF MUSIC**

#### **CURRICULUM CHANGE**

1. Type of Change: New Course

- **2.** <u>Course Description</u>: MSH 780: Independent Study in Music History. 3 hours, 3 credits. Independent research and analysis on a topic in music history under the direction of a faculty advisor. PREREQ: Permission of Graduate Advisor
- **3.** <u>Rationale</u>: The M.A.T. in Music program has long needed an independent study course for students who need to fulfill a requirement or for students interested in pursuing advanced research in Music History. This course also creates an opportunity for students in the Master of Arts in Liberal Studies (MALS) to pursue a music-related topic.

#### 4. Learning Objectives:

- Analyze and evaluate a variety of music in relation to its historical, cultural, and social circumstances.
- Locate, evaluate, and synthesize research material and scholarly writings about music.
- Use research and analysis to develop creative arguments about music.
- Communicate research or analytical findings effectively in oral presentations and in formal prose, using appropriate vocabulary and analytical techniques, following accepted norms of disciplinary styles.
- 5. <u>Date of Departmental Approval</u>: November 6, 2013

#### **DEPARTMENT OF MUSIC**

#### **CURRICULUM CHANGE**

- 1. Type of Change: New Course
- **2.** <u>Course Description</u>: MST 780: Independent Study in Music Theory. 3 hours, 3 credits. Independent research and analysis on a topic in music theory under the direction of a faculty advisor. PREREQ: Permission of Graduate Advisor
- **3.** <u>Rationale</u>: The M.A.T. in Music program has long needed an independent study course for students who need to fulfill a requirement or for students interested in pursuing advanced research in Music Theory. This course also creates an opportunity for students in the Master of Arts in Liberal Studies (MALS) to pursue a music-related topic.

#### 4. Learning Objectives:

- Create rational analyses of common practice tonal music using standard systems of diatonic and chromatic harmonic analysis.
- Locate, evaluate, and synthesize research material and scholarly writings about music
- Use research and analysis to develop creative arguments about music
- Communicate research or analytical findings effectively in oral presentations and in formal prose, using appropriate vocabulary and analytical techniques, following accepted norms of disciplinary styles
- 5. Date of Departmental Approval: November 6, 2013

#### **OFFICE OF GRADUATE STUDIES**

#### **GRADUATE PROGRAMS & POLICIES CHANGE**

1. Type of Change: Update Policy and Procedure

#### 2. **From**:

#### **DUAL GRADUATE PROGRAM MATRICULATION**

Graduate students cannot be simultaneously matriculated in: Master of Arts, Master of Science, Master of Science in Education, Master of Social Work, Master of Public Health, Master of Arts in Teaching, or Master of Fine Arts degree programs. After completion of a first master's degree at Lehman, students must contact the Office of Graduate Admissions if they wish to begin a second master's degree program.

Graduate students may pursue a certificate or extension program while completing a master's degree program if the student adheres to the admissions requirements for that certificate or extension program. If a student is already matriculated in a master's degree and would like to add a certificate program during their course of study, they must fill out a Change in Graduate Curriculum form, located in the Office of Graduate Studies.

#### 3. **To:**

#### **DUAL GRADUATE PROGRAM MATRICULATION**

Graduate students cannot be simultaneously matriculated in: Master of Arts, Master of Science, Master of Science in Education, Master of Social Work, Master of Public Health, Master of Arts in Teaching, or Master of Fine Arts degree programs. After completion of a first master's degree at Lehman, students must contact the Office of Graduate Admissions if they wish to begin a second master's degree program.

Graduate students may pursue a certificate or extension program while completing a master's degree program if the student adheres to the admissions requirements for that certificate or extension program. If a student is already matriculated in a master's degree and would like to add a certificate program during their course of study, they must fill out a Change in Graduate Curriculum form, located in the Office of Graduate Studies.

Graduate students matriculated in both a master's degree and an advanced certificate simultaneously may have course curriculum that overlaps. In this instance, courses may be used to satisfy both programs.

#### 4. Rationale:

The dual matriculation policy has recently been accepted and there is a need for clarification on how to allocate credits when students are enrolled in two programs with overlapping curriculum. This policy applies to situations where a student has been approved to dually matriculate into a corresponding master's and advanced certificate and does not apply to advanced certificates that require completion of a master's degree first.

5. <u>Date of Graduate Studies Committee approval</u>: December 11, 2013

#### **OFFICE OF GRADUATE STUDIES**

#### **GRADUATE PROGRAMS & POLICIES CHANGE**

1. Type of Change: Update Policy and Procedure

#### 2. **From:**

#### REGISTRATION IN UNDERGRADUATE COURSES

Graduate students who are advised by their Program Adviser to register for undergraduate courses must [also] get permission from the [Office of Graduate Studies]. Upon receiving the required approval, they may register for such courses at the time of graduate registration. [Graduate students may not register on the Web for undergraduate courses.]

Credits earned in undergraduate courses [that] are not part of the graduate degree requirements do not count toward the graduate degree[, and g]raduate students pay undergraduate nondegree tuition. A graduate student may not register in a given semester solely for undergraduate courses unless he/she obtains permission from both the Graduate Program Adviser and the Office of Graduate Studies.

#### 3. **To:**

#### REGISTRATION IN UNDERGRADUATE COURSES

Graduate students who are advised by their Program Adviser to register for undergraduate courses must get permission from the <u>department offering the undergraduate course</u>. Upon receiving the required approval, they may register for such courses at the time of graduate registration.

Credits earned in undergraduate courses are not part of the graduate degree requirements <u>and</u> do not count toward the graduate degree. <u>Graduate</u> students pay undergraduate nondegree tuition. A graduate student may not register in a given semester solely for undergraduate courses unless he/she obtains permission from both the Graduate Program Adviser and the Office of Graduate Studies.

#### 4. Rationale:

CUNYfirst changed the policy for obtaining permission to take undergraduate courses as a graduate student. Students no longer come to the Office of Graduate Studies, rather, the academic department offering the course. The academic department checks to see if the graduate student adheres to course

prerequisites, then gives electronic permission to take the course as a graduate student.

5. <u>Date of Graduate Studies Committee approval</u>: December 11, 2013

#### **OFFICE OF GRADUATE STUDIES**

#### **GRADUATE PROGRAMS & POLICIES CHANGE**

- 1. Type of Change: Update Policy and Procedure
- 2. **From:**

#### **REGISTRATION FOR GRADUATE COURSES**

[E]lectronic course permission [of] the Graduate Program Adviser [is required] to register for any graduate course. Consult the department for registration advising hours.

#### 3. **To:**

#### **REGISTRATION FOR GRADUATE COURSES**

Most graduate programs require electronic course permission from the Graduate Program Adviser to register for any graduate course. Consult the department for registration advising hours and registration procedures.

#### 4. Rationale:

Some departments are working with CUNYfirst and the Office of the Registrar to program the system with prerequisite courses and co-requisite courses. This will facilitate easier registration for the graduate students by not requiring course permission for every course taken at the graduate level. Some program curriculum has more flexibility with scheduling and does not require academic advisement for every single course. For the departments to be allowed to request a waiver of academic permission, the policy needs to be updated.

5. Date of Graduate Studies Committee approval: December 11, 2013

#### **DEPARTMENT OF\_CHEMISTRY**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Change in Prerequisites

#### 2. **From:**

CHE 166: General Chemistry I.

3 hours, 3 credits. Fundamental laws and theories of chemistry. PREREQ: MAT 172 or MAT 175 or more advanced calculus course. COREQ: CHE 167.

NOTE 1: [Either] CHE 166 [or CHE 104 and 106 are] required of students planning to take more than one year of chemistry (except students majoring in nutrition) and of pre-engineering students.

NOTE 2: [CHE 104 and 106 or] CHE 166 is recommended to premedical, preveterinary, and predental students.

#### 3. **To**:

CHE 166: General Chemistry I.

3 hours, 3 credits. Fundamental laws and theories of chemistry. PREREQ: MAT 172 or MAT 175 or more advanced calculus course. COREQ: CHE 167.

NOTE 1: CHE 166 is required of students planning to take more than one year of chemistry (except students majoring in nutrition) and of pre-engineering students.

NOTE 2: CHE 166 is recommended to premedical, preveterinary, and predental students.

## 4. Rationale (Explain how this change will impact learning goals and objectives of the department and Major/Program):

We are requesting the removal of CHE 104 and 106 from the CHE course list. Therefore it would make sense to remove references to it in other course descriptions.

#### 5. **Date of departmental approval:**

11/ 7/ 2013

#### **DEPARTMENT OF\_CHEMISTRY**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Change in Prerequisites

#### 2. **From:**

CHE 168: General Chemistry II.

3 hours, 3 credits. Continuation of CHE 166 or 106: the presentation of the fundamental laws and theories of chemistry in considerable depth. PREREQ: CHE 166 [or 104 and 106] (or equivalent, as approved by the Chair). COREQ: CHE 169. (See information for corequisite courses.)

#### 3. **To:**

CHE 168: General Chemistry II.

3 hours, 3 credits. Continuation of CHE 166 or 106: the presentation of the fundamental laws and theories of chemistry in considerable depth. PREREQ: CHE 166 (or equivalent, as approved by the Chair). COREQ: CHE 169. (See information for corequisite courses.)

## 4. Rationale (Explain how this change will impact learning goals and objectives of the department and Major/Program):

We are requesting the removal of CHE 104 and 106 from the CHE course list. Therefore it would make sense to remove references to it in other course descriptions.

#### 5. Date of departmental approval:

#### **DEPARTMENT OF CHEMISTRY**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Change in Prerequisites

#### 2. **From**:

CHE 342: Physical Chemistry Lecture I.

3 hours, 3 credits. Fall term only. An in-depth study of thermodynamics, states of matter, statistical thermodynamics, kinetics, and an introduction to quantum mechanics. The relation between experiment and theory will be emphasized. PREREQ: CHE 168-169, [either] PHY [167 or] 169, and MAT 176. [PRE- or COREQ: MAT 226]. Note: This course meets the requirements of the A.C.S.-certified B.S. in chemistry.

#### 3. **To:**

CHE 342: Physical Chemistry Lecture I.

3 hours, 3 credits. Fall term only. An in-depth study of thermodynamics, states of matter, statistical thermodynamics, kinetics, and an introduction to quantum mechanics. The relation between experiment and theory will be emphasized. PREREQ: CHE 168-169, PHY 169, and MAT 176. Note: This course meets the requirements of the A.C.S.-certified B.S. in chemistry.

### 4. Rationale (Explain how this change will impact learning goals and objectives of the department and Major/Program):

MAT 226 is not necessary for a student majoring in chemistry. The American Chemical Society requires only two semesters of Calculus. We are now requiring PHY 168 and 169. It is important that a student have a background in Physics with the Calculus in order to properly prepare for Physical Chemistry.

#### 5. **Date of departmental approval:**

#### **DEPARTMENT OF CHEMISTRY**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Change in Prerequisites

#### 2. **From**:

CHE 344: Physical Chemistry Lecture II.

3 hours, 3 credits. Spring term only. Continuation of CHE 342. PREREQ: CHE 342 [and MAT 226].

#### 3. <u>To</u>:

CHE 344: Physical Chemistry Lecture II.

3 hours, 3 credits. Spring term only. Continuation of CHE 342. PREREQ: CHE 342

## 4. Rationale (Explain how this change will impact learning goals and objectives of the department and Major/Program):

MAT 226 is not necessary for a student majoring in chemistry. The American Chemical Society requires only two semesters of Calculus.

#### 5. Date of departmental approval:

#### **Department of Chemistry**

#### **Curriculum Change**

Hegis # 1905.00 Program Code 174

#### 1. Type of Change:

Change in Degree Requirements

## 2. <u>From</u>: 81-Credit Major in Chemistry, B.S., with a Specialization in Biochemistry

This major prepares students for (1) graduate study in biochemistry, molecular biology, [immunochemistry, pharmacology,] or clinical chemistry; (2) professional training in medicine, dentistry, and other health-related sciences; and (3) careers in biochemistry or biomedicine in hospitals, medical schools, or the chemical industry. The B.S. program in Biochemistry is accredited by the Committee on Professional Training of the American Chemical Society (A.C.S.). The distribution of required courses and credits is as follows:

#### Credits (81)

In chemistry: CHE 166-167, 168-

47 169, 232-233, 234-235, 249, [332, 334, 335], 442, 443, 444, and 446-447.

In biological sciences: BIO 166, 167,

16 [238], and 420.

In mathematics and physics: MAT

18 175, 176, and [either] PHY [166-167 or] 168-169.

## 3. <u>To</u>: 80.5-Credit Major in Chemistry, B.S., with a Specialization in Biochemistry

This major prepares students for (1) graduate study in chemistry, biochemistry, molecular biology, or clinical chemistry; (2) professional training in medicine, dentistry, and other health-related sciences; and (3) careers in chemistry, biochemistry or biomedicine in hospitals, medical schools, or the chemical industry. The B.S. degree in Chemistry with a specialization in Biochemistry is accredited by the Committee on Professional Training of the American Chemical Society (A.C.S.). The distribution of required courses and credits is as follows:

Credits (80.5)

In chemistry: CHE 166-167, 168-50.5 169, 232-233, 234-235, <u>2420-2430</u>, 249, <u>342, 344-345</u>, 442, 443, 444, 446 and 447.

In biological sciences: BIO 166,

12 167 and 420.

In mathematics and physics: MAT

18 175, 176, and PHY 168 -169.

### 4. Rationale (Explain how this change will impact learning goals and objectives of the department and Major/Program):

The American Chemical Society has changed its requirements for certification. It now requires students to take two semesters for each of the 4 out of 5 areas above the level of General Chemistry. These areas are Analytical Chemistry, Biochemistry, Inorganic Chemistry, Organic Chemistry, and Physical Chemistry. In addition, at least 400 hours of chemistry laboratory, above the level of General Chemistry, must be completed by each student. The American Chemical Society strongly recommends that chemistry majors take two semesters of Physics with the calculus which this new curriculum would require. This change would enable students to better understand Physical Chemistry when they take it. We are removing the requirement for BIO 238 to make room for the new courses that A.C.S. requires. We have also reduced the Physical Chemistry Laboratory requirement to 1 semester from 2. It is the opinion of the Chemistry Department that 1 semester of Physical Chemistry Laboratory is adequate. In addition many chemistry departments across the U.S. have only 1 semester of Physical Chemistry Laboratory.

#### 5. <u>Date of departmental approval</u>:

#### **DEPARTMENT OF CHEMISTRY**

#### **CURRICULUM CHANGE**

#### 1. Type of change:

Create a new course offering.

#### 2. Course Description:

CHE 2430: Introduction to Inorganic Chemistry Laboratory. *3 hours, 1.5 credits*. Experiments involving synthesis and characterization of fundamental inorganic compounds.

#### 3. Rationale:

This course is necessary to accompany CHE 242 lecture, and is part of the courses being created to comply with the American Chemical Society's requirement for a two semester sequence for Inorganic Chemistry.

#### 4. Learning Objectives (By the end of the course students will be expected to):

- Prepare simple inorganic compounds that have various applications.
- Determine if a reaction has gone to completion.
- Know how to write a chemical equation that represents a chemical reaction for the preparation of a compound;
- Know how to represent the structure of a prepared compound.
- Know how to put together a scientific report that includes the interpretation of the experimental data.

#### 5 .Date of Departmental Approval:

#### **DEPARTMENT OF CHEMISTRY**

#### **CURRICULUM CHANGE**

#### 1. Type of change:

Create a new course offering.

2. <u>Course Description:</u> CHE 2420: Introduction to Inorganic Chemistry. *3 hours, 3 credits.* Chemical principles and explanations for the existence and behavior of essential, and atypical elements and compounds.

#### 3. Rationale:

This course is being offered to expand the backgrounds of students in the fundamental area of Inorganic Chemistry and to comply with the new requirements of the American Chemical Society that Inorganic Chemistry be studied for two semesters.

### 4. <u>Learning Objectives</u> (By the end of the course students will be expected to):

- Carefully state and be able to apply the major basic concepts of inorganic chemistry.
- Understand the periodicity of chemical and physical properties.
- Understand how the nature of chemical bonding influences the molecular structure.
- Understand the principles of the reduction-oxidation processes and to recognize and differentiate these from other chemical processes.
- Understand how to differentiate between the main types of chemical reactions.
- Understand the structure of inorganic solids.
- Differentiate between normal inorganic compounds and coordinative complexes.
- Write chemical equations in a precise, effective, and understandable way.

#### 5 .Date of Departmental Approval:

#### **Department of Chemistry**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Withdrawal of course from the departmental offerings.

#### 2. Description:

CHE 104: Introductory Chemistry I.

3 hours, 1.5 credits. (CHE 104 and 106 together are equivalent to CHE 166. Either CHE 104 and 106 or CHE 166 is required of students taking more than one year of chemistry—except students majoring in nutrition—and of pre-engineering students. Either 104 and 106 or 166 is recommended to premedical, preveterinary, and predental students.) A course presenting the fundamental laws and theories of chemistry. Considerable emphasis will be placed on the application of the mathematical and reasoning skills necessary to solve chemical problems. PREREQ: Completion of the College's Requirement in Mathematics. NOTE: CHE 104 is not credited without CHE 106. A student may receive credit for only one of the following: CHE 104 and 106, 114, 136, and 166.

## 3. Rationale (Explain why this course/program is no longer needed in the Department):

This course has not been offered for more than 10 years. It was part of a sequence for a slow track for General Chemistry that is not going to be used again.

#### 4. <u>Date of departmental approval</u>:

#### **Department of Chemistry**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Withdrawal of course from the departmental offerings.

#### 2. Description:

CHE 105: Introductory Chemistry Laboratory I.

4 hours (3, lab; 1, problem lab), 1 credit. Introduction to the methods of scientific investigation, including basic physical and chemical laboratory techniques. Applications will include the synthesis and analysis of simple chemical systems. COREQ: CHE 104.

## 3. Rationale (Explain why this course/program is no longer needed in the Department):

This course has not been offered for more than 10 years. It was part of a sequence for a slow track for General Chemistry that is not going to be used again.

#### 4. Date of departmental approval:

#### **Department of Chemistry**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Withdrawal of course from the departmental offerings.

#### 2. Description:

CHE 106: Introductory Chemistry II.

*3 hours, 1.5 credits.* Continuation of <u>CHE 104</u>: a course presenting the fundamental laws and theories of chemistry. Considerable emphasis will be placed on the application of the mathematical and reasoning skills necessary to solve chemical problems. PREREQ: CHE 104. COREQ: CHE 107.

## 3. Rationale (Explain why this course/program is no longer needed in the Department):

This course has not been offered for more than 10 years. It was part of a sequence for a slow track for General Chemistry that is not going to be used again.

#### 4. Date of departmental approval:

#### **Department of Chemistry**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Withdrawal of course from the departmental offerings.

#### 2. Description:

CHE 107: Introductory Chemistry Laboratory II.

4 hours (3, lab; 1, problem lab), 1 credit. Continuation of <u>CHE 105</u>: introduction to the methods of scientific investigation, including basic physical and chemical laboratory techniques. Applications will include synthesis and analysis of simple chemical systems. PREREQ: CHE 105. COREQ: CHE 106.

## 3. Rationale (Explain why this course/program is no longer needed in the Department):

This course has not been offered for more than 10 years. It was part of a sequence for a slow track for General Chemistry that is not going to be used again.

#### 4. Date of departmental approval:

#### **Department of Chemistry**

#### **CURRICULUM CHANGE**

#### 1. Type of Change:

Withdrawal of course from the departmental offerings.

#### 2. Description:

CHE 327: Structure Determination and Organic Analysis.

8 hours (2, lecture; 6, lab), 5 credits. Qualitative identification of organic compounds and characteristic groups, including the use of instrumentation, the preparation of derivatives, and the consultation of chemical literature. PREREQ: CHE 234-235.

### 3. Rationale (Explain why this course/program is no longer needed in the Department):

This course has not been offered for approximately 20 years. The last person capable of teaching it retired more than ten years ago. It has not been a part of the college chemistry curriculum at most colleges for the last 40 years.

#### 4. Date of departmental approval:

### DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

#### **CURRICULUM CHANGE**

1. Type of Change: Course Description and Credit Change.

#### 2. Course Description:

#### From:

CIS 166: Computer Programming for Information Processing I..[4 hours, 4 credits. Computers, algorithms, and programs. Data representation; processing of quantitative and character data. Control structures, multidimensional arrays. Introduction to formatted input/output procedures. Programming applications drawn from business information processing. ]PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science. [Note: Intended for students in Accounting or Computer Information Systems.] Not intended for students in Mathematics or Computer Science.

#### To:

CIS166: Computer Programming for Information Processing I. <u>4 hours</u>, (2 lecture, 2 lab), 3 credits. Structured computer programming using a modern high-level programming language. Includes console I/O, data types, variables, control structures, including iteration, arrays, function definitions and calls, parameter passing, functional decomposition, and an introduction to objects. Debugging techniques. PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science. *Note: Not Intended for students in Mathematics or Computer Science* 

#### 3. Rationale:

These changes reflect the following changes:

- 1.The beginning programming language is evolving away from Basic and into the more powerful and useful Python language.
- 2. For some time beginning programming has been taught as a 2 hour lecture, 2 hour lab course. The change to a three credit course is consistent with the school's policy for lecture-lab courses.

#### 4. Date of Departmental Approval: May 8, 2013

#### DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

#### **CURRICULUM CHANGE**

1. Type of Change: Course Description, Course Number and Credit Change.

#### 2. Course Description:

#### From:

[CMP 230]: Programming Methods I.[4 hours, 4 credits.] Introduction to structured computer programming using a modern high-level programming language. Programming constructs covered to include console I/O, data types, variables, control structures, including iteration, arrays, function definitions and calls, parameter passing, functional decomposition, and an introduction to objects. Debugging techniques. PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science. Note: For students who intend to major in Computer Science, Mathematics, Computer Graphics and Imaging, or the sciences. Some previous computer programming experience is highly recommended.

#### To:

<u>CMP 167</u>: Programming Methods I. <u>4 hours, (2 lecture, 2 lab), 3 credits</u>. Structured computer programming using a modern high-level programming language. Includes console I/O, data types, variables, control structures, including iteration, arrays, function definitions and calls, parameter passing, functional decomposition, and an introduction to objects. Debugging techniques.

PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science. Note: For students who intend to major in Computer Science, Mathematics, Computer Graphics and Imaging, or the sciences. Some previous computer programming experience is recommended. Not intended for students in Accounting or Computer Information Systems; the technical content is the same as CIS166 but the emphasis is different.

#### 3. Rationale:

These changes reflect the following changes:

- 1. This is an entry level programming class that has changed from Java to the simpler and easier to learn Python language.
- 2. For some time beginning programming has been taught as a 2 hour lecture, 2 hour lab course. The change to a three credit course is consistent with the schools policy in this area.
- 3.The technical content of this course is the same as CIS 166. This course has more emphasis on material that is useful for professional programmers.

#### 4. Date of Departmental Approval: May 8,2013

## DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE CURRICULUM CHANGE

1. Type of Change: Number of credits and Course Description

#### 2. Course Description:

#### From:

CMP 405: Introduction to Networks. [4 hours, 4 credits.] Introduction to network protocols and algorithms. Intensive study of the most important protocols at each layer. Examination of their strengths and weaknesses. Basic algorithms for identifying primary servers, constructing forwarding and broadcasting trees, and determining routing tables. Writing a simple networking service at the I.P. layer or higher. PREREQ: CMP 334 and CMP 338.

#### To:

CMP 405: Introduction to Networks. <u>4 hours, (2 lecture, 2 lab), 3 credits.</u> Introduction to network protocols and algorithms. Intensive study of the most important protocols at each layer. Examination of their strengths and weaknesses. Basic algorithms for identifying primary servers, constructing forwarding and broadcasting trees, and determining routing tables. Writing a simple networking service at the I.P. layer or higher. <u>Lab exercises include building and testing small</u> networks.

PREREQ: CMP 334 and CMP 338.

#### 3. Rationale:

This course is currently taught as a 2 hour lecture, 2 hour lab course. The change to a three credit course is consistent with the school's policy in this area.

4. Date of Departmental Approval: May 8, 2013

#### DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

#### **CURRICULUM CHANGE**

- 1. Type of Change: B. S. CGI Degree Requirements
- 2. From:

[58]-Credit Major in Computer Graphics and Imaging, B.S.

#### The required credits are distributed as follows:

#### In ART/CGI (24 credits; may be taken as CGI or ART)

ART/CGI 221: Applied Imaging and Applications to the World Wide Web I. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 222: Applied Imaging and Applications to the World Wide Web II. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 321: Computer Modeling and Design I. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 322: Evolving Techniques in Digital Photography. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 325: Digital Multimedia. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 421: Computer Animation I. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 422: 3D Interactive Design. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 441: Broadcast Design. 4 hours (2, lecture; 2, lab), 3 credits.

#### In Computer Science (11 credits)

[CMP 230:] Programming Methods I. [4 hours, 4 credits.]

[CMP 326:] Programming Methods II. [4 hours, 4 credits.]

CMP 342: Internet Programming, 4 hours (2, lecture; 2, lab), 3 credits.

#### In Mathematics (5 credits)

MAT 155: Calculus Laboratory. 2 hours, 1 credit.

MAT 175: Calculus I. 4 hours, 4 credits.

#### In Art (18 credits)

ART 100: Basic Drawing. 4 hours (2, lecture; 2, lab), 3 credits.

ART 101: Introduction to two-Dimensional Design. 4 hours (2, lecture; 2, lab), 3 credits.

ART 102: Introduction to Three-Dimensional Design. 4 hours, (2, lecture; 2, lab), 3 credits.

ART 106: Introduction to Sculpture. 4 hours (2, lecture; 2, lab), 3 credits.

Or

ART 108: Introduction to Photography. 4 hours (2 lecture; 2 lab), 3 credits.

ART 112: Introduction to Digital Imaging. 4 hours (2 lecture; 2 lab), 3 credits.

ARH 167: Tradition and Innovation in the Art of the West. 3 hours, 3 credits.

Or

ARH 141: Introduction to the History of Modern Art of the Nineteenth and Twentieth Centuries in Europe and the United States. 3 hours, 3 credits.

#### 3. TO:

<u>56</u>-Credit Major in Computer Graphics and Imaging, B.S.

The required credits are distributed as follows:

#### In ART/CGI (24 credits; may be taken as CGI or ART)

ART/CGI 221: Applied Imaging and Applications to the World Wide Web I. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 222: Applied Imaging and Applications to the World Wide Web II. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 321: Computer Modeling and Design I. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 322: Evolving Techniques in Digital Photography. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 325: Digital Multimedia. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 421: Computer Animation I. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 422: 3D Interactive Design. 4 hours (2, lecture; 2, lab), 3 credits.

ART/CGI 441: Broadcast Design. 4 hours (2, lecture; 2, lab), 3 credits.

#### In Computer Science (9 credits)

CMP 167: Programming Methods I. 4 hours (2, lecture; 2, lab), 3 credits.

CMP 267: Programming Methods II. 4 hours (2, lecture; 2, lab), 3 credits.

CMP 342: Internet Programming. 4 hours (2, lecture; 2, lab), 3 credits.

#### In Mathematics (5 credits)

MAT 155: Calculus Laboratory. 2 hours, 1 credit.

MAT 175: Calculus I. 4 hours, 4 credits.

#### In Art (18 credits)

ART 100: Basic Drawing. 4 hours (2, lecture; 2, lab), 3 credits.

ART 101: Introduction to two-Dimensional Design. 4 hours (2, lecture; 2, lab), 3 credits.

ART 102: Introduction to Three-Dimensional Design. 4 hours, (2, lecture; 2, lab), 3 credits.

ART 106: Introduction to Sculpture. 4 hours (2, lecture; 2, lab), 3 credits.

Or

ART 108: Introduction to Photography. 4 hours (2 lecture; 2 lab), 3 credits.

ART 112: Introduction to Digital Imaging. 4 hours (2 lecture; 2 lab), 3 credits.

ARH 167: Tradition and Innovation in the Art of the West. 3 hours, 3 credits.

Or

ARH 141: Introduction to the History of Modern Art of the Nineteenth and Twentieth Centuries in Europe and the United States. 3 hours, 3 credits.

#### 4. Rationale:

CMP167 Programming Methods course replaces CMP 230 as he initial programming course. It is taught as a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course. The introduction of the Python programming language as an easier to learn programming language (the same language is taught in the CIS 166 course) and the fact that freshman are more sophisticated in their computer knowledge support this change.

The CMP267 Programming Methods 2 course replaces CMP326 as the second programming course. It is a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course.

#### 5. Date of departmental approvals:

Math and Compu	ter Science _5/8/2013
Art Department_	September 18,2013

# DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

#### **CURRICULUM CHANGE**

## 1. Type of Change: B. S. CIS.Degree Requirements

#### 3. From:

[56-58]-Credit Major in Computer Information Systems, B.S.

In Computer Science: Required Courses (20 credits):

CIS 166: Computer Programming for Information Processing [ (4 hours, 4 credits)]

CIS 211: Computer Information Systems (4 hours, 4 credits)

CIS 212: Microcomputer Architecture (4 hours, 3 credits)

CIS 244: Introduction to Database Management (4 hours, 3 credits)

CIS 331: Network Introduction (4 hours, 3 credits)

CIS 344: Database Design and Programming (4 hours, 3 credits)

In Computer Science: Elective Courses (6-8 credits):

Two additional courses chosen from the 200-level (or higher) CIS courses or from CGI 221, CGI 321, CGI 421, and CMP 326. One of the courses must be a 300- (or 400-) level CIS course.

In Mathematics: Required Courses (15 credits):

MAT 132: Basic Concepts of Probability and Statistics (4 hours, 4 credits)

MAT 174: Elements of Calculus (4 hours, 4 credits)

MAT 301: Applied Statistics and Computer Analysis (4 hours, 3 credits)

MAT 348: Mathematical Methods for Management (4 hours, 4 credits)

In Economics: Required Courses (9 credits):

ECO 166: Fundamentals of Economics (3 hours, 3 credits)

ECO 167: Economic Analysis (3 hours, 3 credits)

ACC 185: Introduction to Accounting for Non-Accounting Majors (3 hours, 3 credits)

Further Electives (6 credits):

Students must choose two courses from the following:

One additional 200 level (or higher) CIS course, 3 credits

PHI 221: Ethical Issues in Computing and Technology (3 hours, 3 credits)

POL 299: Law, Computers, and the Internet: The Politics of Information Technology (3 hours, 3 credits)

Note 1: At least one of PHI 221 and POL 299 must be chosen

Note 2:

- 1. A minor is NOT required.
- 2. Students considering graduate work should take MAT 175 176 instead of MAT 174.
- 3. For departmental honors, see one of the advisors in the Department of Mathematics and Computer Science.

## 4. To:

# 55-57-Credit Major in Computer Information Systems, B.S.

In Computer Science: Required Courses (19 credits):

CIS 166: Computer Programming for Information Processing (4 hours, 3 credits)

CIS 211: Computer Information Systems (4 hours, 4 credits)

CIS 212: Microcomputer Architecture (4 hours, 3 credits)

CIS 244: Introduction to Database Management (4 hours, 3 credits)

CIS 331: Network Introduction (4 hours, 3 credits)

CIS 344: Database Design and Programming (4 hours, 3 credits)

In Computer Science: Elective Courses (6-8 credits):

Two additional courses chosen from the 200-level (or higher) CIS courses or from CGI 221, CGI 321, CGI 421, and CMP 326. One of the courses must be a 300- (or 400-) level CIS course.

In Mathematics: Required Courses (15 credits):

MAT 132: Basic Concepts of Probability and Statistics (4 hours, 4 credits)

MAT 174: Elements of Calculus (4 hours, 4 credits)

MAT 301: Applied Statistics and Computer Analysis (4 hours, 3 credits)

MAT 348: Mathematical Methods for Management (4 hours, 4 credits)

In Economics: Required Courses (9 credits):

ECO 166: Fundamentals of Economics (3 hours, 3 credits)

ECO 167: Economic Analysis (3 hours, 3 credits)

ACC 185 or ACC 171: Introduction to Accounting for Non-Accounting Majors (3 hours, 3 credits)

Further Electives (6 credits):

Students must choose two courses from the following:

One additional 200 level (or higher) CIS course, 3 credits

PHI 221: Ethical Issues in Computing and Technology (3 hours, 3 credits)

POL 299: Law, Computers, and the Internet: The Politics of Information Technology (3 hours, 3 credits)

Note 1: At least one of PHI 221 and POL 299 must be chosen

Note 2: Students considering graduate work should take MAT 175 - 176 instead of MAT 174

Note 3. For departmental honors, see one of the advisors in the Department of Mathematics and Computer Science.

## 4. Rationale:

The change reflects the fact that CIS 166 has been changed to a 3 credit course and the hours adjusted for the major.

# DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

#### **CURRICULUM CHANGE**

1. Type of Change: B. A. C.S. Degree Requirements

# 5. **From:**

[43-44]-Credit Major in Computer Science, B.A.

There are eleven required courses:

Hours/Credits Course Code and Title

4 hours, 4 credits MAT 175: Calculus I

4 hours, 4 credits MAT 176: Calculus II

4 hours, 4 credits MAT 313: Linear Algebra

[4 hours, 4 credits CMP 230: Programming Methods I]

4 hours, 4 credits CMP 232: Elementary Discrete Structures &

**Applications to Computer Science** 

[4 hours, 4 credits CMP 326: Programming Methods II]

4 hours, 4 credits CMP 334: Computer organization

4 hours, 4 credits CMP 338: Data Structures

4 hours, 4 credits CMP 339: Programming Languages or

CMP 426: Operating Systems

Two advanced (300- or 400-level) CMP electives (MAT 226 can be used as one of these electives).

# Notes:

- 1. A minor is also required.
- 2. All students, particularly those considering graduate work, are advised to take more upper-level Computer Science courses. (The list above is only the minimum required for graduation.)
- 3. For Departmental honors, see one of the advisers in the Department of Mathematics and Computer Science.

## 3. TO:

# 43-46-Credit Major in Computer Science, B.A.

There are twelve required courses:

Hours/Credits Course Code and Title

4 hours, 4 credits MAT 175: Calculus I

4 hours, 4 credits MAT 176: Calculus II

4 hours, 4 credits MAT 313: Linear Algebra

4 hours, 3 credits CMP 167: Programming Methods I

4 hours, 4 credits CMP 232: Elementary Discrete Structures &

**Applications to Computer Science** 

4 hours, 3 credits CMP 267: Programming Methods II

4 hours, 4 credits CMP 334: Computer organization

4 hours, 4 credits CMP 338: Data Structures

4 hours, 4 credits CMP 339: Programming Languages or

**CMP 426 Operating Systems** 

4 hours, 3-4 credits CMP 405 Introduction to Networking or

## **CMP 420 Database Systems**

Two advanced (300- or 400-level) CMP electives (MAT 226 can be used as one of these electives).

#### Notes:

- 1. All students, particularly those considering graduate work, are advised to take more upper-level Computer Science courses. (The list above is only the minimum required for graduation.
- 2. For Departmental honors, see one of the advisers in the Department of Mathematics and Computer Science.

## 4. Rationale:

CMP167 Programming Methods course replaces CMP 230 as he initial programming course. It is taught as a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course. The introduction of the Python programming language as an easier to learn

programming language (the same language is taught in the CIS 166 course) and the fact that freshmen are more sophisticated in their computer knowledge support this change.

The CMP267 Programming Methods 2 course replaces CMP326 as the second programming course. It is a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course.

-Adding CMP 405 and CMP 420 as choices reflects the change in importance of these areas in Computer Science

# DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

# **CURRICULUM CHANGE**

# 1. Type of Change: B. S. C.S. Degree Requirements

# 6. **From:**

[56-60]-Credit Major in Computer Science, B.S.

There are fifteen required COUrses:

Hours/Credits	Course Code and Title
4 hours, 4 credits	MAT 175: Calculus I
4 hours, 4 credits	MAT 176: Calculus II
4 hours, 4 credits	MAT 313: Linear Algebra
4 hours, 4 credits	CMP 230: Programming Methods I
4 hours, 4 credits	CMP 232: Elementary Discrete Structures & Applications to Computer Science
4 hours, 4 credits	CMP 326: Programming Methods II
4 hours, 4 credits	CMP 334: Computer Organization
4 hours, 4 credits	CMP 338: Data Structures
[4 hours, 4 credits	CMP 339: Programming Languages]
4 hours, 4 credits	CMP 426: Operating Systems

Four advanced (300- or 400-level) CMP courses (MAT 226: Vector Calculus, 4 hours, 4 credits or PHY 305: Digital Electronics, 2 hours, lecture; 2 hours, lab; 3 credits, can be substituted for one of these courses). One advanced (300- or 400-level) MAT course, not including MAT 300, 301, or 348 (CMP 332 or CMP 416 can be used for this course). A minor is not required.

# 3. TO:

# 57-61-Credit Major in Computer Science, B.S.

There are sixteen required courses:

Hours/Credits	Course Code and Title
4 hours, 4 credits	MAT 175: Calculus I
4 hours, 4 credits	MAT 176: Calculus II
4 hours, 4 credits	MAT 313: Linear Algebra
4 hours, 3 credits	CMP 167: Programming Methods I
4 hours, 4 credits Applications to Compute	CMP 232: Elementary Discrete Structures & r Science
4 hours, 3 credits	CMP 267: Programming Methods II
4 hours, 4 credits	CMP 334: Computer Organization
4 hours, 4 credits	CMP 338: Data Structures
4 hours, 3 credits	CMP 405 Introduction to Networking
4 hours, 4 credits	CMP 420 Database Systems
4 hours, 4 credits	CMP 426: Operating Systems

Four advanced (300- or 400-level) CMP courses are required. (MAT 226: Vector Calculus, *4 hours, 4 credits* or PHY 305: Digital Electronics, 2 hours, lecture; 2 hours, lab; 3 credits, can be substituted for one of these courses).

One 300- or 400-level MAT course is required (not including MAT 300, 301, or 348). CMP 332, CMP 416 can be used for this course.

Note: All students, particularly those considering graduate work, are advised to take more upper-level Computer Science courses, particularly CMP 339 and CMP 416.

**4. Rationale:** These changes reflect the evolution in the teaching of computer science courses, and the new areas of computer science (Networking and Database) that are critical in the business world.

CMP167 Programming Methods course replaces CMP 230 as he initial programming course. It is taught as a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course. The introduction of the Python programming language as an easier to learn programming language (the same language is taught in the CIS 166 course) and the fact that freshmen are more sophisticated in their computer knowledge support this change. The CMP267 Programming Methods 2 course replaces CMP326 as the second programming course. It is a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course.

The department wants to apply for accreditation for the computer science majors. By decreasing the credits of some of the beginning courses and shifting requirements the major is more in line with requirements of the accreditation agencies. These manipulations necessitated a change of requirements from 56-60 to 57-61 credits for the B.S. major in computer science.

CMP405 Introduction to Networking is made a required course to reflect the realities of the Internet and the commercial world. The ACM has Networking as part of their core "Body of Knowledge" for Computer Science. It is currently taught as a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course. Networking has become a significant career path for Computer Science majors.

CMP420 Database Systems is also made a required course to also reflect the realities of the commercial world. The ACM has Information Management as part of their core "Body of Knowledge" for Computer Science and database is at the center of that specialty. Database Design and Administration has become a significant career path for Computer Science majors.

CMP 339 has been dropped as a required course to make room for more critical courses.

# DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

## **CURRICULUM CHANGE**

- 1. Type of Change: Math BA Degree Requirements
- 7. **From:**

[40-44]-Credit Major in Mathematics, B.A. There are [eleven] required courses:

## Credits

- 12 MAT 175, MAT 176, and MAT 226
- 8 MAT 313 and MAT 314
- 4 MAT 320
- [4 CMP 230]
- 12-16 Four additional courses chosen from among 200-level or higher MAT courses, not counting \*MAT 231, 300, 301, and 348. [CMP 326] and CMP 332 may be chosen.

A minor is also required.

## 3. TO:

43-47-Credit Major in Mathematics, B.A. There are twelve required courses:

#### Credits

- 12 MAT 175, MAT 176, and MAT 226
- 8 MAT 313 and MAT 314

- 4 MAT 320
- 3 CMP 167
- <u>4</u> <u>MAT 330 or MAT 323</u>
- 12-16 Four additional courses chosen from among 200-level or higher MAT courses, not counting \*MAT 231, 300, 301, and 348. CMP 267 and CMP 332 may be chosen.

#### 4. Rationale:

CMP167 Programming Methods course replaces CMP 230 as he initial programming course. It is taught as a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course. The introduction of the Python programming language as an easier to learn programming language (the same language is taught in the CIS 166 course) and the fact that freshman are more sophisticated in their computer knowledge support this change.

The CMP267 Programming Methods 2 course replaces CMP326 as the second programming course. It is a 2 hour lecture- 2 hour lab course and is therefore a 3 credit course.

The credit change from 40-44 to 43-47 is caused by the introduction of one additional course requirement and the same number of optional courses combed with a decrease in credits of the introductory computer science courses. MAT 330 is probability and MAT 323 is ordinary differential equations and the department feels all students should take at least one of these. Our students have not been taking enough higher-level mathematical courses to be competitive. The department felt that it should continue to require an additional four elective higher-level courses.

Lehman College Senate Library, Technology, and Telecommunications Committee February 5, 2014

- 1. Meeting was held Monday, February 3<sup>rd</sup> in Library Treehouse.
- 2. CIO Ronald Bergmann presented IT Strategic Roadmap to the Committee, which enthusiastically endorses it, with recommendation that Lehman's Information Technology infrastructure and ambitious growth plan be properly resourced and staffed in order to achieve maximum and timely effectiveness.
- 3. Migration of computers running WindowsXP and Office 2003. As of April 8, 2014, Microsoft will terminate supporting outdated WindowsXP and Office 2003 operating systems. IT is diligently addressing upgrades of all necessary computers to Windows 7. If you have questions or need assistance, please e-mail Vincent Sandella in IT.
- 4. Raymond Diaz reported on Library's successful efforts to create Virtual Desktop Pilot.
- 5. Student Technology Fee Committee had launch meeting on January 29<sup>th</sup>. Sadly, this will be final round that Joe Middleton will be chairing. Student attendance and participation is excellent. Next meeting will be Monday, February 10<sup>th</sup> from 3:00 5:00 PM in IT Conference Room, Carman 162.

Respectfully submitted,

Stefanie Havelka Chair

# UFS Report to the Lehman College Senate, February 5, 2014

# Pathways

- Central Office Pathways Review Committees are to be Determined by Faculty Governance Bodies.
- The Rule Mandating that Course Hours are Limited to the Number of Credits is to be Revoked.
- There is to be no Change to the Rule Abolishing Lehman College's System of Mandatory Minors.
- The UFS and PSC Lawsuits Against Pathways Continue.
- The UFS Executive Committee Resolves to Oppose Academic Boycotts and also Oppose the NYS Senate and Assembly Bills Punishing Colleges for Faculty Participation in Such Boycotts. Note today's NYT Editorial.
- The **UFS Charter Revision** Has Enough Campus Governance Approval Votes.
- The UFS of SUNY and the UFS of CUNY hold an April 1 Research Day in Albany.
- SUNY's UFS Hosts an April 23-24 Conference on Shared Governance in Albany.
  - Proposals are due by February 28.

- UFS Chair Martell Comments on Chancellor-Designate James Milliken: "Nebraska is in many senses materially different from the City University of New York, but on the other hand we are both about providing opportunity to people who don't have opportunity. He gets that."
- The May 2<sup>nd</sup> **UFS Spring Conference** Will Concentrate on Federal Funding for Scholarship in the Social Sciences and the Humanities.

- The CUNY Academy Hosted CUNY's First Reception for Incoming Foreign Fulbright Students and Scholars
  - Students and Scholars from France, Poland, Israel, Greece, Nepal, Czech Republic, Mexico, Spain, Afghanistan, Ukraine, Switzerland and Russia were honored.
- The **Lehman College Music Department** Hosts a Performance by the Fulbright Scholar Sponsored by the Academy
  - Thursday, February 13 at 12:30 in the Lovinger Theater.
- The Academy has **Full Funding for Stewart Travel Awards and Feliks Gross Endowment Awards**, both for new Assistant Professors