1. **Call to Order**: Meeting was called to order at 12:15 p.m.

2. **Seating of Alternates**: K. Lee, K. Ojakian, J. Ziegler, and I. Horozov were seated.

3. **Approval of the Agenda**: Agenda was approved (Y- 47, N- 0, A- 1).

4. **Approval of Minutes of April 26, 2018**: The minutes were approved with amendments (Y- 46, N- 0, A- 5).

5. **Action Items:**
a. Committee On Academic Standing: S. Powers recognized the work of T. Fisher and A. Ott on the changes in the codification. He asked the Senate for questions regarding the codification changes. Motion to adopt the report passed by voice vote. Changes to the codification were approved (Y- 46, N- 1, A- 4).

b. Curriculum Committee: H. Clampman asked for comments and discussion from the Senate.

- A motion to separate 1A (ENG XX) from the other items passed by voice vote. S. Utakis spoke against approval of ENG XX, stating that approving the course would be part of a path to eliminating open admissions. ENG 110, which combines remedial and credit-courses, already exists. N. Ritze reminded everyone that students placing the highest level of RDL and ENG are eligible to take virtually all first-level of credit bearing courses (PSY, SOC, etc). There was a discussion on the impact of ENG XX on ESL students and open admissions in general.

D. Gonsher asked R. Beuka whether CUNY would implement a program of their own if the course was not approved. R. Beuka stated that a new placement algorithm is being enforced. Placement is going to be based on high school GPA and regents scores. Due to non-course interventions, CUNY Start, and other mechanisms, developmental students will not be coming to us soon. This will be an experiment, and it is better to keep developmental in our department rather than not. Motion to extend 5 minutes passed unanimously by voice vote.

A. Ott stated that developmental education is changing in the college and in the university. This is one way to keep developmental. V. Walker stated that even although it is just an experiment, there are students who are impacted by it. T. Isekenegbe stated that we have to realize that things are changing. We have to look at the ways in which we are offering our remedial classes. S. Utakis explained that given the way students are placed, students are already placed in CUNY Start. Both are time-intensive. There will be no opportunity to take just the English class they need. This is limiting opportunity, not expanding.

J. Scott stated that research was done at other community colleges. This is an optional course -- students are not forced to take the course. They are not low-level writers; they are close to the threshold of ENG 111. They are advised, and then can choose to take the course. The senate voted on the course ENG XX. The course was not approved (Y-24, N-16, A-14).

- The senate voted on items 1B-1E as a group: All courses were approved (Y- 48, N- 1, A- 4).
● The senate voted on CHM 16 as an experimental course (item 2A):
The course was approved (Y- 46, N- 1, A- 7).

● A change in ENG 111 was proposed. The prerequisite is different now, and the change would codify what is being practiced. A motion to waive the two-meeting rule passed (Y- 45, N- 2, A- 7).

● A motion to approve item 2B was approved by voice vote.

c. Governance and Elections: S. Davis reported on the following items.

● Due to time constraints, voting on planned items will be moved to September.

● In light of the received comments and feedback, the membership has changed. A comment was made that without the written material and framework, it is difficult to make a decision. Suggestions were made that the task force needs an outsider (not in governance) and an adjunct, someone not in governance. The motion to approve the changes with amendments (Y- 30, N- 9, A- 12) did not pass (no quorum).

8. Adjournment: Meeting was adjourned at 1:17 p.m.

Attachments
● Senate Agenda
● Curriculum Committee Report
● Curriculum Committee Annual Senate Report
● Academic Integrity Memo
● Academic Master Plan Memo
● BCC Governance Self-Study Task Force Proposal
● Middle States Self-Study Update
● CCCRC Nominees
● CUNY Bylaws Section 9
● Governance and Elections Revisions to Governance Plan
AGENDA OF THE MEETING OF THE
BRONX COMMUNITY COLLEGE SENATE
May 3, 2018 12:15 - 1:00 P.M.
Nichols Hall 104

1. Call to Order

2. Seating of Alternates

3. Approval of the Agenda

4. Approval of Minutes of April 26, 2018

5. Announcements

6. Action Items:
   a. Committee On Academic Standing (10 Minutes)
   b. Curriculum Committee (10 minutes)
   c. Governance and Elections (10 minutes)
   d. Any other Committee needing Action (7 minutes)

7. New Business (time remaining)

8. Adjournment
# BRONX COMMUNITY COLLEGE  
of the City University of New York  
Curriculum Committee

To: Members of the College Senate  
From: Professor Howard A. Clampman, Chairperson Curriculum Committee  
Date: May 3, 2018  
Subject: Report of Actions by the Curriculum Committee through 04/24/2018

---

1. Actions previously reported to the Senate:
   (a) Proposed new experimental course

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG XX – Accelerated Learning Program</td>
<td>4-24-18</td>
</tr>
<tr>
<td>Paper ballot vote 12-1-3 with 1 spoiled ballot</td>
<td></td>
</tr>
</tbody>
</table>

(b) Proposed change to an existing course

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 40</td>
<td></td>
</tr>
<tr>
<td>From: Field Work Seminar Birth to Grade 6</td>
<td></td>
</tr>
<tr>
<td>To: Field Work Seminar</td>
<td></td>
</tr>
<tr>
<td>Change in Course Title</td>
<td></td>
</tr>
<tr>
<td>(Unanimous show of hands)</td>
<td>4-24-18</td>
</tr>
</tbody>
</table>

(c) Proposed new courses

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 21 – Introduction to Chemical Processes</td>
<td></td>
</tr>
<tr>
<td>BIO 34/CHM 34 – Biofuels and Bioproducts</td>
<td></td>
</tr>
<tr>
<td>(Unanimous show of hands)</td>
<td>4-24-18</td>
</tr>
</tbody>
</table>

(d) Proposed change to an existing program

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts AS Degree Program – Chemistry Option</td>
<td></td>
</tr>
<tr>
<td>(Unanimous show of hands)</td>
<td>4-24-18</td>
</tr>
</tbody>
</table>

(e) Proposed change to an existing course

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMT 79 – Phlebotomy</td>
<td></td>
</tr>
<tr>
<td>Change in Course Description</td>
<td></td>
</tr>
<tr>
<td>(Unanimous show of hands)</td>
<td></td>
</tr>
<tr>
<td>The Committee voted unanimously to waive the customary three-meeting rule.</td>
<td>4-24-18</td>
</tr>
</tbody>
</table>
2. Actions reported to the Senate for the first time:
   (a) Proposed new experimental course

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHM 16 – Chemistry: A Forensic Perspective</td>
<td>4-10-18</td>
</tr>
<tr>
<td>To be included in Pathways Flexible Core E</td>
<td></td>
</tr>
<tr>
<td>(Unanimous show of hands)</td>
<td></td>
</tr>
</tbody>
</table>

(b) Proposed change to an existing course

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ENG 111 – Composition and Rhetoric I</td>
<td>4-10-18</td>
</tr>
<tr>
<td>Change in Course Prerequisite</td>
<td></td>
</tr>
<tr>
<td>(Unanimous show of hands)</td>
<td></td>
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</tbody>
</table>

Please note: These two new items were inadvertently left off of the April 2018 Senate Report.
## Section AIV: New Courses

### AIV.1

<table>
<thead>
<tr>
<th>CUNYfirst Course ID</th>
<th>ENG XX: Accelerated Learning Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department(s)</td>
<td>English</td>
</tr>
<tr>
<td>Career</td>
<td>[X] Undergraduate [ ] Graduate</td>
</tr>
<tr>
<td>Academic Level</td>
<td>[ ] Regular [ ] Compensatory [X] Developmental [ ] Remedial</td>
</tr>
<tr>
<td>Subject Area</td>
<td>Developmental writing</td>
</tr>
<tr>
<td>Course Prefix &amp; Number</td>
<td>ENG XX</td>
</tr>
<tr>
<td>Course Title</td>
<td>ENG XX: Accelerated Learning Program</td>
</tr>
</tbody>
</table>

### Catalogue Description
The Accelerated Learning Program (ALP) is a four-hour companion course to ENG 111 for Native-English-Speaking students who pass the CUNY Assessment Test in Reading, but fail with a score between 38 and 47 on the CUNY Assessment Test in Writing. ALP provides small-group, workshop-style instruction that supports the reading and writing activities of ENG 111.

### Prerequisites
A passing score on the CUNY Assessment Test in Reading or successful completion of RDL 2, if required, and a score of 38-47 on the CUNY Assessment Test in Writing.

### Co-Requisites
ENG 111 (ALP-designated section)

### Credits
0

### Contact Hours
4

### Liberal Arts
[ ] Yes [ ] No

### Course Attribute (e.g. Writing Intensive, Honors, etc)

### Course Applicability

- [ ] Major
- [ ] Gen Ed Required
- [ ] English Composition
- [ ] Mathematics
- [ ] Science
- [ ] Gen Ed - Flexible
- [ ] World Cultures
- [ ] US Experience in its Diversity
- [ ] Creative Expression
- [ ] Individual and Society
- [ ] Scientific World

### Effective Term
Fall 2018

### Rationale:
This experimental course is offered in response to the call by CUNY for more co-requisite course offerings that blend developmental and credit-bearing instruction. Accelerated Learning Program (ALP) classes at BCC will enable students with a developmental need in writing to get the support they need to succeed in their English 111 class as they develop their writing and reading skills. The goal is to give students the opportunity to complete in one semester what normally takes two. This ALP companion course, paired with a co-requisite, ALP-designated section of ENG 111, will serve as a small-group workshop to provide the support its cohort of developmental writers needs to succeed in ENG 111.
English XX:
ACCELERATED LEARNING PROGRAM
Fall 2018
Credits: 0
Hours: 4

Meeting Times: Monday & Wednesday
1:00 pm – 2:50 pm
Room: Colston ___

Office Hours: Monday & Wednesday
3 pm – 4 pm
Colston 638
(and by appointment)

Dr. Scott’s Phone:
(646) 573-1871
e-mail: Jonathan.Scott@bcc.cuny.edu

ENG XX Catalog Description
The Accelerated Learning Program (ALP) is a four-hour companion course to ENG 111 for Native-English-Speaking students who pass the CUNY Assessment Test in Reading, but fail with a score between 38 and 47 on the CUNY Assessment Test in Writing. ALP provides small-group, workshop-style instruction that supports the reading and writing activities of ENG 111.

Prerequisites: A passing score on the CUNY Assessment Test in Reading or successful completion of RDL 2, if required, and a score of 38-47 on the CUNY Assessment Test in Writing.
Co-Requisite: ENG 111 (ALP-designated section)

Student Learning Outcomes:
By the end of the course, students should be able to:

- Know how to use a dictionary, and apply this knowledge to the enlargement of their academic vocabulary.
- Write thesis-centered essays.
- Identify and correct grammatical and mechanical errors, such as sentence fragments, subject-verb agreement mistakes, and misspellings.
- Read and discuss several exemplary literary texts, interpreting them to identify and understand main ideas and supporting evidence.
The Structure of ENG XX
The Accelerated Learning Program (ALP) is offered by the English Department. ALP allows students still in need of completing their developmental writing work to take English 111, a credit-bearing course that applies to Required Core Area A. ALP classes are smaller than other classes, creating a strong class community that enables students to spend several hours a week working one-on-one with their instructor.

In this ALP model at BCC, students with a developmental need in writing enroll concurrently in an upper-level developmental writing workshop, called ENG XX, and a linked English 111 course. If you are in ALP, your ENG XX course will consist of all ALP students, and your English 111 course will consist of the same ALP students in your ENG XX class as well as other English 111 students. Both of these classes are taught by the same instructor.

Because the English 111 course that ALP students take is directly connected to the developmental writing workshop (ENG XX), ALP students will get the support they need to succeed in their English 111 class as they develop their writing and reading skills. The goal is to give students the opportunity to complete in one semester what normally takes two. In order to succeed in the program, students who enroll must be highly motivated and willing to complete demanding and complex assignments.

ALP Student Eligibility
Eligible Students for ALP are Native-English-Speakers who:

- Have a pass (55+) on the ACCUPLACER Reading Test or have otherwise demonstrated reading proficiency.
- Scored between 38 and 47 on the CATW exam.

ALP Registration Requirements
Students must register for both ENG XX and the connected ALP-designated English 111 taught by the same instructor.

ENG XX is 0 credits and ENG 111 is 4 hours and 3 credits. The enrollment cap for ENG XX is 14 students. The cap for the ALP-designated English 111 is 25: 14 ALP students (who are also enrolled in the linked ENG XX course) and 11 mainstream English 111 students.

The Link Between ENG XX and ENG 111
Because all ALP students register for a section of English 111, they will receive two syllabi: one for ENG XX (this one, here), and another for English 111 (not here, as it is an already existing course). For ALP students, these two syllabi are necessarily interconnected, with the ENG XX syllabus providing detailed information about the schedule of assignments and instructional support for the required projects of English 111.
ENG XX Evaluation and Requirements of Students
Students receive a letter grade, A through F:

- 40% – Body of written work (3 formal, revised essays, typed and double-spaced, which includes drafts; 3 in-class essays)
- 20% – Individualized student-teacher tutorial project
- 20% – Quizzes on readings
- 20% – Attendance

Required Text
- ENG XX Coursepack (given to students by their instructor on the first day of class)

The Individualized Student-Teacher Tutorial Project
Because ENG XX is structured as a small-group writing workshop, many hours during the semester will be spent in one-on-one tutoring with the instructor. At the end of the semester, students will produce a written narrative of their progress throughout the course, focused on grammar and mechanics.

Accessibility
Any student who feels that s/he may need an accommodation based on the impact of a permanent or temporary disability should contact me privately. I am committed to ensuring the full participation of all students in this class. The Office of Disability Services (ODS) serves as a clearinghouse on disability issues and works in partnership with faculty and all other student service offices. They work with students confidentially. The ODS is located in Loew Hall, Room 213. You can stop by, or call (718) 289-5874 for more information. Ask for Poonam Sharma.

Attendance Policy
Three unexcused absences will be permitted. But on your fourth unexcused absence, your final course grade will be lowered by a half grade, and another half grade for your fifth unexcused absence, and so on and so forth. For example, if you had a B before your fourth unexcused absence, after your fourth, your final course grade will be lowered to a B-. Excused absences are medical notes, or other professional letters of explanation accounting for your absence.

Policy on Smartphones and Tablets
Digital devices, such as smartphones and tablets, will not be used in the classroom. Each time that a student uses their smartphone or tablet during class, it will count as an absence.

Policy on Plagiarism
Plagiarism is the presentation of someone else’s ideas, words, or artistic/scientific/technical work as one’s own creation. A student who copies or paraphrases published or on-line material, or another person’s research, without properly identifying the source(s) is committing plagiarism.

Plagiarism violates the ethical and academic standards of our college. Students will be held responsible for such violations, even when unintentional. To avoid unintended plagiarism,
students should consult with their instructors about when and how to document their sources. The library also has both print and digital guides designed to help students cite sources correctly.

Plagiarism carries a range of penalties commensurate with the severity of the infraction. The instructor may, for example, require the work to be redone, reduce the course grade, fail the student in the course, or refer the case to the Faculty-Student Disciplinary Committee (see article 15.4 of the Bylaws of the Board of Trustees). Cases referred to that committee could result in suspension or expulsion from the college.

Students should consult the BCC catalog section that contains the CUNY and College policies on academic integrity.

Schedule

Week One (8/28, 8/30)

- Introductions
- Pick up ENG XX Coursepack
- The connection between grammar and critical thinking
- First ENG 111 reading assignment (on “How American Awfulness Stacks Up,” by Doug Henwood)

Week Two (9/6, 9/7)

(No class on Monday, Sept. 4: Labor Day)

- How to use a dictionary
- Vocabulary assignment
- Quiz #1 (vocabulary from reading #1)
- Review of ENG 111 essay #1
- Second ENG 111 reading assignment (on “Flight,” by Sherman Alexie, chapters 1 -5)

Week Three (9/11, 9/13)

- Clauses: main clauses, and subordinate clauses
- Basic structure of the thesis-centered essay
- In-class essay #1
- Vocabulary assignment
- Quiz #2 (vocabulary from reading #2)
- Third ENG 111 reading assignment (on “Flight,” chapters 6 - 13)

Week Four (9/18, 9/20)

- Terms for interpretive writing
- Review of ENG 111 essay #2
- Vocabulary assignment
Quiz #3 (vocabulary from reading #3)
Fourth ENG 111 reading assignment (on “Flight,” chapters 14 - end)

Week Five (9/25, 9/27)

- Grammar review
- Vocabulary assignment
- Quiz #4 (vocabulary from reading #4)
- Review of ENG 111 essay #3

Week Six (10/2, 10/4)

- Principles of logic and organization
- Fifth ENG 111 reading assignment (on “Tired,” by Langston Hughes)
- Vocabulary assignment
- Quiz #5 (vocabulary from reading #5)

Week Seven (10/9, 10/11)

- Phrases: prepositional, and gerund
- Review of ENG 111 essay #4
- Sixth ENG 111 reading (“Bloodchild,” by Octavia Butler)

Week Eight (10/16, 10/18)

- Analyzing the text
- Vocabulary assignment
- Quiz #6 (vocabulary from reading #6)
- Review of Essay #5

Week Nine (10/23, 10/25)

- In-class essay #2
- Grammar review
- Linking texts and ideas

Week Ten (10/30, 11/1)

- Seventh ENG 111 reading (“The Washing Machine Has Changed the World More Than the Internet Has,” by Ha-Joon Chang)
- Review of ENG 111 essay #6

Week Eleven (11/6, 11/8)

- MLA documentation style
- Vocabulary assignment
- Quiz #7 (vocabulary from reading #7)
- What is empirical data?
- How to substantiate your thesis

**Week Twelve (11/13, 11/15)**

- Online academic research techniques
- Review of ENG 111 essay #7
- Eighth ENG 111 reading (the English Department Final Exam Text)

**Week Thirteen (11/20, 11/22)**

- In-class essay #3
- Annotated bibliography workshop
- Vocabulary assignment
- Quiz #8 (vocabulary from reading #8)

**Week Fourteen (11/27, 11/29)**

- Research paper revisions
- Individualized student-teacher tutorial project due

**Week Fifteen (12/4, 12/6)**

- Body of written work due
- English Department Final Exam: Thursday, Dec. 14
AV: 1 Changes to be offered in the Education & Academic Literacy

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Departments</strong></td>
<td>Education &amp; Academic Literacy</td>
</tr>
<tr>
<td><strong>Course</strong></td>
<td>EDU 40 Field Work Seminar Birth to Grade 6</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Prerequisite</strong></td>
<td>EDU 10; EDU 12 or EDU 26</td>
</tr>
<tr>
<td><strong>Co-requisite</strong></td>
<td>All other education courses and permission of the department.</td>
</tr>
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</table>

**Description**
Individual and small group teaching experiences under professional supervision in an accredited school or agency. Periodic meetings with BCC faculty supervisor. Students must demonstrate competencies pertaining to general knowledge expected of those who completed the education sequence; and be able to plan educational activities for culturally diverse populations and children with special needs. Students’ dispositions and instructional strategies will be assessed. The use of technology is introduced as appropriate. Students will make contributions to their academic portfolio.

**Requirement Designation**

<table>
<thead>
<tr>
<th>Liberal Arts</th>
<th>[ ] Yes [X ] No</th>
<th>Liberal Arts</th>
<th>[ ] Yes [X ] No</th>
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<tbody>
<tr>
<td><strong>Course Attribute</strong> (e.g. Writing Intensive, etc.)</td>
<td></td>
<td><strong>Course Attribute</strong> (e.g. Writing Intensive, etc.)</td>
<td></td>
</tr>
<tr>
<td><strong>General Education Component</strong></td>
<td><em>X</em> Not Applicable</td>
<td><strong>General Education Component</strong></td>
<td><em>X</em> Not Applicable</td>
</tr>
<tr>
<td></td>
<td><em>X</em> Required</td>
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<td><em>X</em> Required</td>
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<tr>
<td></td>
<td><em>X</em> Science</td>
<td></td>
<td><em>X</em> Science</td>
</tr>
</tbody>
</table>
Rationale:
To broaden the course’s appeal to students interested in eventually becoming certified in middle and secondary education, i.e., 7-12 New York state certification. At present, BCC’s Department of Education & Academic Literacy is building its middle and secondary cohorts. By not restricting this course to the parameters of “Birth to Grade 6” the course will have a broader reach and therefore serve more students.
EDUCATION 40: Field Work Seminar—3 credit hours
Perquisites: EDU 10; EDU 12 or EDU 26

Course Description: Individual and small group teaching experiences under professional supervision in an accredited school or agency. Periodic meetings with BCC faculty supervisor. Students must demonstrate competencies pertaining to general knowledge expected of those who completed the education sequence; and be able to plan educational activities for culturally diverse populations and children with special needs. Students’ dispositions and instructional strategies will be assessed. The use of technology is introduced as appropriate. Students will make contributions to their academic portfolio.

Student Learning Outcomes:
- Students will be able explain various pedagogical techniques used for effective teaching.
- Students will be able to explain how differentiated instruction helps to meet the needs of all learners.
- Students will be able to identify the key elements of effective classroom management.
- Students will be able to plan activities to support higher-level thinking strategies.
- Students will be able to develop lesson plans aligned with Common Core & NY State Standards.

I will post several education articles and videos on our class Blackboard site throughout the semester. Some of the information is required while others are optional. You are responsible for any required material which will be indicated in the subject line, e.g., “Required.” Please check our Blackboard site often. In addition, you should stay current with the New York Time’s coverage of Education.

For links to NY standards and the Common Core State Standards: www.engageNy.org

For help with grammar and punctuation, please consult: https://owl.english.purdue.edu/owl/section/1/ You may also contact Dr. Redpath at: alice.redpath@bcc.cuny.edu (Colston Hall, Room 407).

You can begin to familiarize yourself with the Library of Congress Teacher’s Page for your primary source demonstrations at: http://www.loc.gov/teachers/ and: http://www.loc.gov/teachers/classroommaterials/

Assignments and Due Dates:
All assignments must be typed, double-spaced, and edited before submission to me. Any work that is not handed in on time will result in a lowered grade of 10 points for each day that it is late.

Student Professional Dispositions: Professional dispositions are the values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities, and affect student learning, motivation, and development as well as the educator’s own professional growth. Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honesty, responsibility, and social justice. Students will demonstrate professional dispositions by exhibiting the following professional behaviors:

Arriving for class on time
Reading the assigned materials before class
Participating in class discussions
ASSIGNMENTS:

1. Participation (10 points)

2. One Reflection Paper of a school observation (10 points)
   The Reflection Paper is a three to four-page assignment. Students should relate their school visits to the material covered in class. **Students are required to use correct forms of English grammar and punctuation in all written assignments.** Please ask me for help or contact Dr. Redpath at: alice.redpath@bcc.cuny.edu (Colston Hall, Room 407) in addition to utilizing this site: https://owl.english.purdue.edu/owl/section/1/

3. Mid-term Quiz (10 points): fill-in-the-blank based on assigned readings

4. One Oral Summary of a school observation (10 points)

5. One formal Lesson Plan based on NYS or Common Core standards (10 points)
   See: www.engageNy.org

6. One in-class teaching demonstration of a Lesson Plan using primary sources (10 points)

7. One Sample Teach (10 points)

8. One Field Observation of you by me (10 points)

9. Final Exam (20 points); short-essay format based on assigned readings
In addition to the above assignments, I will come to your field placement to observe you once during the semester. You are also required to do **thirty-six hours** of school field placement in order to pass this course.

**Course Calendar:**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introductions &amp; Syllabus Overview; Fieldwork; Nadia Lopez at TED</td>
<td>Read “Teach Your Teachers Well” by Susan Engel &amp; answer questions</td>
</tr>
<tr>
<td>Week 2</td>
<td>Teaching Strategies</td>
<td>Read “What Makes a Great Teacher” by Amanda Ripley &amp; answer questions</td>
</tr>
<tr>
<td>Week 3</td>
<td>Teaching Strategies, cont.; John Hunter at TED</td>
<td>Read “Building a Better Teacher” &amp; answer questions</td>
</tr>
<tr>
<td>Week 4</td>
<td>NO CLASS!</td>
<td></td>
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<tr>
<td>Week 5</td>
<td>Introduction &amp; Backward Design</td>
<td>Read Intro &amp; Ch. 1, UbD; Sample Teach #1</td>
</tr>
<tr>
<td>Week 6</td>
<td>Breaking Down Teaching Strategies; Mid-Term Quiz</td>
<td>Sample Teach # 1 cont. Read Ch. 1, “Teach Like a Champion” by Doug Lemov</td>
</tr>
<tr>
<td>Week 7</td>
<td>Teaching with Primary Sources; <strong>Mid-term quiz</strong></td>
<td>Students learn how to incorporate primary sources into their lesson plans</td>
</tr>
<tr>
<td>Week 8</td>
<td>Gaining Clarity on our Goals</td>
<td>Read Ch. 2, UbD, pp. 35-44; Ch. 3, UbD, pp. 56-75</td>
</tr>
<tr>
<td>Week 9</td>
<td>Classroom Questioning</td>
<td>Ch. 8 (10th ed.) pp. 223-228; pp. 232-237</td>
</tr>
<tr>
<td>Week 10</td>
<td>Effective Planning</td>
<td>Ch. 2 “Teach Like a Champion” by Doug Lemov</td>
</tr>
<tr>
<td>Week 11</td>
<td><strong>BREAK!</strong></td>
<td></td>
</tr>
<tr>
<td>Week 12</td>
<td>Video: The Ron Clark Story</td>
<td><a href="https://www.youtube.com/watch?v=xVsld1WIs10">https://www.youtube.com/watch?v=xVsld1WIs10</a> Answer Questions from Ron Clark’s, 55 Rules</td>
</tr>
<tr>
<td>Week 13</td>
<td>Teaching with Primary Sources</td>
<td>TPS Demos</td>
</tr>
<tr>
<td>Week 14</td>
<td>Review for Final, etc.</td>
<td></td>
</tr>
<tr>
<td>Week 15</td>
<td>Final Exam</td>
<td></td>
</tr>
</tbody>
</table>
Suggested Questions to Be Used for Classroom Observations

Guiding Question 1: What are the content frameworks that guide teachers as they prepare instruction? Locate and write two (2) common core standards that your cooperating teacher addressed in the classroom. How did the teacher introduce the standard?

Guiding Question 2: Why is it important for teachers to understand the demographics of their students? What is the ethnicity of the students in your classroom? How many English Language Learners are in your classroom? What is the gender make-up of the student population in your classroom? What percentage of students in your cooperating school receive free and reduced Lunch?

Guiding Question 3: Why should teachers incorporate technology into their instruction? Make a list of the types of technologies and/or technology resources that are available to your cooperating teacher at the cooperating school.

Guiding Question 4: Why is important to teach students how to work well in a group? Design a meaningful activity that would help students develop positive behaviors that would encourage productive group work with students. Describe a strategy that you observed your cooperating teacher use in the classroom to redirect students who were off task.

Guiding Question 5: Why should teachers understand and address the different modalities of the students in their classroom? List 3 strategies that help teachers address different learning styles, i.e., visual, auditory, kinesthetic, multiple.

Guiding Question 6: Why is it important for teachers to understand and incorporate similarities and differences in culture, family structure, and learning styles in their instruction?
Bronx Community College
Department of Chemistry & Chemical Technology

Proposal for two New Courses in
Liberal Arts and Sciences Program Chemistry Option

1. CHM 21 – Introduction to Chemical Processes
2. BIO 34 / CHM 34 - Biofuels and Bioproducts

Laura Broughton Ph.D. (Biology Department)
Soosairaj Therese Ph.D. (Chemistry Department)
I. Rationale:

Energy is a central societal issue, impacting our way of life, economy, national security, environment, and health. The world’s energy consumption is projected to triple in 2100 (based on moderate population and economic growth). Current energy production cannot keep up with our rising energy needs. In 2010, there were about 250 million registered vehicles on U.S. highways and nearly one-third of the total energy consumption is by the transportation sector, which is also a major source of air pollution emitting Greenhouse Gases. Most of these vehicles have engines that use oil-based fuel, such as gasoline or diesel and the price of oil increased about 170% between 2002 and 2012. These growing demands for fossil-based fuels should be addressed to enhance and safeguard energy and environment. So the government is focusing on alternative and sustainable energy and providing funding for research and development of green energies. In 2005, the Renewable Fuel Standard (RFS) mandate was passed to include cellulosic biofuels as an alternative energy. The Military and the Department of Defense are aiming to replace 25% of their energy need from alternative energy sources by 2025.

We were awarded an NSF ATE grant in 2016 mainly to develop courses for students across the disciplines of biomass process engineering, analytical chemistry and scientific entrepreneurship. Chemistry department then partnered with the Biological Science Department developed two new courses CHM 21 and BIO 34 /CHM 34 that encompass the curricular materials necessary to provide our students with the knowledge base and skills needed for a successful career in sustainable chemical manufacturing. The addition of the two new courses as an option to the current offerings of the Liberal Arts & Sciences, Chemistry Option, would expand the degree’s current offerings, and provide the necessary background to either transfer into a Chemistry or Chemical Engineering Degree or pursue a career in green chemical manufacturing. The credit amount for the Degree remains at 60 credits.

II. Courses Proposed:

The two courses are developed based on the need in the current sustainable and green energy market. These two courses will expose our students to high quality science through the lens of industrially relevant chemical engineering and entrepreneurial education by making biofuels. The course content is academically demanding for the community college level and relevant to the needs of an emerging industry.

CHM 21, “Introduction to Chemical Processes” will teach analytical chemistry skills, problem solving skills, and laboratory skills related to chemical processes at the industrial scale. Students will learn these skills by performing common laboratory techniques such as basic reactor set-up, instrument calibration, solution preparation and dilution. This course will also focus on biorefining for the production of fuels and chemicals, specifically industrial methods for cellulosic feedstock pretreatment, QA/QC analysis. It also teaches basic data processing skills, including graphing, error analysis and linear regression analysis.

BIO 34 /CHM 34, “Biofuels and Bioproducts” will be cross listed in both the Biological Sciences and Chemistry Departments. Work load will be shared between both the department faculties and technicians. This course covers the chemistry behind the production of sugars from plants and converting sugar to biofuels and other bioproducts. Students will be introduced to hands-on experience through the laboratory featuring chemical and biological reactors, fermentation, microbial metabolism, and detection of biological products like biofuels.

III. Skill sets developed to meet the industrial needs:

The Industrial Advisory Board comprising members of biofuel and biomanufacturing companies as well as university professors and scientists from National Laboratories were consulted before developing the
curriculum. Listed below are skill sets recommended to incorporate into the new courses to ensure that these courses are relevant to modern industrial demands, analytical instruments and software. The two new courses encompass most of the skill sets both in the lecture and laboratory sessions.

**Technical Skills Summary - NSF ATE IAB 2016**

**Mechanical & Process Engineering:**

- Pumps/drives/valves/piping
- Milling systems
- Oven/dryer
- Heat exchangers/thermocouples
- Sieves/centrifuges
- Evaporator/rotary evaporation/distillation
- Digital control systems
- Develop, follow and optimize a workflow/SOP (including diagrams)
- Quality control of feedstocks and products

**Measurement, Calibration/Instrumentation & Wet Lab Skills:**

- Balances/unit conversion/pipetting
- pH/titration
- NMR/IR/near IR/MS/UV
- Bioreactor/Chemical Reactor
- TLC/GC/HPLC
- Sterile culture techniques
- Media and buffer preparation

**Safety and Risk Management:**

- Signage and nomenclature
- Acid/base spill protocol
- Hazardous waste disposal/chemical hygiene plan/PPE
- Work in chemical safety hood and laminar flow hood
- Work with pressurized gasses

**Data Management:**

- Maintain accurate written and digital lab notebook
- Understand data reporting (graphs, charts, diagrams, tables)
- Create Excel scatter plots with error analyses
- Perform regression analysis
- Demonstrate accurate written communication and presentation skills (technical and non-technical)

**IV. Articulation Agreement:**

1. City Tech. Brooklyn- Showed interest in articulation (Work on progress)
2. York College- Working with the Provost of York College, Work on Progress)
3. Lehman College- Work on progress
V. **Infrastructure:**

Biofuel courses require analytical instruments. Through CUNY 2020 funds, major equipment were purchased to run the laboratory courses. For example, the following equipment has already been purchased or is scheduled to be purchased and placed in the new CUNY 2020 laboratory space on the second floor of Meister Hall: pressure reactors, analytical balances, pH meters for CHM 21 course, bioreactors, centrifuge for cells, -80 °C freezer, laminar flow hoods, HPLC, and autoclave for BIO 34 /CHM 34 course. Trained faculty members and technicians are available both in the Chemistry department and the Biological Sciences Department to operate the instruments. Full time faculty members will teach these courses. A modified version of CHM 21 course was piloted to high school students through the College Now program in the summer of 2017. The lecture and the laboratory components are well received by the students. The same course with little modification in the syllabus will be offered this summer again through the College Now program.

VI. **Job Market:**

The proposed courses will address the job market skills in biomass processing and bio manufacturing to serve biofuel, green chemistry and sustainable waste utilization industries. The Bureau of Labor Statistics (BLS) have information on green jobs from its Green Goods and Services (GGS) survey. According to GGS in 2010, private sector employment in the basic chemical manufacturing industry was 11,970. The basic chemical manufacturing industry includes the manufacture of biofuels. According to the study by Renewable Fuels Association in 2012 that ethanol (bio fuel) production supported 401,600 jobs in 2011. A National Biodiesel Board study found that the production of 1 billion gallons of biodiesel supports 39,027 jobs. The Bureau of Labor Statistics (BLS) predicts steady job growth for chemical technicians (9% by 2022), stating: “Chemical technicians will continue to be in demand in scientific [R&D] and to monitor the quality of chemical products and processes. Greater interest in environmental issues, such as pollution control, clean energy, and sustainability, are expected to increase the demand for chemistry research and development”. The BLS also states that the increase in domestic energy production from sources [such as shale] will further increase the number of chemical manufacturing jobs in the next 10 years. Jobs in these emerging industries require advanced analytical skills and knowledge of nationally standardized quality assurance and quality control (QA/QC) protocols. Further, technicians are increasingly required to perform biomass feedstock analysis and pretreatment, cell culture, chromatography and mass spectrometry. Moreover, biomass pretreatment and analysis skills requirements are growing, as many high-volume chemical syntheses are replacing fossil fuels with sustainable starting materials.

References:

2. “Gasoline and Diesel Fuel Update,” (U.S. Energy Information Administration, 2012), [https://www.eia.gov/petroleum/gasdiesel/](https://www.eia.gov/petroleum/gasdiesel/)  Annual averages were calculated using weekly U.S. regular conventional retail gasoline prices.
5. John M. Urbanchuk, “Contribution of the Ethanol Industry to the Economy of the United States,” (Cardno Entrix, February 2012), [http://ethanolrfa.3cdn.net/c0db7443e48926e95f_j7m6i6zi2.pdf](http://ethanolrfa.3cdn.net/c0db7443e48926e95f_j7m6i6zi2.pdf)
http://biodiesel.org/production/production-statistics
III.8 The following revisions are proposed for the Liberal Arts and Sciences Program

Program: A.S. in Liberal Arts and Sciences

Program Code: 378

Effective: Fall 2018

Proposed Changes: Modification of the Liberal Arts & Sciences A.S. Degree Option in Chemistry.

<table>
<thead>
<tr>
<th>From Liberal Arts &amp; Sciences, Chemistry</th>
<th>To Liberal Arts &amp; Sciences, Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Core</strong></td>
<td><strong>Required Core</strong></td>
</tr>
<tr>
<td>A. English Composition</td>
<td>A. English Composition</td>
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<tr>
<td>B. Mathematical and Quantitative Reasoning</td>
<td>B. Mathematical and Quantitative Reasoning</td>
</tr>
<tr>
<td>- MTH 30¹ Pre-Calculus Mathematics OR</td>
<td>- MTH 30¹ Pre-Calculus Mathematics OR</td>
</tr>
<tr>
<td>- MTH 31 Analytic Geometry and Calculus</td>
<td>- MTH 31 Analytic Geometry and Calculus</td>
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<tr>
<td>C. Life and Physical Sciences</td>
<td>C. Life and Physical Sciences</td>
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<td>- CHM 11¹ General College Chemistry</td>
<td>- CHM 11¹ General College Chemistry</td>
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<td><strong>Flexible Core</strong></td>
<td><strong>Flexible Core</strong></td>
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<td>No more than two courses in any discipline or interdisciplinary field.</td>
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<td>A. World Cultures and Global Issues</td>
<td>A. World Cultures and Global Issues</td>
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<tr>
<td>B. U.S. Experience in Diversity</td>
<td>B. U.S. Experience in Diversity</td>
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<tr>
<td>C. Creative Expression</td>
<td>C. Creative Expression</td>
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<tr>
<td>D. Individual and Society</td>
<td>D. Individual and Society</td>
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<tr>
<td>E. Scientific World</td>
<td>E. Scientific World</td>
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<tr>
<td>- CHM 12¹ General College Chemistry II</td>
<td>- CHM 12¹ General College Chemistry II</td>
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<td>Restricted Elective Select ONE course from Area A-E²</td>
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<td>- Free Electives</td>
<td>- Free Electives</td>
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<tr>
<td>- MTH 31 Analytic Geometry and Calculus I</td>
<td>- MTH 31 Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>- MTH 32 Analytic Geometry and Calculus II</td>
<td>- MTH 32 Analytic Geometry and Calculus II</td>
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<tr>
<td>Chemistry Option Requirements</td>
<td>Chemistry Option Requirements</td>
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<td>- CHM 31 Organic Chemistry I</td>
<td>- CHM 31 Organic Chemistry I</td>
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<tr>
<td>- CHM 32 Organic Chemistry II</td>
<td>- CHM 32 Organic Chemistry II</td>
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<td>- Choose two of three courses below:</td>
<td>- Choose two of five courses below:</td>
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### Curriculum Committee Report to the College Senate

*May 3, 2018*

<table>
<thead>
<tr>
<th>Required Core Area A</th>
<th>Total credits: 27</th>
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<tbody>
<tr>
<td>CHM 33 Quantitative Analysis AND/OR</td>
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<tr>
<td>BIO 11 Introductory General Biology I AND/OR</td>
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<tr>
<td>PHY 11 Physics I</td>
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<td><strong>Subtotal:</strong> 27</td>
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<tr>
<td><strong>Total credits:</strong> 60</td>
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**Rationale:** BCC was awarded a National Science Foundation ATE (Advanced Technological Education) grant (#1601635 – Chemical and Bioenergy Technology for Sustainability) which was to be used to develop materials that will provide our students with the skills necessary for a career in sustainable chemical manufacturing. Based on the input from the grant’s Industrial Advisory Board, the Chemistry Department partnered with the Biological Sciences Department developed two new courses: CHM 21 and BIO 34 /CHM 34. The addition of the two new courses to the current Chemistry Option would expand the degree’s current offerings and provide the necessary background to either transfer into a Chemistry or Chemical Engineering Degree program or pursue a career in green chemical manufacturing.
Section AIV: New Courses

AIV.1

<table>
<thead>
<tr>
<th>CUNYfirst Course ID</th>
<th>CHM 21</th>
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<tbody>
<tr>
<td>Department(s)</td>
<td>Chemistry &amp; Chemical Technology</td>
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<tr>
<td>Career</td>
<td>[ x] Undergraduate [ ] Graduate</td>
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<td>Academic Level</td>
<td>[ x] Regular [ ] Compensatory [ ] Developmental [ ] Remedial</td>
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<tr>
<td>Subject Area</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Course Prefix &amp; Number</td>
<td>CHM 21</td>
</tr>
<tr>
<td>Course Title</td>
<td>Introduction to Chemical Processes</td>
</tr>
<tr>
<td>Catalogue Description</td>
<td>This course will teach students how to solve problems and perform experiments related to chemical processes at the industrial scale. Students will learn how to measure common physical properties and how to analyze their data using Excel. Basic data processing skills will include graphing, error analysis and linear regression analysis. Students will learn these skills by performing common laboratory techniques such as basic reactor set-up, instrument calibration, solution preparation and dilution. Though most of the chemicals used in lab are non-toxic, a large emphasis will be placed on proper lab safety techniques. Students will also learn the basics of chemical processes calculations, including how to write and solve heat and mass balance problems. Lastly, students will solve these problems in the context of biotechnology and renewable energy.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>MTH 6, CHM 11</td>
</tr>
<tr>
<td>Co-Requisites</td>
<td>4</td>
</tr>
<tr>
<td>Credits</td>
<td>4</td>
</tr>
<tr>
<td>Contact Hours</td>
<td>6 (2 hr lecture, 1 hr recitation, 3 hr lab)</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>[ x] Yes [ ] No</td>
</tr>
<tr>
<td>Course Attribute (e.g. Writing Intensive, Honors, etc)</td>
<td></td>
</tr>
</tbody>
</table>
**Rationale:** The course will cover the basic principles involved in chemical processing. This course will also serve as a primer for students who are interested in transferring into Chemical Engineering programs at four-year colleges and for students aspiring to a career in the industrial chemical, biomass conversion, green chemistry, and energy technology fields.
Bronx Community College
Department of Chemistry and Chemical Technology

Proposal New Course- CHM 21– Introduction to Chemical Processes

Syllabus

Instructor:
- Email:
- Phone:
- Office Hours:

Course Description: 4 credits/ 2hrs Lecture/ 1 hr recitation /3 hrs lab

This course will teach students how to solve problems and perform experiments related to chemical processes at the industrial scale. Students will learn how to measure common physical properties and how to analyze their data using Excel. Basic data processing skills will include graphing, error analysis and linear regression analysis. Students will learn these skills by performing common laboratory techniques such as basic reactor set-up, instrument calibration, solution preparation and dilution. Though most of the chemicals used in lab are non-toxic, a large emphasis will be placed on proper lab safety techniques. Students will also learn the basics of chemical processes calculations, including how to write and solve heat and mass balance problems. Lastly, students will solve these problems in the context of biotechnology and renewable energy.

Prerequisite: MTH 6, and CHM 11


Extra Reading:

2. NREL’s Top Value Added Chemicals from Biomass, Volume I: Results of Screening for Potential Candidates from Sugars and Synthesis Gas, US Department of Energy, August 2004 (p. 8-23 in pdf numbers)
Student Learning Outcome:

At the end of the semester, the students will

- Able to use Microsoft Excel to solve engineering problems related to engineering and chemistry
- Learn about material balances, chemical reactor, and heat transfer
- Understand how to use linear regression models to predict outcomes
- Identify physical properties and identify common units of measurement for each property
- Understand the importance of chemistry and chemical engineering in society

Course Grading:

- Quizzes 35%
- Laboratory Experiments 25%
- Homework & Participation 5%
- Final Exam 35%

Total 100%

General Policy of the class:

1. Attendance is important / Absence and late coming will jeopardize your grade
2. No makeup test or lab will be given unless for valid reasons and proper documentation
3. Home work is due the next meeting after the chapter is finished. Home work will be collected before each lecture class.
4. Your class participation includes asking questions, solving problems on the board if asked, and involving in discussions.
5. Using cell phones in class is prohibited.

Your performance in this class is directly related to your attendance and participation in lecture and labs. As an indication of how you are performing in this course section, you will receive a performance evaluation after the 4th week of the semester and again at the midterm period.

Academic Integrity:

Academic integrity is an extremely important issue. Students who copy other people's lab work, homework, assignments, quizzes, and examinations will not be given any credit. Refer to the BCC College Academic Integrity Policy in the College Catalog for further details on cheating and plagiarism.
<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topic</th>
<th>Lecture Reading</th>
<th>Lab Topic</th>
<th>Lab Reading</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to Chemical Engineering</td>
<td>pp. 1-11</td>
<td>Introduction to Lab and Safety</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>An introduction to measuring physical properties (including instrumentation)</td>
<td>pp. 43-46</td>
<td>Measuring Volume of a Chemical Reactor</td>
<td>pp. 35-39 (working in teams)</td>
</tr>
<tr>
<td>3</td>
<td>Excel and Data plotting and doing calibrations for physical property measurements</td>
<td>Larsen chapter 3</td>
<td>Setting up valving and plumbing on a chemical reactor</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Excel Tools: Linear Regression</td>
<td>pp. 46-51</td>
<td>Measuring Flow Rates and Changes in Pressure from the Reactor</td>
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<tr>
<td>5</td>
<td>Exam 1</td>
<td></td>
<td>Calibrations using Excel</td>
<td>pp. 86-95</td>
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<tr>
<td>6</td>
<td>Introduction to Material Balances</td>
<td>Chapter 5, pp. 61-79</td>
<td>Beers Law with Excel Analysis</td>
<td>pp. 96-98</td>
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<tr>
<td>7</td>
<td>Material Balances written in molar quantities</td>
<td>pp. 61-67</td>
<td>Setting up a flow reactor, and measuring height changes with time</td>
<td>pp. 101-104</td>
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<tr>
<td>8</td>
<td>Material Balances with Reactions</td>
<td>pp. 68-77</td>
<td>Hydrostatic pressure</td>
<td>pp. 101-104 (continued)</td>
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<tr>
<td>9</td>
<td>Introduction to units of energy and power</td>
<td>pp. 116-120</td>
<td>Review</td>
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<tr>
<td>10</td>
<td>Exam 2</td>
<td></td>
<td>Acid-Neutralization Reaction Part I</td>
<td>pp. 78-79</td>
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<tr>
<td>11</td>
<td>Chemical Thermodynamics</td>
<td>Chapter 10; pp. 163-169</td>
<td>Acid-Neutralization Reaction Part II</td>
<td>pp. 78-79 (continued)</td>
</tr>
<tr>
<td>12</td>
<td>Energy balance for closed systems</td>
<td>Chapter 10; pp. 163-169</td>
<td>BioEnergy Lab Conservation of Energy or Pressurized Reactor Lab 1 – Safety &amp; Intro to Reactor</td>
<td></td>
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</tr>
<tr>
<td>14</td>
<td>Introduction to Biotechnology – Non-Petroleum Derived Commodity Chemicals</td>
<td>NREL’s Top Value Added Chemicals from Biomass (p. 8-23 in pdf numbers)</td>
<td>Final Exam Review</td>
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<tr>
<td>15</td>
<td>Final Exam</td>
<td></td>
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<td></td>
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</table>
### Section AIV: New Courses

#### AIV.1

<table>
<thead>
<tr>
<th><strong>CUNYfirst Course ID</strong></th>
<th><strong>Department(s)</strong>: Biological Sciences, Chemistry and Chemical Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Career</strong></td>
<td>[x] Undergraduate [ ] Graduate</td>
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<tr>
<td><strong>Academic Level</strong></td>
<td>[x] Regular [ ] Compensatory [ ] Developmental [ ] Remedial</td>
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<td><strong>Subject Area</strong></td>
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</tr>
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<td><strong>Course Prefix &amp; Number</strong></td>
<td>BIO 34 / CHM 34</td>
</tr>
<tr>
<td><strong>Course Title</strong></td>
<td>Biofuels and Bioproducts</td>
</tr>
<tr>
<td><strong>Catalogue Description</strong></td>
<td>This course covers the chemistry behind the production of sugars from plants, and the biology of converting these sugars into commodity molecules. Specific attention will be paid to biosynthetic pathways, plant cell wall architecture, microbial metabolism, biofuels, and valorization of by-product streams. A hands-on laboratory component for the course will introduce students to chemical and biological reactors to teach skill sets required for these transformations via microbial cell culture and modern analytical chemistry methods. Applications of biofuels and bioproducts will be examined within the context of their commercial success and viability.</td>
</tr>
<tr>
<td><strong>Prerequisites</strong></td>
<td>CHM 31</td>
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<tr>
<td><strong>Co-Requisites</strong></td>
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<td><strong>Credits</strong></td>
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<td><strong>Contact Hours</strong></td>
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</table>

Effective Term | FALL 2018

**Rationale:** This course will expand the range of topics in the revised Liberal Arts & Sciences, Chemistry Option AS Degree. Students will gain the understanding and skills necessary to operate bioreactors to produce chemical products using biological organisms. Students attending this course should gain insight into how a formal training in chemistry and biology can be leveraged into a scientific career and/or a career focused on sustainable chemical manufacturing. This course is being offered by both the Chemistry Department and the Department of Biological Sciences as it includes the following topics: biochemistry, metabolism, biohazard safety, sterile technique, culture techniques, and cell structure, function, and metabolism.
BIO 34 / CHM 34: Biofuels and Bioproducts

Instructor: TBD
Office Hours: TBD
Office Location: TBD
Course Meeting Times: TBD
Lecture Location: TBD
Lab Location: TBD

Course Description: 4 credits/ 2 lecture hours/ 1 hr recitation/ 3 lab hours

This course covers the chemistry behind the production of sugars from plants, and the biology of converting these sugars into commodity molecules. Specific attention will be paid to biosynthetic pathways, plant cell wall architecture, microbial metabolism, biofuels, and valorization of by-product streams. A hands-on laboratory component for the course will introduce students to chemical and biological reactors to teach skill sets required for these transformations via microbial cell culture and modern analytical chemistry methods. Applications of biofuels and bioproducts will be examined within the context of their commercial success and viability.

Prerequisite: CHM 31

Course Objectives:

1. Students will develop a deeper understanding of the connections between chemistry and biology with a unifying theme of bio-based chemical production.
2. Emphasis of this course is placed on the understanding of small molecule biosynthesis and hands-on, technical skills required to operate a chemical reactor and a bio-reactor. Analysis of products will be performed by modern chromatographic methods.
3. Additional emphasis is places on the societal and economic value of bio-based fuel and non-petroleum derived chemical manufacturing.
4. Students attending this course should gain insight into how a formal training in chemistry and biology can be leveraged into a scientific career and/or a career focused on sustainable chemical manufacturing and business.

Course Format:

Lectures = Lectures and discussion following reading assignments from the previous week.
Lab = Instruction/demonstration and Experiment

Course Textbooks:

2. IAB = Industrialization of Biology: A Roadmap to Accelerate the Advanced Manufacturing of Chemicals (National Academies of Science, 2015).

*NOTE* Page numbers in Course Schedule below for MNP and IAB refer to the page numbers on the page of the Book’s PDF, not the page numbers in Adobe Reader. Openstax Biology readings are listed by “chapter.section” rather than page numbers.

**Course Schedule:**

*All Lecture Notes and Reading Assignments will be available through the course Blackboard site. Please complete the Reading Assignment and review your Lecture Notes before class.*

**OVERVIEW OF TOPICS**

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topic</th>
<th>Lecture Reading</th>
<th>Lab Topic</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1    | Primary vs. Secondary Metabolism  
Building Blocks of Biomolecules | OpenStax Biology Metabolism Chapter 6 | Safety, Centrifuges, and Autoclaves |  |
| 2    | Reactions in Bio-Organic Chemistry Part I  
(nucleophilic substitution, electrophilic addition, Aldol, Claisen and Mannich Reactions, Wagner-Meerwein Rearrangements) | MNP 11-18 | Preparing Calibration Curves for GC-MS and HPLC using standards that will be used in labs (sugars, ethanol, terpenes, etc.) | Homework due |
| 3    | Reactions in Bio-Organic Chemistry Part II  
(amino acids, decarboxylation, phenolic coupling, glycosylations, halogenations) | MNP 20-22, 28-31 | Soxlet Extraction of Tall Oils from Pine and GC-MS Analysis | Homework due |
| 4    | Biosynthetic Pathways  
(Fatty Acid, Terpene, Shikimate, Alkaloid) | Selected Sections from MNP | Introduction to BioReactors – Software, Probes, and Safety Considerations | Lab Report 1 due (Soxlet Extraction) |
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading/Resource</th>
<th>Homework/Lab Report Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Biosynthetic Pathway Elucidation</td>
<td>MNP 34-38</td>
<td>Homework due</td>
</tr>
<tr>
<td>6</td>
<td>MID TERM EXAM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Biological Organization, Cells, Biotechnology</td>
<td>Openstax Biology Chapters 1.2 &amp; 4</td>
<td>Homework due</td>
</tr>
<tr>
<td>8</td>
<td>Introduction to Industrial Biotechnology</td>
<td>IAB 1-25, 35-47</td>
<td>Lab Report 2 due (Ethanol)</td>
</tr>
<tr>
<td>9</td>
<td>Enzymes, Biological Thermodynamics and Redox Reactions</td>
<td>MNP 24-27, <em>Enzymes for Chemical Synthesis</em>, Wong, CH 2001; <em>Biosynthesis of Amino Acids</em> Miles, B. 2003</td>
<td>Homework due</td>
</tr>
<tr>
<td>10</td>
<td>Plant Cell Walls</td>
<td>Plant Cell Wall Deconstruction Gilbert, HJ. Plant Physiol. 153, 210, 444-455</td>
<td>Homework due</td>
</tr>
<tr>
<td>12</td>
<td>Feedstocks and Transformations in Industrial Biotechnology</td>
<td>IAB 67-79</td>
<td>Homework due</td>
</tr>
<tr>
<td>13</td>
<td>Designing Microbes for Biotechnology</td>
<td>IAB 80-95</td>
<td>Homework due</td>
</tr>
<tr>
<td>14</td>
<td>The Business and Ethics of Biology</td>
<td>IAB 101-109</td>
<td>Lab Report 4 due (isopentenol) Final Projects due</td>
</tr>
<tr>
<td>15</td>
<td>Final Exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Grading Policy:
Exams (2) 30%
Lab Reports (3 completed) 25%
Homework Assignments 15%
Participation and Lab Documentation 10%
Final Project Presentation 20%
Total 100%

Assessment:
“Mindful” Participation and Laboratory Documentation:
The course Participation assessment will consist of in-class discussions where students are expected to answer questions based on the assigned reading. Excessive tardiness, absence or lack of engagement will not be tolerated. During laboratory experiments a technique or calculation (e.g. calibration curves, dilutions, mass balance calculations) will be demonstrated once or twice and afterwards students will be expected to be able to demonstrate the technique in variety of situations. Students will be expected to record all laboratory observations, data, calculations, and techniques in a carbonless scientific laboratory notebook. Proper documentation techniques will be taught as part of this class.

Exams and Description of Fermi-Type Questions:
Exams will consist of chemistry problems, short answers and Fermi-type calculations applied to the themes of biofuel and bioproducts. A Fermi problem is one often used in engineering education whereby dimensional analysis and approximation are used to solve the problem to a reasonable degree of accuracy. These “back of the envelope” type calculations are used routinely and often performed with little or no data. They are extremely useful in laboratory settings where the scientist is often required to use very small amounts of substances (e.g. 100 uL of liquid) containing many, many things (e.g. 3 x 10^{17} molecules). As such, Fermi estimates can be used to inform where to invest (and save) time during the course of an experiment.

Lab Reports:
It is likely that not all of the course’s laboratory experiments (described in the Course Schedule) will be completed, and is also likely that several labs will last more than one week. A total of 3 Lab Reports will be due by the end of the semester. An example of a lab report format will be available through the course Blackboard site.

Description of Final Project:
During the semester you will learn about the chemistry, biology and introductory engineering of several biofuel and bioproduct platforms. In particular we will focus on the sugar platform (e.g. fermentation of glucose), thermochemical and enzymatic reactions, and spend a significant time discussing feedstocks. Your final project will fuse these ideas to Fermi-estimated capital and operational costs for a biomanufacturing process. You will work in two teams of 3-4 and designate
roles (such as Quality Control Specialist, Chief Technology Officer, Chief Financial Officer, Marketing Manager, etc.) to each group member.

At the beginning of the semester, think how you will form and brand a startup company that will:

- Using a comprehensive literature search, select a feedstock/microbe/process that could be used to manufacture a consumer product. Determine if you will produce a commodity or specialty chemical. Design a process to manufacture, purify, analyze and package your product. You must be cognizant of potential pitfalls such as:
  - What is the rate, titer and yield of your product?
  - What are the separation steps and costs? Are there valuable by-products?
  - What are the feedstock and product transport costs?
  - How do you perform QC on feedstock and product?
  - What capital equipment will you need in your manufacturing facility?
  - What are the estimated associated energy and waste disposal costs to make 10 kg of your product? Can you benefit from an “economy of scale”?
  - Who are your customers?
- To answer the last question, conduct a series of short interviews with potential customers to see if there is a market for your product. Present the combined results of your interviews using Steve Blank’s Business Model Canvas format. If necessary, make adjustments to your value proposition using the results of your Customer Discovery process. Present a Customer Archetype for your product.

Your final project will be a 3-5 min Promotional You-Tube Video for your team, process and product’s brand. You should not spend much time making animated graphics, rather you should address the above items using diagrams/schematics/chemical structures and images from the lab and scripted testimonials (from yourself and your potential customer archetypes).

Here are is an example of a New York based company that produces renewable chemical starting materials from plants: [https://www.youtube.com/watch?v=MdDgNYyS1h0](https://www.youtube.com/watch?v=MdDgNYyS1h0)
See responses below to questions posed by members of the Curriculum Committee to the Department on 4/17/18 regarding the proposed change in NMT 79, Phlebotomy in Nuclear Medicine Technology Program. These responses are provided for the Curriculum Committee meeting on 4/24/18.

1. Is a blood draw is same thing as a patient stick?
   Ans. Yes, a blood draw is the same thing as a patient stick.

2. Is there any arrangement with other hospital for students to complete required number of blood draws?
   Ans. Students who wish to pursue their phlebotomy certification are provided with materials for outside phlebotomy programs. Upon request, the clinical instructors provide students with information for multiple certification programs including; Manhattan College, City College, and other private institutions.

3. Will this change effect the program accreditation?
   Ans. This change will not have any effect on the program accreditation.

4. What can be done in terms of insurance agreement?
   Ans. Medical Office Assistants are not within the insurance agreement at Montefiore hospital to conduct patient blood draws. Currently, the students practice these sticks on a mannequin. A contract agreement would have to be arranged with the volunteer office at Montefiore hospital allowing MOA students to conduct these blood draws, while satisfying the requirements for the exam.

5. What are the qualifications for this course?
   Ans. Qualifications to sit for the phlebotomy exam include a designated number of documented blood draws as well as didactic hours accompanied by a senior phlebotomist. The minimum amount of blood draws required is 50 sticks and 10 capillary punctures as well as 120 didactic hours with a senior phlebotomist. Programs in which a student gains certification typically are held within a six-month period.
6. What steps will be taken if it effects accreditation?
   Ans. This change in the course description will not affect accreditation. Nuclear Medicine and Medical Office students are well within their degree guidelines with this introductory phlebotomy course.
AV: 1 Changes to be offered in the Department of Engineering, Physics and Technology

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Departments</td>
<td>Engineering, Physics and Technology</td>
</tr>
<tr>
<td>Course</td>
<td>NMT 79 Phlebotomy</td>
</tr>
<tr>
<td>Credits</td>
<td>2</td>
</tr>
<tr>
<td>Hours</td>
<td>3 (1 lecture/2 lab)</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>BIO 24 and permission of the NMT Program Director, or BIO 21 and BIO 22 and permission of Medical Office Assistant Curriculum Coordinator</td>
</tr>
<tr>
<td>Co-requisite</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Introduction to phlebotomy. Topics include: phlebotomy principles, anatomy and physiology of the circulatory system, safety, equipment and techniques. Students completing this course qualify for the certification exam in phlebotomy.</td>
</tr>
<tr>
<td>Requirement Designation</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>[ ] Yes [X ] No</td>
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<tr>
<td>Course Attribute (e.g. Writing Intensive, etc)</td>
<td></td>
</tr>
<tr>
<td>General Education Component</td>
<td><em>X</em> Not Applicable</td>
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<tr>
<td><em>Required</em></td>
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</tr>
<tr>
<td>___ English Composition</td>
<td>___ English Composition</td>
</tr>
<tr>
<td>___ Mathematics</td>
<td>___ Mathematics</td>
</tr>
<tr>
<td>___ Science</td>
<td>___ Science</td>
</tr>
<tr>
<td><em>Flexible</em></td>
<td>World Cultures</td>
</tr>
<tr>
<td>___ US Experience in its Diversity</td>
<td>___ US Experience in its Diversity</td>
</tr>
<tr>
<td>___ Creative Expression</td>
<td>___ Creative Expression</td>
</tr>
<tr>
<td>___ Individual and Society</td>
<td>___ Individual and Society</td>
</tr>
<tr>
<td>___ Scientific World</td>
<td>___ Scientific World</td>
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<td></td>
<td></td>
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<tr>
<td>Effective Fall 2018</td>
<td></td>
</tr>
</tbody>
</table>

**Rationale:** Students taking the NMT 79 course obtain introductory phlebotomy training and patient safety information. After completion of this course, students will have a general understanding of the basics of phlebotomy as well as training in universal precautions. In order to sit for the Phlebotomy Certification exam, students must have clinical experience and blood draws documented. Montefiore Hospital does not have an insurance agreement with Bronx Community College allowing students to perform the required amount of designated patient sticks. Instructors provide students information regarding outside programs in which they can obtain their clinical experience if they wish to sit for the certification exam.
### Section AIV: New Courses

**AIV.1 Experimental**

<table>
<thead>
<tr>
<th>CUNYfirst Course ID</th>
<th>CHM 16</th>
</tr>
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<tbody>
<tr>
<td>Department(s)</td>
<td>Chemistry and Chemical Technology</td>
</tr>
<tr>
<td>Career</td>
<td>[X] Undergraduate [ ] Graduate</td>
</tr>
<tr>
<td>Academic Level</td>
<td>[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial</td>
</tr>
<tr>
<td>Subject Area</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Course Prefix &amp; Number</td>
<td>CHM 16</td>
</tr>
<tr>
<td>Course Title</td>
<td>Chemistry: A Forensic Perspective</td>
</tr>
<tr>
<td>Catalogue Description</td>
<td>This is a general chemistry course and has been designed for a student in a non-science major. The course will provide an introduction to general chemistry with connections to forensic science. In the laboratory, students will learn sample preparation techniques and chemical analysis related to the study of crime scene evidence such as identification and analysis of hair, fibers, organic accelerants and inorganic poisons, drug chemistry, fingerprints, and chemistry of explosives. Laboratory experiments emphasize physical and chemical identification of substances, bench and onsite wet chemical techniques, microscopy, and applications of spectroscopy.</td>
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<tr>
<td>Prerequisites</td>
<td>RDL 2 and ENG 2, if required</td>
</tr>
<tr>
<td>Co-Requisites</td>
<td>MTH 5</td>
</tr>
<tr>
<td>Credits</td>
<td>3 credits; 2 lec; 2 lab</td>
</tr>
<tr>
<td>Contact Hours</td>
<td>4</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>[ X ] Yes [ ] No</td>
</tr>
<tr>
<td>Course Attribute (e.g. Writing Intensive, Honors, etc)</td>
<td></td>
</tr>
<tr>
<td>Course Applicability</td>
<td>___ Major</td>
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<tr>
<td></td>
<td>___ Gen Ed Required</td>
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<td></td>
<td>___ English Composition</td>
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<td></td>
<td>___ Mathematics</td>
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<td></td>
<td>___ Science</td>
</tr>
<tr>
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<td>X Gen Ed - Flexible</td>
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<td>World Cultures</td>
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<td>US Experience in its Diversity</td>
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<td>Creative Expression</td>
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<td></td>
<td>Individual and Society</td>
</tr>
<tr>
<td></td>
<td>X Scientific World</td>
</tr>
<tr>
<td>Effective Term</td>
<td>Fall 2018</td>
</tr>
</tbody>
</table>

**Rationale:**
The Department of Chemistry and Chemical Technology, in conjunction with the Office for Academic Affairs (under a Title V Grant), has established a state-of-the-art crime lab with new instruments and equipment. This course will leverage these instruments and equipment to expose any interested BCC student to the science behind crime investigations. The course will be of particular interest to and value for BCC Criminal Justice majors, as it will help prepare them for future careers in law enforcement.
**Course Syllabus**

**Section:**

Dr. John F. Molina, Instructor

e-mail address: [john.molina01@bcc.cuny.edu](mailto:john.molina01@bcc.cuny.edu)

**Office Hours:**

**Location:** Room 313A, Nichols Hall (lecture and recitation)
Room 313A, Nichols Hall (laboratory session)

**Text:** *Investigating Chemistry*, Third Edition, Matthew Johll, W H Freeman, Publisher 2012


**Course Description:**

This is a general chemistry course and has been designed for a student in a non-science major. The course will provide an introduction to general chemistry with connections to forensic science. In the laboratory, students will learn sample preparation techniques and chemical analysis related to the study of crime scene evidence such as identification and analysis of hair, fibers, organic accelerants and inorganic poisons, drug chemistry, fingerprints, and chemistry of explosives. Laboratory experiments emphasize physical and chemical identification of substances, bench and onsite wet chemical techniques, microscopy, and applications of spectroscopy.

**Prerequisites:** RDL 2 and ENG 2, if required

**Co requisition:** MTH 5

<table>
<thead>
<tr>
<th>WEEK NO. (DATE)</th>
<th>CHAPTER NO.</th>
<th>TOPIC</th>
<th>HOMEWORK ASSIGNMENT</th>
<th>UNIT QUIZ DATE</th>
</tr>
</thead>
</table>
| 1              | 1           | **Introduction to Forensic Chemistry**  
Case Study: Planted Evidence
Evidence Analysis: Thin-Layer Chromatography  
Case Study Finale: Planted Evidence | 2,3,7,10,16,20,24,28,30,32,36,37 |                     |
| 2              | 2           | **Evidence Collection and Preservation**  
Case Study: Grave Evidence
Case Study Finale: Grave Evidence | 2,4,6,14,24,28,32,36,38,40,42,44,46,48,52,54,64,68 | 1 |
| 3              | 3           | **Atomic Clues**  
Case Study: The Isotope Itinerary
Evidence Analysis: Scanning Electron Microscopy  
Case Study Finale: The Isotope Itinerary | 6,8,12,16,20,22,28,30,32,34,40,44,50,56,58,62,66,70,75,76 | 2 |
| 4              | 4           | **Chemical Evidence**  
Case Study: Mind Games Evidence Analysis: Spectrophotometry  
Case Study Finale: Mind Games | 4,10,14,18,22,26,30,32 | 3 |
<table>
<thead>
<tr>
<th>Page</th>
<th>Topic</th>
<th>Case Study</th>
<th>Evidence Analysis</th>
<th>Case Study Finale</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Chemistry of Bonding: Structure and Function of Drug Molecules</td>
<td>Case Study: No Motive, No Opportunity</td>
<td>Evidence Analysis: Immunoassay Methods</td>
<td>Case Study Finale: No Motive, No Opportunity</td>
</tr>
<tr>
<td>6</td>
<td>Properties of Solutions I: Aqueous Solutions</td>
<td>Case Study: An Aqueous Apocalypse</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Properties of Solutions II: Intermolecular Forces and Colligative Properties</td>
<td>Case Study: Something for the Pain</td>
<td>Evidence Analysis: HPLC</td>
<td>Case Study Finale: Something for the Pain</td>
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<tr>
<td>8</td>
<td>Drug Chemistry</td>
<td>Case Study: Administering Murder</td>
<td>Evidence Analysis: Infrared Spectroscopy</td>
<td>Case Study Finale: Administering Murder</td>
</tr>
<tr>
<td>9</td>
<td>Chemistry of Fire and Heat</td>
<td>Case Study: “False and Unreliable”</td>
<td>Evidence Analysis: Gas Chromatography</td>
<td>Case Study Finale: “False and Unreliable”</td>
</tr>
<tr>
<td>10</td>
<td>Chemistry of Explosions</td>
<td>Case Study: Tracing Explosives</td>
<td>Evidence Analysis: Mass Spectroscopy</td>
<td>Case Study Finale: Tracing Explosives</td>
</tr>
<tr>
<td>11</td>
<td>Applications of Chemical Kinetics Estimating the Time of Death</td>
<td>Case Study: The Casey Anthony Trial</td>
<td></td>
<td>Case Study Finale: The Casey Anthony Trial</td>
</tr>
<tr>
<td>12</td>
<td>The Nuclear Age: Energy, Medicine, Weapons, and Terrorism</td>
<td>Case Study: Elimination by Irradiation</td>
<td>Evidence Analysis: Neutron Activation Analysis</td>
<td>Case Study Finale: Elimination by Irradiation</td>
</tr>
<tr>
<td>14</td>
<td>REVIEW - FINAL EXAM</td>
<td></td>
<td></td>
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</tbody>
</table>
Curricula for which the course is required/recommended:

This course is recommended for non-science majors requiring a lab science elective and is specifically recommended to students in the Criminal Justice Degree Program.

Attendance

Attendance will be taken for recitation, lecture and laboratory classes. Your performance in this course is directly related to your attendance and class participation in these classes.

Missed Work

Missing a laboratory session will result in a zero for that lab. There are no make-up labs. Excused absences are at the discretion of the instructor under the current attendance guidelines. Permission to make up tests or work missed due to student absence is at the discretion of the instructor.

Pathways Student Learning Outcomes (SLO):

This course will integrate critical thinking, a powerful tool that has been emphasized in Higher Education over the last ten years. One main purpose is to engage students and transform them from passive into active learners. Students will engage in class discussions, and present solutions to problems on the blackboard.

At the end of this course, and in accordance with CUNY Pathways Flexible Core Student Learning Outcomes, students should be able to:

- Obtain, interpret, and assess information from chemistry and forensic reference handbooks, scientific journals, and internet websites to formulate a story of what has occurred at a crime scene. Students will be able to use chemical techniques including chemical kinetics, equilibria, thermodynamics and electrochemistry to interconnecting real world conditions to scientific relationships, especially in forensic chemistry. Students will be evaluated on the contents of laboratory reports, and quiz scores.

- Evaluate data, identify interrelationships of variables, analytically evaluate data collected, and solve problems related to forensic chemistry. Critical evaluation of case studies presented are evaluated through homework problems and quizzes.

- Support the conclusions resulting from a crime scene analysis in the form of a well-written laboratory report.

- Identify chemical and physical change, and the importance of proper classification. Become aware of changes in substances, as chemical or physical, which will enhance their observational awareness in a crime scene experience. This will be evaluated through quizzes.
• Apply solution chemistry, gas law concepts, kinetics, and redox chemistry to explosives and will employ Mass Spectrometry to characterize evidence. Evaluation will be based on a lab report.

• Evaluate the ethical nature of questionable practices associated with polygraph testing. The measure of student performance will be accomplished through active lab polygraph analysis.

**Grading**

Final grading is a grading combination of lecture, laboratory and homework assignments.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>35%</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>25%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
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</table>

Note: in order to successfully complete this course, a passing grade in lecture and laboratory must be achieved. In addition, all other components of the course must be fulfilled including homework and any writing assignments.

**CHM 16 - Introductory Chemistry- A Forensic Science Perspective**

**Laboratory Schedule**

<table>
<thead>
<tr>
<th>Week No.</th>
<th>Lab No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Measurements 2-week lab</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>Physical Properties- Identification of Evidences</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Ink analysis- TLC</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>Hair and Fiber Analysis- Optical Microscopy- 2 week lab</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>Fingerprint Identification Techniques</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>Soil Analysis</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>Identification of Organic Compounds-Structure Analysis by IR</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>UV/VIS- Analysis of Lead- A Poison- 2 week lab</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>10</td>
<td>Identification of paint chips</td>
</tr>
<tr>
<td>13</td>
<td>11</td>
<td>Explosives lab</td>
</tr>
<tr>
<td>14</td>
<td>12</td>
<td>Wood Identification</td>
</tr>
</tbody>
</table>
Instructions: All courses submitted for the Common Core must be liberal arts courses. Courses may be submitted for only one area of the Common Core. All courses must be 3 credits/3 contact hours unless the college is seeking a waiver for another type of Math or Science course that meets major requirements. Submission of this form to the Course Review Committee is unrelated to college governance procedures for course approvals.

<table>
<thead>
<tr>
<th>College</th>
<th>Bronx Community College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>CHM 16</td>
</tr>
<tr>
<td>Course Title</td>
<td>Chemistry: A Forensic Perspective</td>
</tr>
<tr>
<td>Department(s)</td>
<td>Chemistry and Chemical Technology</td>
</tr>
<tr>
<td>Discipline</td>
<td>Science</td>
</tr>
<tr>
<td>Subject Area</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Credits</td>
<td>3</td>
</tr>
<tr>
<td>Contact Hours</td>
<td>4</td>
</tr>
<tr>
<td>Pre-requisites/RDL</td>
<td>RDL 2 and ENG 2, if required.</td>
</tr>
<tr>
<td>Co-requisites</td>
<td>MTH 5</td>
</tr>
<tr>
<td>Catalogue Description</td>
<td>This is a general chemistry course and has been designed for a student in a non-science major. The course will provide an introduction to general chemistry with connections to forensic science. In the laboratory, students will learn sample preparation techniques and chemical analysis related to the study of crime scene evidence such as identification and analysis of hair, fibers, organic accelerants and inorganic poisons, drug chemistry, fingerprints, and chemistry of explosives. Laboratory experiments emphasize physical and chemical identification of substances, bench and onsite wet chemical techniques, microscopy, and applications of spectroscopy.</td>
</tr>
<tr>
<td>Sample Syllabus</td>
<td>Attached</td>
</tr>
</tbody>
</table>

**Waivers for Math and Science Courses with more than 3 credits and 3 contact hours**

Waivers for courses with more than 3 credits and 3 contact hours will only be accepted in the required areas of “Mathematical and Quantitative Reasoning” and “Life and Physical Sciences.” Such waivers will only be approved if students also have 3-credit/3-contact hour courses available in these areas.

If you would like to request a waiver please check here: [X] Waiver requested

If waiver requested:
Please provide a brief explanation for why the course will not be 3 credits and 3 contact hours.

This course is intended for students who do not have prior knowledge of chemistry. Therefore it is important they need 2 hours of lecture and 2 hours of lab to acquire the basic chemistry principles and to apply them to crime lab situation.

If waiver requested:
Please indicate whether this course will satisfy a major requirement, and if so, which major requirement(s) the course will fulfill.

This course will not satisfy the major requirement, but will be placed in Flexible Core E- Scientific World and can be taken as an elective course.

Indicate the status of this course being nominated:
- [ ] current course
- [ ] revision of current course
- [X] a new course being proposed

CUNY COMMON CORE Location

Please check below the area of the Common Core for which the course is being submitted. (Select only one.)

<table>
<thead>
<tr>
<th>Required</th>
<th>Flexible</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>World Cultures and</td>
</tr>
<tr>
<td>Mathematical and Quantitative Reasoning</td>
<td>US Experience in its Diversity</td>
</tr>
<tr>
<td>Life and Physical Sciences</td>
<td>Global Issues Individual and Societ</td>
</tr>
<tr>
<td></td>
<td>Scientific World</td>
</tr>
<tr>
<td></td>
<td>Creative Expression</td>
</tr>
</tbody>
</table>
## Learning Outcomes

In the left column explain the assignments and course attributes that will address the learning outcomes in the right column.

### II. Flexible Core (18 credits)

Six three-credit liberal arts and sciences courses, with at least one course from each of the following five areas and no more than two courses in any discipline or interdisciplinary field.

### E. Scientific World

A Flexible Core course must meet the three learning outcomes in the right column.

<table>
<thead>
<tr>
<th>Students will be able to obtain, interpret, and assess information from chemistry and forensic reference handbooks, scientific journals, and internet websites to formulate a story of what has occurred at a crime scene. Students will be able to use chemical techniques including chemical kinetics, equilibria, thermodynamics and electrochemistry to interconnecting real world conditions to scientific relationships, especially in forensic chemistry. Students will be evaluated on the contents of laboratory reports and quiz scores.</th>
<th>• Gather, interpret, and assess information from a variety of sources and points of view.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to evaluate data, identify interrelationships of variables, analytically evaluate data collected, and solve problems related to forensic chemistry. Critical evaluation of case studies presented are evaluated through homework problems and quizzes.</td>
<td>• Evaluate evidence and arguments critically or analytically.</td>
</tr>
<tr>
<td>Support the conclusions resulting from a crime scene analysis in the form of a well-written laboratory report</td>
<td>• Produce well-reasoned written or oral arguments using evidence to support conclusions.</td>
</tr>
</tbody>
</table>

A course in this area (II.E) must meet at least three of the additional learning outcomes in the right column.

<table>
<thead>
<tr>
<th>Students will be able to identify chemical and physical change, and the importance of proper classification. Become aware of changes in substances, as chemical or physical, which will enhance their observational awareness in a crime scene experience. This will be evaluated through quizzes.</th>
<th>• Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the scientific world, including, but not limited to: computer science, history of science, life and physical sciences, linguistics, logic, mathematics, psychology, statistics, and technology-related studies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to apply solution chemistry, gas law concepts, kinetics, and redox chemistry to explosives and will employ Mass Spectrometry to characterize evidence. Evaluation will be based on a lab report.</td>
<td>• Demonstrate how tools of science, mathematics, technology, or formal analysis can be used to analyze problems and develop solutions.</td>
</tr>
<tr>
<td>Students will be able to evaluate the ethical nature of questionable practices associated with polygraph testing. The measure of student performance will be accomplished through active lab polygraph analysis</td>
<td>• Articulate and evaluate the empirical evidence supporting a scientific or formal theory.</td>
</tr>
</tbody>
</table>

| Students will be able to articulate and evaluate the impact of technologies and scientific discoveries on the contemporary world, such as issues of personal privacy, security, or ethical responsibilities. | • Understand the scientific principles underlying matters of policy or public concern in which science plays a role. |
AV: Changes to be offered in the English Department

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Departments</td>
<td>Departments</td>
</tr>
<tr>
<td>English</td>
<td>NC</td>
</tr>
<tr>
<td>Course</td>
<td>Course</td>
</tr>
<tr>
<td>ENG 111: Composition and Rhetoric I</td>
<td>NC</td>
</tr>
<tr>
<td>Credits</td>
<td>Credits</td>
</tr>
<tr>
<td>3</td>
<td>NC</td>
</tr>
<tr>
<td>Hours</td>
<td>Hours</td>
</tr>
<tr>
<td>3 rec 1 conf/rec</td>
<td>NC</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>Prerequisite</td>
</tr>
<tr>
<td>Passing scores on both the CUNY Writing Skills Assessment Test and the CUNY Reading Skills Assessment Test.</td>
<td>Either a passing score on the CUNY Assessment Test in Writing or successful completion of ENG 2, if required, and either a passing score on the CUNY Assessment Test in Reading or successful completion of RDL 2, if required.</td>
</tr>
<tr>
<td>Co-requisite</td>
<td>Co-requisite</td>
</tr>
<tr>
<td>Requirement</td>
<td>Requirement</td>
</tr>
<tr>
<td>Designation</td>
<td>Designation</td>
</tr>
<tr>
<td>[ ] Yes [ ] No</td>
<td>[ ] Yes [ ] No</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>[ X ] Yes [ ] No</td>
<td>[ X ] Yes [ ] No</td>
</tr>
<tr>
<td>Course Attribute (e.g. Writing Intensive, etc.)</td>
<td>Course Attribute (e.g. Writing Intensive, etc.)</td>
</tr>
<tr>
<td>__ Not Applicable</td>
<td>__ Not Applicable</td>
</tr>
<tr>
<td>__ Required</td>
<td>__ Required</td>
</tr>
<tr>
<td>_<strong>X</strong> English Composition</td>
<td>_<strong>X</strong> English Composition</td>
</tr>
<tr>
<td>___ Mathematics</td>
<td>___ Mathematics</td>
</tr>
<tr>
<td>___ Science</td>
<td>___ Science</td>
</tr>
<tr>
<td>__ Flexible</td>
<td>__ Flexible</td>
</tr>
<tr>
<td>___ World Cultures</td>
<td>___ World Cultures</td>
</tr>
<tr>
<td>___ US Experience in its Diversity</td>
<td>___ US Experience in its Diversity</td>
</tr>
<tr>
<td>___ Creative Expression</td>
<td>___ Creative Expression</td>
</tr>
<tr>
<td>___ Individual and Society</td>
<td>___ Individual and Society</td>
</tr>
<tr>
<td>___ Scientific World</td>
<td>___ Scientific World</td>
</tr>
<tr>
<td>Effective Date</td>
<td>Effective Date</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>Fall 2018</td>
</tr>
</tbody>
</table>

**Rationale:** The CUNY-wide policy shift toward multiple measures of assessment for exit from developmental courses has resulted in a change to the process of exiting out of the top-level developmental reading course (RDL 2) and writing course (ENG 2). The CUNY Assessment Test in Reading is no longer the sole determinant for passing RDL 2, and an overall passing grade in that course now also satisfies the reading requirement.
prerequisite for freshman composition. Similarly, the CUNY Assessment Test in Writing is no longer the sole determinant for passing ENG 2, and an overall passing grade in that course now also satisfies the writing prerequisite for freshman composition. The proposed new prerequisite conforms to current CUNY policy by accounting for students who have demonstrated proficiency in reading and writing either through the passing of the respective CUNY Assessment Tests or through the passing of the respective upper-level developmental courses, RDL 2 and ENG 2.
ENG 111 Catalog Description
Fundamental principles of organization and rhetoric; practice in expository writing; selected readings, mainly non-fiction; approximately eight papers required, including one research paper with MLA documentation using library sources.

Prerequisite: Either a passing score on the CUNY Assessment Test in Writing or successful completion of ENG 2, if required, and either a passing score on the CUNY Assessment Test in Reading or successful completion of RDL 2, if required.

Student Learning Outcomes
In this course, students will:

- Read and discuss several exemplary essays, analyzing the essays to identify and understand main ideas and supporting evidence.
- Write several formal essays, including a research paper; they also write in-class essays, including a final, written exam which requires students to synthesize and apply ideas and concepts from two readings with their own ideas in a formal essay. Students write and share essays using electronic technologies.
- Complete assignments, including a formal research paper, requiring use and evaluation of multiple sources, including those retrieved from academic databases.
- Write assignments including persuasive essays; study and analyze readings to identify and evaluate arguments and differentiate between fact and opinion.
- Learn Modern Language Association (MLA) methods for citation, attribution, and bibliography.

Accessibility
Any student who feels that s/he may need an accommodation based on the impact of a permanent or temporary disability should contact me privately. I am committed to ensuring the full participation of all students in this class. The Office of Disability Services (ODS) serves as a clearinghouse on disability issues and works in partnership with faculty and all other student service offices. They work with students confidentially. The ODS is located in Loew Hall, Room 213. You can stop by, or call (718) 289-5874 for more information. Ask for Poonam Sharma.

Attendance Policy
Three unexcused absences will be permitted. But on your fourth unexcused absence, your final course grade will be lowered by a half grade, and another half grade for your fifth unexcused absence, and so on and so forth. For example, if you had a B before your fourth unexcused absence, after your fourth, your final course grade will be lowered to a B-. Excused absences are medical notes, or other professional letters of explanation accounting for your absence.
Policy on Smartphones and Tablets
Digital devices, such as smartphones and tablets, will not be used in the classroom. Each time that a student uses their smartphone or tablet during class, it will count as an absence.

Policy on Plagiarism
Plagiarism is the presentation of someone else’s ideas, words, or artistic/scientific/technical work as one’s own creation. A student who copies or paraphrases published or on-line material, or another person’s research, without properly identifying the source(s) is committing plagiarism.

Plagiarism violates the ethical and academic standards of our college. Students will be held responsible for such violations, even when unintentional. To avoid unintended plagiarism, students should consult with their instructors about when and how to document their sources. The library also has both print and digital guides designed to help students cite sources correctly.

Plagiarism carries a range of penalties commensurate with the severity of the infraction. The instructor may, for example, require the work to be redone, reduce the course grade, fail the student in the course, or refer the case to the Faculty-Student Disciplinary Committee (see article 15.4 of the Bylaws of the Board of Trustees). Cases referred to that committee could result in suspension or expulsion from the college.

Evaluation and Requirements of Students
Students receive a letter grade, A through F:

- 40% – Formal essays (6 in total, typed and double-spaced)
- 25% – Research Paper
- 20% – Final Exam
- 15% – quizzes

Required Texts

- ENG 111 Coursepack
- Flight, by Sherman Alexie

Schedule

Week One (8/28, 8/30)

- Introductions
- Pick up ENG 111 Coursepack
- Grammar and critical thinking
- Read “How American Awfulness Stacks Up,” by Doug Henwood (coursepack)
- How to use a dictionary
- Vocabulary assignment
- First essay assignment (on the handout)
Week Two (9/6)
(No class on Monday, Sept. 4: Labor Day)

- Clauses
- Review of Essay #1
- Begin reading “Flight”

Week Three (9/11, 9/13)

- Quiz #1 (on “Flight”)
- Basic structure of the thesis-centered essay
- Main clause and subordinate clause
- Second essay assignment (on “Flight”)

Week Four (9/18)
(No class on Wednesday, Sept. 20)

- Quiz #2 (on “Flight”)
- Review of Essay #2
- Basic terms and concepts of interpretive writing
- Third essay assignment (on “Flight”)

Week Five (9/25, 9/27)

- Quiz #3 (on “Flight”)
- Review of Essay #3
- Grammar review
- Principles of logic, organization

Week Six (10/2, 10/4)

- Phrases
- Read “Tired,” by Langston Hughes (coursepack)
- Fourth essay assignment (on Hughes)
- Vocabulary homework

Week Seven (10/11)
(No class on Monday, Oct. 9)

- Turn in Essay #4 (on Hughes)
- Read “Big Government Makes People More Open to Change,” by Ha-Joon Chang (coursepack)
- Analyzing the text
Week Eight (10/16, 10/18)

- Fifth essay assignment (on Chang)
- Review of Essay #4
- Quiz #4 (on Chang)

Week Nine (10/23, 10/25)

- Turn in Essay #5 (on Chang)
- Read “The Deepening Page,” by Nicholas Carr (coursepack)
- Sixth essay assignment (on Carr)
- Vocabulary homework

Week Ten (10/30, 11/1)

- Read “The Deepening Page,” by Nicholas Carr (coursepack)
- Review of Essay #5
- Sixth essay assignment (on Carr)
- Vocabulary homework

Week Eleven (11/6, 11/8)

- Quiz #5 (on Carr)
- What is empirical data?
- Substantiating your thesis
- The five stages of research writing
- Proposing your research paper project

Week Twelve (11/13, 11/15)

- Turn in Essay #6 (on Carr)
- Pick up English Department Final Exam Text
- Turn in your Research Paper proposal

Week Thirteen (11/20, 11/22)

- Locating good online academic sources: the method
- MLA citation
- The Works Cited Page

Week Fourteen (11/27, 11/29)

- Quiz #6 (on the Final Exam text)
- In-class essay
• Research paper rough draft due

**Week Fifteen (12/4, 12/6)**

• The art of revision

**Week Sixteen (12/11)**

• Research paper due
• Department Final Exam: Thursday, Dec. 14
To: Members of the College Senate
From: Professor Howard A. Clampman, Chairperson Curriculum Committee
Date: May 3, 2018
Subject: Annual Report of Committee Activities fall 2017 – spring 2018

The Curriculum Committee met 19 times during the 2017 – 2018 academic year. A delineation of the curricula items approved and reviewed by the Curriculum Committee, and the corresponding approval by the College Senate, is included below.

(a) Changes to existing courses

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
<th>Date approved by College Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BUS 54 – Entrepreneurship – Change in course prerequisites</td>
<td>10-24-17</td>
<td>11-16-17</td>
</tr>
<tr>
<td>2. CSI 33 – Data Structures – Change in course prerequisites</td>
<td>11-7-17</td>
<td>12-7-17</td>
</tr>
<tr>
<td>3. RDL 21 – Reading in the Sciences and Technologies – Change in course description</td>
<td>11-14-17</td>
<td>12-7-17</td>
</tr>
<tr>
<td>4. HIS 14 – Change in course name and description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From: The Individual and Society in the Middle Ages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To: Medieval History</td>
<td>11-28-17</td>
<td>2-22-18</td>
</tr>
<tr>
<td>5. ENG 2 – Developmental Writing II</td>
<td>2-27-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>Change in Course Prerequisite and Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ENG 10 (110) – Fundamentals of Composition and Rhetoric</td>
<td>2-27-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>Change in Course Prerequisite and Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. GEO 10 – World Regional Geography (currently in Pathways Flexible Core A)</td>
<td>3-13-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>Change in Course Prerequisite and Co-requisite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. PHL 11 – Introduction to Philosophy (currently in Pathways Flexible Core D)</td>
<td>3-20-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>Change in Course Prerequisite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. MEDP 12 – Digital Studio Production</td>
<td>3-20-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>Change in Course Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. MEDP 51 – Media and Digital Film Internship</td>
<td>3-20-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>Change in Course Hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 11. ENG 111 – Composition and Rhetoric I
- **Change in Course Prerequisite**
  - (Unanimous show of hands)
- Date approved by Curriculum Committee: 4-10-18
- Date approved by College Senate: pending
  - Approved

### 12. EDU 40
- **From:** Field Work Seminar Birth to Grade 6
- **To:** Field Work Seminar
- **Change in Course Title**
- Date approved by Curriculum Committee: 4-24-18
- Date approved by College Senate: pending
  - Approved

### 13. NMT 79 – Phlebotomy
- **Change in Course Description**
- Date approved by Curriculum Committee: 4-24-18
- Date approved by College Senate: pending
  - Approved

### (b) Changes to existing degree programs

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Date approved by Curriculum Committee</th>
<th>Date approved by College Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mathematics AS Degree Program</td>
<td>5-16-17</td>
<td>10-24-17</td>
</tr>
<tr>
<td>2. Cybersecurity and Networking AAS Degree</td>
<td>11-7-17</td>
<td>12-7-17</td>
</tr>
<tr>
<td>3. Automotive Technology AAS Degree</td>
<td>3-20-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>4. Radiologic Technology AAS Degree</td>
<td>3-20-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>5. Liberal Arts AS Degree Program – Chemistry Option</td>
<td>4-24-18</td>
<td>pending</td>
</tr>
</tbody>
</table>

### (c) New Courses

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
<th>Date approved by College Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. JPN 111 – Beginning Japanese (formerly an experimental course)</td>
<td>2-27-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>To be included in Pathways Flexible Core A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ACS 50 – Automotive Technology Internship</td>
<td>3-20-18</td>
<td>4-26-18</td>
</tr>
<tr>
<td>(formerly an experimental course)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. CHM 21 – Introduction to Chemical Processes</td>
<td>4-24-18</td>
<td>pending</td>
</tr>
<tr>
<td>4. BIO 34/CHM 34 – Biofuels and Bioproducts</td>
<td>4-24-18</td>
<td>pending</td>
</tr>
</tbody>
</table>
(d) New experimental courses

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date approved by Curriculum Committee</th>
<th>Date approved by College Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CSN 100 – Introduction to Cybersecurity</td>
<td>10-3-17</td>
<td>11-16-17</td>
</tr>
<tr>
<td>2. RDL 31 – Reading and Assessing Research Documents</td>
<td>11-14-17</td>
<td>11-16-17</td>
</tr>
<tr>
<td>3. ACS 50 – Automotive Technology Internship</td>
<td>11-14-17</td>
<td>11-16-17</td>
</tr>
<tr>
<td>4. CSI 11 – Computer Science for Everyone</td>
<td>3-20-18</td>
<td>3-22-18</td>
</tr>
<tr>
<td>5. CHM 16 – Chemistry: A Forensic Perspective</td>
<td>4-10-18</td>
<td>Pending Senate Approval</td>
</tr>
<tr>
<td>6. ENG XX – Accelerated Learning Program</td>
<td>4-24-18</td>
<td>Pending Senate Approval</td>
</tr>
</tbody>
</table>

(e) Changes in Curriculum Committee procedures

<table>
<thead>
<tr>
<th>Title</th>
<th>Date approved by Curriculum Committee</th>
<th>Date approved by College Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Procedures for creating Experimental Courses</td>
<td>9-26-17 / 2-13-18</td>
<td>11-16-17</td>
</tr>
</tbody>
</table>

(f) Pilot sections of existing courses – Information Only

<table>
<thead>
<tr>
<th>Title</th>
<th>Date presented to Curriculum Committee</th>
<th>Date presented to College Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pilot 4-Hour Sections of MTH 23 (normally 3-hours)</td>
<td>4-17-18</td>
<td>4-26-18</td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: College Senate
FROM: Alexander Ott, Ed.D., Associate Dean, Curriculum Matters and Academic Programs
DATE: May 3, 2018
RE: Two Academic Integrity Policies: the College Senate Version and the CUNY Version

The Context:
Since 2000, the BCC college catalog has included the “College Senate Policy” on academic integrity. According to a review of archived Senate minutes, this policy was developed through the Committee on Instructional and Professional Development (CIPD) in 1998-1999 and was approved by the College Senate on February 18, 1999.

Since 2005, the BCC catalog has included the “CUNY Policy” on academic integrity in addition to the College Senate Policy (see pp. 72-74 in the current catalog). That is, we have had two policies on academic integrity in the catalog since 2005. This would not be a problem if the two policies were complementary, which, at one time, the two policies likely were.

The Issue:
However, we have become aware recently that there is an updated version of the CUNY Policy that differs significantly from the one currently in the catalog. This updated CUNY Policy appears to conflict with elements in the College Senate Policy. For example, the CUNY Policy empowers an Academic Integrity Officer to make key decisions; the College Senate Policy makes no mention of an Academic Integrity Officer and gives key decision-making authority to the VP of Academic Affairs and the VP of Student Development. The College Senate Policy also seems confusingly redundant in places with the CUNY Policy. For example, both policies list samples of cheating and plagiarism, seemingly addressing the same integrity violations but in different ways.

As is clear for all CUNY policies, local implementation policies and procedures must be consistent with the CUNY policy. The following is section 5 from the CUNY Policy on academic integrity: “Each college shall implement this Policy and may adopt its own more specific procedures to implement the Policy. Colleges’ procedures must be consistent with the policy and procedures described in the Policy.”

The Solution:
It is clear that we will need to include the updated CUNY Policy in the catalog, replacing the outdated version. But we cannot logically do so and place it next to a College Senate Policy with which it seems to conflict and with which it seems confusingly redundant. Therefore, immediate action is needed to address this issue for the 2018-2019 catalog, which will be finalized in late August.

Unfortunately, the above issue became apparent only recently, not allowing for Senate processes to review and reconcile, as needed, the College Senate Policy with the CUNY Policy on academic integrity. Given this, I plan to work over the summer with appropriate parties (e.g., academic integrity officer, legal counsel) to revise and/or eliminate sections of the College Senate Policy as it appears in the catalog when they duplicate and/or conflict with the CUNY Policy.

Please note that I have consulted with the chair of CIPD on this issue and will be updating the full committee at their next meeting on May 8, 2018. Further, a report will be made to CIPD and the College Senate in Fall 2018 as to what administrative actions were taken over the summer in regard to the College Senate Policy. CIPD and the Senate can then determine whether to take further action (e.g., write an updated College Senate policy in the context of the most recent CUNY Policy).

If you have any feedback, questions, or observations, please contact me at alexander.ott@bcc.cuny.edu or 718.289.5497
MEMORANDUM

TO: College Senate
FROM: Alexander Ott, Ed.D., Associate Dean, Curriculum Matters and Academic Programs
DATE: May 3, 2018
RE: Academic Master Plan Update

Per the Academic Master Plan (AMP) project timeline, please see the following update on the AMP effort. Please be aware, however, of the following: since the final Spring 2018 Senate meeting was moved up by two weeks, we are not yet ready to report initial “findings” at this stage. Simply put, we need more time for data collection and analysis. We do plan to have a more substantive report later this month to the full college community. As per the project timeline, the final Academic Master Plan is still expected to be complete and reported as an Information Item to Senate in early fall.

The following is a brief update on AMP progress thus far:

- The first three subcommittees—(1) Labor Market/Business Trends, (2) Educational Trends, (3) Academic Program Review—are well underway with established data sources and initial analyses.
- The fourth subcommittee—Academic Structures and Resources—is holding its first meeting on Thursday, May 3.
- The final full AMP Committee of the semester will be held on Tuesday, May 8.

Summer and Fall Plans:

- AMP development will continue throughout the summer, integrating and further analyzing work done in subcommittees 1-4 as part of final conclusions and recommendations (subcommittee 5). The draft Academic Master Plan will be reviewed and revised by the full AMP committee in late August. Additional feedback will be solicited from the Vice Presidents, Deans, and Chairs group. A final report to the Senate is planned for September/October.

For additional information on the AMP effort, please note the following:

- For previous AMP reports to the College and Senate, please click here: https://goo.gl/meo2Ny
- See the most recent AMP Committee minutes here: https://goo.gl/3Bl8sV

If you have any feedback, questions, or observations, please contact me at alexander.ott@bcc.cuny.edu or 718.289.5497.
BCC Governance Self-Study Task Force

Presented by Prof. Roni Ben-Nun, BCC Faculty Council Chair

7-Member task force of the G&E committee to begin work Fall 2018 with first report due start of spring 2019. Task force is to study the state of shared governance at BCC and liaison with Middle States Standard VII (Governance) committee and other interested parties as needed. Task Force will elect its own officers.

Membership proposed:

1. Chair of Faculty Council
2. Chair of G&E
3. President rep
4. SGA rep (elected by SGA from SGA senators)
5. Student rep (elected by SGA from the student body)
6. Instructional Staff At-large member (elected by the Faculty Council)
7. Instructional Staff At-large member (elected by the Faculty Council)
**Possible Goals:**

- Define Shared Governance for BCC
- Clarify roles and responsibilities of each constituency/governance entity
- Develop accessible governance information for new faculty
- Study workload and assess compensation
- Establish clear procedures for end-of-term/start-of-term
- Promote transparency and open communications
- Recommend ways to increase participation and inclusion
- Investigate diversification of the membership
- Publish and distribute governance documents online and in print

**Things to consider/investigate:**

- Training and workshops on governance
- Introducing governance to new faculty and students (New Faculty Seminar and FYS)
- Staggering terms of service
- Term limits / limits on multiple positions
- Publicizing BCC governance (web, broadcast, print, etc.)
- Creating a newsletter highlighting faculty service and possible vacant posts.
- Conducting periodic assessment of governance
BCC Middle States Self-Study Update, April 2018

BCC is engaged in a comprehensive Self-Study as part of the accreditation requirements of the Middle States Commission on Higher Education (MSCHE). The process, which was initiated in Spring 2017 will culminate in a final report submitted to MSCHE and an evaluation team visit in Spring 2019. Formal action on BCC’s accreditation status will be taken at the June 2019 Executive Meeting of Middle States Commission on Higher Education.

Purpose of MSCHE Self-Study

- demonstrates BCC’s compliance with MSCHE Standards and requirements
- evaluates progress of the current BCC Strategic Plan, “Building a Community of Excellence 2015-20”, which was designed to improve student learning outcomes and institutional effectiveness
- informs development of new plan, in support of student learning and success and institution-wide improvement and renewal

Self-Study Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>Spring 2017</td>
<td>Self-Study Steering Committee and Working Groups formed</td>
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<td></td>
<td>More than 100 faculty, staff and students volunteered to participate</td>
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<td>Self-Study Design submitted and approved by MSCHE</td>
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<td>Fall ’17-SP ’18</td>
<td>Working groups collected data and drafted reports according to design</td>
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<tr>
<td>Fall 2018</td>
<td>Draft Self-Study disseminated campus-wide for discussion, review and feedback</td>
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<td>Self-Study updated with feedback from campus community</td>
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<tr>
<td>Spring 2019</td>
<td>Final Self-Study submitted</td>
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<tr>
<td></td>
<td>Evaluation Team visit</td>
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<tr>
<td></td>
<td>MSCHE Executive Committee determines BCC accreditation status</td>
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BCC Middle States Self-Study Focus and Theme – Building a Community of Excellence


Additional Information

For more information about the Self-Study and Evaluation or to volunteer to participate, please contact:

- Professor Jordi Getman-Eraso, Self-Study Co-Chair
- Vice President Irene R. Delgado, Self-Study Co-Chair
- Dean Nancy Ritze, MSCHE Accreditation Liaison Officer
Building a Community of Excellence

**Mission**  BCC serves students of diverse backgrounds, preparations and aspirations by providing them with an education that is both broad in scope and rigorous in its standards. We offer students access to academic preparation that provides them with the foundation and tools for success in their educational and/or professional plans and instills in them the value of informed and engaged citizenship and service to their communities.

**Vision**  BCC will effectively invest in each student’s success by engaging with them in an integrative and supportive environment that facilitates the development and achievement of their educational and career goals. Graduates will be prepared to understand, thrive in, and contribute to a 21st-century global community marked by diversity, change, and expanded opportunities for lifelong learning and growth.

**Values**  Respect - Integrity – Engagement – Excellence - Empowerment

**Goals**
1. Build a Community of Excellence
2. Empower Students to Succeed
3. Deepen Student Learning
4. Develop World Citizens
5. Cultivate a 21st Century Curriculum
6. Enhance the Campus Environment
7. Promote a Reputation for Excellence

**MSCHE Standards for Accreditation**

**Standard I: Mission and Goals.** The institution’s mission defines its purpose within the context of higher education, the students it serves, and what it intends to accomplish. The institution’s stated goals are clearly linked to its mission and specify how the institution fulfills its mission.

**Standard II: Ethics and Integrity.** Ethics and integrity are central, indispensable, and defining hallmarks of effective higher education institutions. In all activities, whether internal or external, an institution must be faithful to its mission, honor its contracts and commitments, adhere to its policies, and represent itself truthfully.

**Standard III: Design and Delivery of the Student Learning Experience.** An institution provides students with learning experiences that are characterized by rigor and coherence of all program, certificate, and degree levels, regardless of instructional modality. All learning experiences, regardless of modality, program pace/schedule, level, and setting are consistent with higher education expectations.

**Standard IV: Support of the Student Experience:** Across all educational experiences, settings, levels, and instructional modalities, the institution recruits and admits students whose interests, abilities, experiences, and goals are congruent with its mission and educational offerings. The institution commits to student retention, persistence, completion, and success through a coherent and effective support system sustained by qualified professionals, which enhances the quality of the learning environment, contributes to the educational experience, and fosters student success.

**Standard V: Educational Effectiveness Assessment.** Assessment of student learning demonstrates that the institution’s students have accomplished educational goals consistent with their programs of study, degree level, the institution’s mission, and appropriate expectations for institutions of higher education.

**Standard VI: Planning, Resources and Institutional Improvement.** The institution’s planning processes, resources, and structures are aligned with each other and are sufficient to fulfill its mission and goals, to continuously assess and improve its programs and services, and to respond effectively to opportunities and challenges.

**Standard VII: Governance Leadership and Administration.** The institution is governed & administered in a manner that allows it to realize its stated mission & goals in a way that effectively benefits the institution, its students, & the other constituencies it serves. Even when supported by or affiliated with governmental, corporate, religious, educational system, or other unaccredited organizations, the institution has education as its primary purpose, & it operates as an academic institution with appropriate autonomy.
Nominees to the CUNY Common Core Curriculum Review Committee

Nominees for Sub Committee One

Giulia Guarnieri, Professor
Italian Language and Literature
WAC Faculty Development Coordinator
Department of Modern Languages

No Written Statement

Kate Culkin
Professor of History, Bronx Community College

I have participated in the Pathways process at both the department and college level. As coordinator of History 20, the American Nation, (U.S. Experience in its Diversity), I prepared the SharePoint template with the Student Learning Outcomes, along with the Pathways syllabus, for the course in Spring 2012. I also prepared the SharePoint and syllabus for HIS 28, Women: The Historical Perspective (Individual and Society) and participated in department discussions about the SLOs for HIS 10, History of the Modern World (World Cultures and Global Issues) that semester. In the summer of 2012, I served as a History Department representative to the college-wide Pathways Committee, reviewing the paperwork for Pathways courses across the departments. In 2015, I developed HIS 29, the History of Women in the United States (U.S. Experience in its Diversity), including preparing the SharePoint, SLOs, and syllabus, and presenting them to the Curriculum Committee. The course was approved and is running this semester. These experiences have allowed me to become familiar with the Pathways process, including the articulation of Student Learning Outcomes. I would value the opportunity to use the knowledge I gained to serve the college as a representative on Subcommittee One of the Common Core Course Review Committee.

Ben Yarmolinsky, Ph.D., Dept. of Art & Music

This is to nominate myself to serve on the CUNY Common Core Course Review Committee as a representative from BCC. I feel well qualified to serve on Subcommittee One: "English Composition," "Creative Expression," World Cultures and Global Issues," and "U.S. Experience in its Diversity."

I have designed and taught a Pathways course: Music 12 World Music, described in its syllabus as
In addition, I am a published ethnomusicologist, as well as an active composer and performer. For many years I have taught writing-intensive sections of both Music 11 and Music 12. It would be an honor to serve CUNY and BCC by participating in the work of this committee.

Thank you for your consideration.

Nominees for Sub-Committee Two

Vicki Flaris, Ph.D.
Chemistry Department,

I am very interested in continuing with CCCRC Subcommittee Two: “Mathematical and Quantitative Reasoning,” “Life and Physical Sciences,” “Scientific World,” and “Individual and Society.” I have served as Chair of this committee for the last two years and would be honored to do so again. I have served the prior two years as a BCC member. It is important to see the uniformity and standards are met across all 2 year and 4 year institutions and across departments so that our students and our institutions benefit. Having well defined SLOs (student learning outcomes) that can clearly be assessed and seen clearly by students is essential. I have learned about other courses across campuses and also been involved in assessing proposals prior to submission to reduce and assist those that need revision or need to repurpose their proposals in other categories. The other duties the committee does is to review courses submitted via the student appeals process and to contribute to guiding the learning outcomes of select major or gateway courses.

Robert Lupo,
Chemistry & Chemical Technology

No Statement
SECTION 9.1. DEPARTMENT ORGANIZATION.

b. The executive officer of the department shall be the department chairperson who shall be a professor, associate professor or assistant professor elected by secret ballot for a term of three years, except as provided below, by a majority vote of all the members of the instructional staff of the department who have faculty rank. Proxy or mail voting shall not be permitted. The department chairperson must be tenured or have been approved by the board for tenure at the time of his/her election, except in departments less than seven years old. Such elections shall be subject to the subsequent approval of the president and the board. The present system of staggered departmental elections shall be continued. The successors of department chairpersons shall be elected during the first full week in May at the expiration of the respective terms of office to take office as of July first of the year in which they are elected and at the three year intervals thereafter. *Vacancies shall be filled by election for the unexpired term.* (Italics Added)

SECTION 9.3. DUTIES OF DEPARTMENT CHAIRPERSON.

a. The department chairperson shall be the executive officer of his/her department and shall carry out the department’s policies, as well as those of the faculty and the board which are related to it. He/she shall

1. Be responsible for departmental records

2. Assign courses to and arrange programs of instructional staff members of the department

3. Initiate policy and action concerning the recruitment of faculty and other departmental affairs subject to the powers delegated by these bylaws to the staff of the department in regard to educational policy, and to the appropriate departmental committees in the matter of promotions and appointments

4. Represent the department before the faculty council or faculty senate, the faculty, and the board

5. Preside at meetings of the department

6. Be responsible for the work of the department’s committee on appointments or the department’s committee on personnel and budget which he/she chairs

7. Prepare the tentative departmental budget, subject to the approval by the department’s committee on appointments or the department’s committee on personnel and budget

8. Transmit the tentative departmental budget with his/her own recommendations to the president or the dean or provost as the president may designate

9. Arrange for careful observation and guidance of the department’s instructional staff members
10. Make a full report to the president and to the college committee on faculty personnel and budget of the action taken by the department committee on personnel and budget or department committee on appointments when recommending an appointee for tenure on the following, as well as any other criteria set forth in university policies

a. Teaching qualifications and classroom work

b. Relationship of the appointee with his/her students and colleagues

c. Appointee’s professional and creative work

11. Hold an annual evaluation conference with every member of the department after observation and prepare a memorandum thereof

12. Generally supervise and administer the department
BRONX COMMUNITY COLLEGE

GOVERNANCE PLAN

Adopted by the Board of Higher Education on June 18, 1973, Cal. No.5,
Amended:
June 22, 1981;
February 5, 1996;
June 25, 2001;
April 27, 2009;
April 26, 2010; and
I. THE BRONX COMMUNITY COLLEGE SENATE

The Bronx Community College Senate shall, subject to the authority of the Bylaws of the Board of the Trustees and the provisions of this document, be responsible for the establishment of academic policy and for legislative and advisory functions related to the programs, operations, and goals of the College.

A. Organization

1. The Senate shall be comprised of two Councils: The Faculty Council and the Student Government Association.

   a. Faculty Council

      i. Membership of the Faculty Council: Those Senators who are members of the Instructional Staff and who do not hold the title of President, Vice President or Dean, shall comprise the Faculty Council.

      ii. Functions of the Faculty Council: The Faculty Council shall have the following functions:

          1) The authority to pass recommendations or resolutions which shall express the views of the Bronx Community College faculty and Instructional Staff.

          2) To elect faculty and staff to college and university bodies on which elected faculty, or elected faculty and Instructional Staff, serve. Such elections shall be conducted by the entire Council.

      iii. Officers of the Faculty Council

          1) The Council shall elect a Chairperson, a vice-Chairperson, and a secretary from its membership.

          2) The term of office for officers of the Faculty Council shall be two years.

   iv. Meetings of the Faculty Council

          1) The Faculty Council shall convene at least once per semester.

          2) The Faculty Council shall be convened by the Council’s Chairperson, or by petition of at least 40 percent of the Council’s membership.

   b. The Student Government Association

      i. The Student Government Association shall consist of students who are elected by the student body to be the Student Government Association pursuant to Section 15.2.b. of the Bylaws of the Board of Trustees. It shall be empowered to:

          1) Elect a President, Vice President for Inter-Organization Council (I.O.C.) clubs, Executive Officer for Legal and Legislative Affairs, Treasurer and Secretary.

          2) Develop a constitution for ratification by the student body.

          3) Regulate student co-curricular activities in conformity with policies adopted by the Senate.

          4) Represent the student body on committees of the Senate and their sub-committees as provided in this document.
2. Procedures - Rules of Conduct
   a. First Elections: Procedures for the first election of Senate shall be established by the previously existing Committee on Nominations and Elections.
   b. Meetings, Attendance at Meetings and Quorum: The Senate shall meet at least once a month during the Fall and Spring Semesters. Meetings of the Senate shall be open to all members of the College and the public at large. A quorum shall mean a majority of the body as calculated as a percentage of the total number of seats eligible to be filled.
   c. Voting: Any action taken by the Senate requires a vote of the member present at the meeting. Any matter, for which a vote is required by the College Governance Plan, must receive the requisite number of votes based upon the number of members of the body as a whole.
   d. Rules of Order:
      i. The Senate shall adopt Rules of Order for itself, its committees, and its sub committees consistent with its obligations under law.
      ii. The SGA may adopt Rules of Order according to its own Constitution.
      iii. The Faculty Council may adopt Rules of Order for Departments and other bodies provided for in the Governance Plan.
      iv. The Senate, Faculty Council and the Student Government Association shall elect a parliamentarian.
   e. Speaking Privileges: The privilege of addressing the Senate is reserved for members of the Senate. Non-members may address the Senate only upon the approval of the Senate.
  
3. Alternates
   a. Provision for Alternates: When called for by this plan, Alternates are individuals elected to fill a temporary absence or vacancy by a Senator or committee member. Alternates are entitled to and expected to attend all meetings of the Senate or committee, although they shall only vote when seated for the meeting. A seated Alternate shall be counted for the purpose of quorum and may vote on any manner with no distinction between Alternate and regular seats.
   b. Seating of Alternates: In the case where an absence or vacancy occurs at a meeting of the Senate or one of its committees, the Chairperson shall seat Alternates to fill the vacant seats. Alternates may only be seated from within a delegation. In the case of multiple Alternates in a delegation, such seats shall be filled by ranking as determined at the time of election in the manner specified below. After seating, Alternates shall be seated for the entirety of the meeting, without regard to the late arrival of any member.
   c. Number of Alternates
      i. Alternates shall be elected in a number according to the manner in which the seat they are covering is designated.
      ii. Departments shall elect an Alternate for the departmental seats to the Senate. They may elect Alternates for the seats on Senate committees.
iii. There shall be at large Alternate seats to the Senate elected by and from the various Senate constituencies in the following number:

1. Full-time Faculty: Five (5) Alternate seats
2. Adjunct Faculty: One (1) Alternate seat
3. Higher Education Officers: One (1) Alternate seat
4. College Laboratory Technicians: One (1) Alternate seat

iv. Alternates for student seats shall be defined in a number set forth in the SGA Constitution.

v. There shall be no provision for Alternates for ex officio seats of the Senate or any of its committees.

d. Election of Alternates

i. Departmental Alternate Senators and committee members shall be elected at the same time and manner as that of the Departmental Senator or committee member. The name of the Alternate Senator shall be communicated to the Senate or committee at the time of the election.

ii. At-large Alternate Senators shall be elected by and from each delegation in a number provided for above in an election held at the same time and manner as the election for the regular Senate seats. In the case that more than one Alternate seat is being elected, the seats shall be ranked by the number of votes received as First Alternate, Second Alternate, etc.

iii. Student Alternate Senators shall be defined in a manner set forth in the SGA Constitution.

iv. Senate and Faculty Council Representatives to Senate Committees: The Senate or the Faculty Council may elect up to one Alternate for any committee to which it elects members to serve in the event of an absence or vacancy. Such an election shall take place at the same time and in the same manner as the election for the regular seat. The name of such Alternate shall be communicated to the committee at the same time as the result of the regular election.

B. Functions of the Senate:

1. The Senate shall have legislative power with regard to:
   a. Academic affairs, including curricula, degree requirements, admissions and grading structure.
   b. The protection of the academic freedom of students and Instructional Staff.
   c. The adoption of Rules of Procedure for itself, its committees and its sub committees.

2. The Senate shall have the following advisory responsibilities:
   a. Participate in the search for and appointment of the President of the College, as requested by the Board of Trustees.
   b. Advise on the appointment of all individuals holding Vice President and Dean titles. These recommendations are to be submitted to the President of the College for his/her consideration.
   c. Advise on long range planning to achieve the goals of the College.
d. Advise on campus life and activities, including ancillary services within the College (including, but not limited to, Auxiliary Enterprises, BCC, Inc. and the Student Election Review Committee), student organizations and community relations.

e. Advise the College's administrative officers on the formulation and allocation of the College budget, of policies relating to grants, of allocation of space and facilities, and in the making of decisions pertaining to the allocation of resources for educational programs, and for research and scholarly activities.

3. In carrying out its responsibilities, the Senate shall be fully advised of, shall routinely receive, and shall be free to seek information from the College's administrative officers on all matters germane to the programs and operations of the College and its facilities.

4. The College administration shall provide to the Senate in a timely fashion all pertinent information, including information on college resources and policies.

5. Upon the invitation of the Senate Chairperson, the President shall meet with it to discuss his/her response to its recommendations.

C. Membership of the Senate: The membership of the Senate shall consist of the following:

1. The President of the College.

2. The Vice Presidents of Academic Affairs, Administration and Student Development.

3. One representative elected by and from each department.

4. Eighteen faculty members holding full-time lines elected by and from the faculty at-large holding full-time titles as lecturer, instructor, assistant professor, associate professor or professor.

5. Two faculty members in adjunct titles elected by and from the adjunct faculty.

6. Fifteen students elected by the student body at-large.

7. Three people elected by and from the holders of titles in the Higher Education Officer series.

8. One person elected by and from holders of titles in the College Laboratory Technician Series.

9. One person elected by and from the holders of titles in the Registrar's series and Higher Education Officers' series in the Registrar’s Department.

D. Officers of the Senate

1. The Chairperson of the Senate shall be elected by and from the body. The Chairperson of the Senate shall be responsible for:

   a. Convening and presiding at Senate Meetings.

   b. Convening and presiding at Senate Executive Committee meetings.

   c. Representing the College community along with administrative officers and student officers at College and community functions.

2. If the Chairperson is a member of the Faculty Council, the Vice-Chairperson shall be a member of the Student Government Association. If the Chairperson is a member of the Student Government Association, the Vice-Chairperson shall be a member of the Faculty Council.

3. The Secretary of the Senate shall be elected by and from the Senate.
E. Qualifications For and Length of Service in the Senate and on Senate Committees

1. Student Senators and student members of committees shall serve for a one-year term and shall serve no more than two consecutive terms.

2. Student members of the Senate or Senate bodies must have and maintain a minimum cumulative average of 2.00. Students may serve in their first semester, but must achieve and maintain the required 2.00 index to continue to hold office.

3. All full-time Instructional Staff representatives shall serve two-year terms.

4. All adjunct Instructional Staff representatives shall serve two-year terms.

5. Membership on Senate Committees shall be for a term of two years, except that student membership shall be for a term of one year.

6. No person shall hold more than one standing committee membership except by approval of the Executive Committee.

7. Vacancies
   
   a. A vacancy in a Senate seat held by a member of the faculty or Instructional Staff shall only occur when the elected holder of the seat resigns or is no longer employed by Bronx Community College. A vacancy in a Senate seat held by a student shall be defined in accordance with the SGA constitution.

   b. An at-large seat which will be vacant for more than one year shall be filled by special election of the constituency represented by the vacant seat. An at-large seat which will be vacant for less than one year shall be filled by an election by the Senate. A vacant departmental seat shall be filled by special election of the department. In each case, an adequate nomination period shall be granted prior to the election. The term of such an elected seat shall be the remainder of the term of the seat vacated.

F. Committees of the Senate - General Policy

1. The membership of committees of the Senate shall consist of elected members of the Senate, except as provided in the Governance Plan. Committees shall, unless otherwise specified, elect their own officers. Recommendations and actions by all committees are subject to ratification by the Senate. Such committee recommendations or actions must be presented to the Senate one meeting prior to the one at which action may be taken.

2. Each standing committee of the Senate shall submit a written report of committee activities at the last scheduled Senate meeting of the academic year.

3. The same rules of quorum and privilege of the floor apply to the committees of the Senate as apply to Senate.

4. When a person is designated in the Governance Plan as a representative of an Office or officer, that person shall serve as a representative for a full academic year.

G. Standing Committee of the Senate

1. Executive Committee
   
   a. Functions of the Executive Committee:

   i. Prepare a schedule of regular meetings of the Senate by the beginning of each academic year.

   ii. Prepare and transmit agendas and notices for all meetings of the Senate.
iii. Act on behalf of the Senate when the full body cannot be called into session and the matters in question must be decided without delay.

iv. Call the Senate into special session by a vote of two-thirds of the total membership, as provided in Section I(A)(3)(c).

v. Appoint members of Standing Committees of the Senate as required by this document.

vi. Appoint members of other committees when requested by the President, the Senate, or any other administrative officer of the College.

vii. Review the College budget with the President at the beginning of each academic year.

viii. Prepare an annual evaluation of the performance and accomplishments of each standing committee of the Senate.

b. Membership of the Executive Committee:

i. The President of the College.

ii. The Vice President of Academic Affairs.

iii. The Chairperson of the Senate.

iv. The Vice Chairperson of the Senate.

v. The Secretary of the Senate.

vi. Six members of the Faculty Council, elected by the Faculty Council.

vii. The Student Government Association Vice President for Inter-Organization Council (I.O.C.) clubs and Executive Officer for Legal and Legislative Affairs.

viii. The Chairperson of the Faculty Council when the holder of that office is not the same person as the Chairperson of the College Senate.

ix. The Vice President of Administration and Finance and the Vice President of Student Development as non-voting members.

c. Officers of the Executive Committee:

i. The Chairperson of the Senate shall serve as the Chairperson of the Executive Committee.

ii. The Secretary of the Senate shall serve as the Secretary of the Executive Committee.

d. A majority of the members of the Executive Committee shall constitute a quorum.

2. Committee on Governance and Elections

a. Functions of the Committee on Governance and Elections:

i. Review the process of governance of the College on a continuing basis.
ii. Prepare and present to the Senate a biennial evaluation of the governance of the College.

iii. Recommend changes in administrative and governance structure and practices, and amendments to this document.

iv. Consider recommendations from the administration, faculty, staff, and students for changes to this document.

v. Interpret the Governance Plan subject to Senate review and approval.

vi. Conduct nominations and elections for the offices designated in the Governance Plan as well as for outside organizations with which the College may have an official connection, including:

   (1) Determining eligibility to vote and hold office.
   (2) Establishing procedures for disseminating information about candidates to their electorates.
   (3) Presenting nominations and reporting results to the College at-large.
   (4) Establishing procedures for nominations and elections not otherwise specified in the Governance Plan.

vii. Hear complaints regarding the breach of the Governance Plan or Bylaws and make recommendations to resolve such complaints.

b. Membership of the Committee on Governance and Elections:

   i. The Chairperson of the Faculty Council.

   ii. Five faculty members: two elected by and from the Faculty Council, three elected by the Faculty Council from the Instructional Staff at-large.

   iii. Four students: the Student Government Association President, Vice President for Inter-Organization Council (I.O.C.) Clubs, the Executive Officer for Legal and Legislative Affairs, and the Executive Secretary of the SGA, or their respective designees from the SGA.

   iv. One member designated by the President from among the Vice Presidents, Deans and Directors or their assistants.

3. Committee on Academic Standing

a. Functions of the Committee on Academic Standing:

   i. Formulate policy regarding maintenance of matriculation, grading structure, satisfaction of requirements for degrees, diplomas and certificates, attendance, and advanced standing.

   ii. Adjudicate and take final action on student appeals.

b. Membership of the Committee on Academic Standing:

   i. The Vice President or a representative from the Office of the Vice President of Academic Affairs.

   ii. One faculty member elected by and from each department.
iii. The Registrar who shall act as Executive Secretary of the Committee.

iv. Five students: two elected by and from the Student Government Association; three who are not members of the Student Government Association to be elected by the Student Government Association from the student body.

4. Committee on Curriculum

a. Functions of the Committee on Curriculum:

i. Establish and evaluate curricular requirements for the degrees and certificates awarded by the Faculty.

ii. Evaluate and approve new courses and curricula and revisions of courses and curricula currently offered by the College.

iii. Approve and evaluate all new programs to be offered by the College.

iv. Assemble information on all courses, both non-credit (remediation) and credit, and develop procedures for the evaluation of effectiveness of these courses.

b. Membership of the Committee on Curriculum:

i. The Vice President of Academic Affairs, or a representative from that Office.

ii. One representative to be elected by each department.

iii. The Registrar, or a representative of that Office.

iv. Four students: two elected by and from the Student Government Association; two who are not members of the Student Government Association elected by the Student Government Association from the student body.

5. Committee on Student Activities

a. Functions of the Committee on Student Activities:

i. Review and make recommendation to the Senate on policies and procedures for co-curricular activities, including approval of the charters of student organizations.

ii. Serve as the agency through which the College establishes and reviews rules of conduct and regulations in conformity with general requirements of Article XV of the Board of Trustees Bylaws.

iii. Authorize the use of the name of the College by student groups.


b. Membership of the Committee on Student Activities:

i. The Vice President of Student Development, or a representative from that office.

ii. The Director of Student Activities.

iii. The Director of Athletics.

iv. The Chairperson of the Student Government Association, the Vice President for
Inter-Organization Council (I.O.C.) clubs, and the Executive Officer for Legal and Legislative Affairs, or their respective designees from the SGA.

v. Two faculty members elected by and from the Faculty Council.

vi. Two students elected by the Student Government Association from the student body.

6. **Committee on Space, Facilities, and Physical Plant**

   a. Functions of the Committee on Space, Facilities, and Physical Plant:
      
      i. Serve as a resource regarding the preparation and implementation of the master plan.
      
      ii. Consult and advise regarding the allocation of space and facilities within the College.
      
      iii. Report to the Senate, at least once a semester, on matters pertaining to space and facilities.

   b. Membership of the Committee on Space, Facilities, and Physical Plant:
      
      i. The Campus Facilities Officer as a non-voting member.
      
      ii. The Vice President of Administration and Finance, or designee.
      
      iii. **Three (3) At-Large Faculty Members.**

   vi. Two (2) students elected by the Student Government Association.

H. **Standing Committees With Advisory Functions**

   1. **Committee on Instruction and Professional Development**
      
      a. Functions of the Committee on Instruction and Professional Development:
      
      i. Examine developments in the instructional process related to the improvements of instruction, and publicize such developments.
      
      ii. Conduct an annual survey of the faculty at the end of the Spring semester to determine areas of concern and problems that may be addressed by the committee.
      
      iii. Canvass students to determine problem areas in the instructional process which may be explored by the committee.
      
      iv. Distribute to the faculty information on issues relevant to college teaching, including bibliographies of materials available in the College library.
      
      v. Organize workshops dealing with various aspects of instruction, including new developments in teaching technology.
      
      vi. Consult and advise the Vice President of Academic Affairs on student evaluation of instruction in accordance with the policies of the Senate and the Board of Trustees of The City University of New York.
vii. Advise the Vice President of Academic Affairs on methods and procedures related to the improvement of instruction and the professional development of Instructional Staff.

b. Membership of the Committee on Instruction and Professional Development:

i. One faculty member elected by and from each department.

ii. Three students elected by the Student Government Association from the student body.

iii. The Vice President of Academic Affairs, or representative.

iv. The Vice President of Student Development or representative.

2. Committee on Community Events

a. Functions of the Committee on Community Events:

i. To serve as an advisory body for college events and activities.

ii. To liaison between the various college entities responsible for community relations and events.

iii. To help guide community outreach efforts and can advise faculty and staff on the creation of events.

b. Membership of the Committee on Community Events:

i. One representative from the Office of the President.

ii. Four members from the Instructional Staff: two elected by the Faculty Council; two appointed by the Executive Committee.

iii. Two student members to be elected by the Student Government Association from the student body.

iv. The Director of Administrative Services and Events Management, or designee, who shall serve without vote.

3. Committee on Vice Presidents and Deans

a. Functions of the Committee on Vice Presidents and Deans:

i. Consult with and advise the President on the appointment of persons holding Vice President’s and Dean's titles.

ii. Consult with the President concerning the criteria and the procedures to be used by the President in reviewing the performance of Vice Presidents and Deans and their offices.

b. Membership of the Committee on Vice Presidents and Deans:

i. The Chairperson of the Senate who shall serve as Chairperson of the Committee.

ii. Two members of the Faculty Council elected by the Faculty Council.
Four members elected by the Faculty Council from the Instructional Staff at-large

iii. Two members of the Instructional Staff appointed by the Executive Committee.

iv. Two members of the Student Government Association elected by the Student Government Association.

v. No person holding a Vice President’s or Dean’s title shall serve on this Committee.

4. Committee on Academic Freedom

a. Functions of the Committee on Academic Freedom:

i. The Committee on Academic Freedom studies, reports and makes recommendations to the Senate concerning any condition within or without the College which, in its judgment, may affect the academic freedom of the college community. Academic freedom is the freedom from duress or sanction aimed at suppressing the intellectual independence, free investigation, and unfettered communication by the academic community – including but not limited to members of the Instructional Staff, students, and guests.

b. Membership of the Committee on Academic Freedom:

i. The Chairperson of the Faculty Council.

ii. The President of the Student Government Association, or his/her designee.

iii. Five members of the Instructional Staff elected by the Faculty Council.

iv. Three members of the Student Government Association, elected by the Student Government Association.

v. One member designated by the President from among the Vice Presidents, Deans and Directors or their assistants.
II. THE STUDENT OMBUDSPERSON

A. Election of the Student Ombudsperson: The Senate shall nominate and elect a Student Ombudsperson (further referred to in this section as “the Ombudsperson”) from among the full-time tenured teaching faculty for a term of two years. In this election each student vote shall be weighted as three, each non-student vote as one.

B. Responsibilities of the Student Ombudsperson:

1. Serve the College as an exceptional channel of redress for students when the normal administrative channels do not adequately respond.

2. Receive, investigate, and attempt to resolve those student complaints that have not been resolved by the appropriate College agencies; in particular, complaints alleging unfairness, discourtesy, undue delay, or other malfunctioning in the process of the College.

3. Have access to all pertinent records; have the right to make inquiries of any member of the College community, and to receive full and complete answers; and maintain confidentiality.

4. Make a report at the end of each semester on the number and nature of cases handled to the President of the College and the Chairperson of the Senate without breaching confidentiality.
III. DEPARTMENTAL ORGANIZATION AND AFFAIRS

A. All full-time members of the Instructional Staff appointed in a department, including College Laboratory Technicians, shall have the right to vote on department matters, including the election of members of elected department committees, college committee representatives, and for Department Chairperson.

B. All adjunct Instructional Staff members appointed in a department shall have the privilege of the floor, and the right to participate without vote, in all discussions at department meetings.

C. There shall be five members of the Personnel and Budget Committee of each department, including the Department Chairperson. Departments shall elect one additional committee member for each fifteen full-time members above 40. The maximum membership of such committee shall be nine. An elected Alternate shall serve with vote in the absence of a regular member.

D. At the discretion of each department, and to the extent determined by the department, there may be student participation in department committees, except the Personnel and Budget Committee. Also at the discretion of the department, and the extent determined by the department, students may participate in the department meeting without vote.

E. All practices associated to divisions, including the election of division coordinators and divisional Personnel and Budget Committee votes recommending faculty for reappointment and promotion, shall be discontinued.

F. A vacancy in the position of department chairperson, to be filled by election for the unexpired portion of any term, shall be taken to have occurred when the sitting chairperson:

   a. Resigns or retires from or otherwise ceases to be employed in the post of departmental chairperson.

   b. Takes any leave of absence, regardless of duration or contractual status, including CUNY Fellowship Leave, or other academic, scholarly or professional leave, which removes them from full active service in the department as departmental chairperson.

   c. Assumes any administrative or other executive or directorial position within CUNY outside their academic department for which any form of compensation is given, including re-assigned time. This shall not include duties in any office of the College Senate.

   d. Takes any other form of leave for more than twenty continuous working days in any semester, or within such a leave period of cumulatively more than twenty working days, has returned to work as department chairperson for fewer than five continuous working days.
IV. THE COLLEGE PERSONNEL AND BUDGET COMMITTEE AND THE ACADEMIC REVIEW COMMITTEE

A. The College Personnel and Budget Committee

1. Functions of the College Personnel and Budget Committee:
   a. Make recommendations to the President with regard to the Instructional Staff serving in the instructional departments of the College concerning appointments, reappointments, reappointments with tenure, leaves of absence, fellowship leaves, promotions, salary adjustments, and appeals of actions on these matters, consistent with the College’s appeals procedure.
   b. Make recommendations to the President with regard to the annual tentative budget prepared by the President.
   c. Adopt and make known to the College community its procedures and calendar.

2. Membership of the College Personnel and Budget Committee:
   a. The President of the College, who shall preside.
   b. The Vice President of Academic Affairs, who shall preside in the absence of the President.
   c. The Chairpersons of all instructional departments.
   d. All other Vice Presidents of the College, who shall be members without vote.
   e. The Secretary of the Committee, who shall be designated by the President and shall serve without vote.

B. The Academic Review Committee

1. Functions of the Academic Review Committee:
   a. Review all recommendations made by the College Personnel and Budget Committee for reappointments, promotions, and tenure, and make recommendations to the President.

2. Membership of the Academic Review Committee:
   a. Three tenured Full Professors who are not members of the College Personnel and Budget Committee, elected by the Senate from the faculty at-large, and who do not hold excluded titles (i.e. Vice Presidents, Deans, Directors).
   b. Two tenured Full Professors who are not members of the College Personnel and Budget Committee, elected by the College Personnel and Budget Committee, and who do not hold excluded titles.
   c. One non-voting member of the College Personnel and Budget Committee, designated by the President, who shall serve without vote. It shall be the responsibility of the President’s designee to impartially relate the deliberations and outcome of the College Personnel and Budget Committee for the committee’s review.
V. PLENARY MEETINGS OF THE INSTRUCTIONAL STAFF, AND PLENARY MEETINGS OF THE STUDENT BODY

A. Plenary meetings of the Instructional Staff may be convened by:
   1. The President of the College.
   2. The Chairperson of the Senate.
   3. The Chairperson of the Faculty Council.
   4. The Senate Executive Committee, by majority vote.
   5. The Senate, by majority vote.
   6. Petition of ten percent (10%) of the Instructional Staff, one-half of whom shall be the holders of full-time lines, to one of the persons or bodies named above in this section, which persons or bodies shall be obliged to act on receipt of the petition.

B. Plenary meetings of the student body may be convened by:
   1. The President of the College.
   2. The Chairperson of the Senate.
   3. The President of the Student Government Association.
   4. The Executive Committee, by majority vote.
   5. The Senate, by majority vote.

C. Plenary meetings shall be held as soon as possible after the call for the meeting or the receipt of a petition. The notice and agenda for the meeting shall be communicated to each member of the Instructional Staff, or each student, as the case may be.

D. A quorum for the Instructional Staff meetings shall consist of one-third of the Instructional Staff, provided at least two-thirds of those present shall be holders of full-time lines.

E. A quorum for student meetings shall consist of ten percent (10%) of the student body.

F. Plenary meetings of the Instructional Staff shall be chaired by the Chairperson of the Senate.

G. Plenary meetings of the students shall be chaired by the President of the Student Government Association.

H. Plenary meetings provided for herein shall be empowered to make recommendations to the Senate on any matter within the Senate's jurisdiction. Such recommendations shall be considered by the Senate as matters of high priority on the agenda of the meeting which follows immediately upon the receipt of the recommendations by the Chairperson of the Senate.
VI. AMENDMENT OF THE GOVERNANCE PLAN

A. Initiation of Amendments: Amendment of the Governance Plan may be initiated by the Committee on Governance and Elections or by a majority vote of the Senate:

1. When proposed by the Committee on Governance and Elections, the proposed amendment must be approved by majority vote of the Senate in order to be submitted to referendum.

2. When the proposed amendment is initiated by the Senate, it shall be submitted to the Committee on Governance and Elections for its recommendations.

a. Within two months of submission to the Governance and Elections Committee, that committee shall provide its recommendations to the Senate in the form of a written report.

b. Within one month of receiving the recommendations of the Governance and Elections Committee, but no later than three months from the original submission to the Governance and Elections Committee, the proposed amendment shall be resubmitted to the Senate, where it must be approved by a majority of the Senate in order to be submitted to referendum.

c. Summer leave shall not count toward any time lines in this paragraph.

d. The Committee review shall constitute the fulfillment of the one-meeting advance notice prior to voting by the Senate.

B. Ratification

1. In order for an amendment to be ratified, at least 30% of the full-time Instructional Staff and 10% of the student body must participate in the vote. Ratification requires a majority vote of the participating faculty, and a majority vote of the participating students. Should the referendum fail to obtain the required participation, it will be ratified when the following conditions have been satisfied: a positive vote with the required participation of either the full-time Instructional Staff or the student body; and two-thirds vote of the Senate. All amendments must be approved by the Board of Trustees in order to be valid.
VII. NAMING AND RENAMING OF BUILDINGS OR FACILITIES

A. To name or rename any of the College’s buildings, parts of buildings, facilities, chairs, deanships, departments, or other college subdivisions, a motion must be made by an elected representative of any of the following legislative bodies:

1. Senate
2. Faculty Council
3. Student Government Association

B. A reasonable effort shall be made to obtain the consent of the Nominee, the Nominee’s Family, or the Executors of the Nominee’s Estate. The naming motion shall not be opposed by the Nominee, or the Family, or the Executors of the Nominee’s Estate.

C. A naming is generally designed to enhance teaching and research and is usually based upon the desire to:

1. Honor the exemplary character, scholarly distinction or distinguished service of an individual, or
2. Recognize a significant financial contribution to the college.

Such a motion must be approved by a 2/3 vote of the Senate.
VIII. COUNCIL OF CHAIRS

A. Function of the Council of Chairs:

1. Review issues and responsibilities relevant to the administration of the academic instructional departments.

2. Make recommendations to the President, College Senate, and Faculty Council regarding issues of procedure, policy or practice relevant to the administration of the academic instructional departments.

B. Membership of the Council of Chairs:

1. The Chairpersons of all Academic Instructional Departments and the Chief Librarian.