Agenda
Academic Senate Meeting
Date: Tuesday, May 10, 2016
Time: 3:10 p.m.
Location: Room M-136
I. Attendance
II. Consideration of the minutes from April 12, 2016 meeting (Attachment A)
III. Communications from:

- CUNY Board of Trustees (http://www2.cuny.edu/about/trustees/)
- President Diane B. Call (Attachment B)
- Senate Steering Committee Report (Attachment C)


## IV. ELECTIONS

a.) Elections of members of the Steering Committee - ELECTION
b.) Election of Parliamentarian - ELECTION
c.) Election of Senate Technology Officer - ELECTION
d.) Election of Members of Committee on Committees - ELECTION
V. List of Potential Graduates for June 3, 2016 (Attachment D) — RESOLUTION
VI. Monthly Reports of the Committees of the Academic Senate

- Committee on Committees - Monthly Report for April 2016 (Attachment E)
- Committee on Curriculum - Monthly Report for April 2016 (Attachments F and G) - RESOLUTION
- Committee on Environment, Quality of Life and Disability issues (Attachments H and I)
VII. Old Business
VIII. New Business
- Resolution Affirming Principles of the "Chicago Statement" (Attachment J) - RESOLUTION
- General Education Assessment Task Force Report (Attachment K) - RESOLUTION
- QCC Mission Statement (Attachment L) - RESOLUTION
- Steering Committee of the Academic Senate Special Subcommittee on Food Insecurity Report Update, May 10, 2016 (Attachment M)
- Technology 5-year Plan (Attachments N and O ) - RESOLUTION

Joel Kuszai, Secretary
Academic Senate Steering Committee

# Queensborough Community College The City University of New York 

## MINUTES

of the April 12, 2016
Academic Senate
President Diane Call called the seventh regularly scheduled meeting of the Academic Senate to order at 3:17 P.M.

## I. Attendance:

57 votes were recorded at the time attendance was taken; 62 members of the Academic Senate cast votes during the meeting.

Absentees: Rosemary Zins, Monica Trujillo, Isabella Lizzul, Georgina Colalillo, Anthony Kolios, Jannette Urciuoli, Charles Neuman, Simran Kaur, Lana Zinger, John Luby, Richard Tayson, Ricky Panayoty, JodiAnn Grant, Shriromani Sukhwa, Mariya Karisa Picache, Asif Mobin and Maryam Hira.

## II. Consideration of minutes of the March 8, 2016 meeting of the Academic Senate:

A motion was made, seconded, and adopted 54-0-0 to approve the March 8, 2016 minutes as presented (see Attachment A of the March 8, 2016 Agenda). Did not vote: David Humphries, Anne Marie Menendez, Gilmar Visoni, Franca Ferrari, Jose Osorio, Barbara Blake-Campbell, Eileen White, and Issac Ayisi.

## III. Communications from:

## 1. President Call

President Call referred to her written report (Attachment B of the April 12, 2016 Agenda.) For the full report, visit: http://www.qcc.cuny.edu/governance/academicsenate/docs/ay2015-16/April-
2016/Attachment-B PresidentsReport 4-12-16.pdf
An update on the BTECH high school was provided by principal Hoa Tu and Denise Ward.

## 2. Senate Steering Committee Report

Chair Dr. Peter Bales referred to the written report (Attachment C of the April 12, 2016 Agenda). For the full report, visit: http://www.qcc.cuny.edu/governance/academicsenate/docs/ay2015-16/April-2016/Attachment-C SteeringCommitteeReport April-2016.pdf

## IV. List of Graduates for January 2016 (Attachment E of the April 12, 2016 Agenda)

A motion was made, seconded, and adopted 57-0-0 to approve the list of graduates for January 2016 (see Attachment E of the April 12, 2016 Agenda). Did not vote: Anne Marie Menendez, Barbara Blake-Campbell, Mangala Tawde, Issac Ayisi and Tulasha Thapa.

## V. Monthly Reports of the Committees of the Academic Senate

1. Committee on Committees: Election of Committee Members (Attachment $G$ of the April 12, 2016 Agenda)

Chair of the Committee on Committees, David Sarno presented the slate for assignments to standing committees of the Academic Senate.

A motion was made, seconded, and adopted 60-0-0 to accept by a single ballot the entire slate of candidates presented by the Committee on Committees for service on Academic Senate standing committees (see Attachment G of the April 12, 2016 Agenda). Did not vote: Anne Marie Menendez and George Muchita.
2. Committee on Bylaws (Attachment F of the April 12, 2016 Agenda)

Chair Stephen Hammel presented a resolution to add at least one ceremonial occasion to the charge for the Committee on Ceremonial Occasions (Attachment F of the April 12, 2016 Agenda):
"The Senate should immediately to designate at least one official ceremonial occasion, such as graduation or other significant event and therefore promptly populate the membership of said Committee."

> A motion was made, seconded, and adopted $40-19-1$ to designate graduation as at least one significant event to be included on the charge for the Committee on Ceremonial Occasions (see Attachment F of the April 12,2016 Agenda). No votes: Diane Call, Paul Marchese, Liza Larios, Karen Steele, Denise Ward, Stuart Asser, Kathleen Villani, Jean Galvin, David Humphries, David Lieberman, Kip Montgomery, Bob Rogers, Georgia McGill, Shele Bannon, Kelly Ford, Regina Rochford, Eileen White, Julian Stark and Pedro Irigoyen. Abstention: Alexandra Tarasko. Did not vote: Edward Volchok and George Muchita.

## 3. Committee on Course and Standing (Attachment H of the April 12, 2016 Agenda)

Committee on Course and Standing Chair Nina Sarkar presented a resolution to change a grade policy in the Department of Nursing (Attachment H of the April 12, 2016 Agenda), which reads in part:
"The first C - or lower grade (not including a WU) that a student receives in any one nursing course will be changed to a NC (no credit) and will not be included in the calculation of the grade point average (GPA)."

> A motion was made, seconded, and adopted $53-1-0$ to change a grade policy in the Department of Nursing (see Attachment H of the April 12, 2016 Agenda). No vote: Pedro Irigoyen. Did not vote: Bob Rogers, Andrew Nguyen, Michael Cesarano, Lin Maan, Barbara Blake-Campbell, Eileen White, Ann Tulio, and George Muchita.

## 4. Committee on Curriculum (Attachment I of the April 12, 2016 Agenda)

## New Courses

DEPARTMENT OF HISTORY
HIST-203 Economic History of the Ancient World, HIST-204 Topics in Slavery, HIST-212 History of Piracy and the Sea, HIST-219 History of the Mediterranean, HIST-223 History of the Cold War, HIST-247: "History of the Modern Middle East, 1795-2011 and HIST-263 History of American Cities (Attachment I of the April 12, 2016 Agenda).

Senator Edmund Clingan asked unanimous consent to present seven courses (HIST-203, HIST-204, HIST-212, HIST-219, HIST-223, HIST-247 and HIST-263) for a single vote.

A motion was made, seconded, but failed 31-7-8 to approve HIST-203, HIST-204, HIST-212, HIST-219, HIST-223, HIST-247 and HIST-263 as new courses in the Department of History (Attachment I of the April 12, 2016 Agenda). No votes: Liza Larios, Karen Steele, Denise Ward, Stuart Asser, Kip Montgomery, Georgia McGill, Regina Rochford. Abstentions: Diane Call, Kathleen Villani, Michel Hodge, Bob Rogers, Joel Kuszai, Shele Bannon, Kelly Ford, Alexandra Tarasko. Did not vote: Laura Sabani, Andrea Salis, John Talbird, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma Fletcher-Anthony, Maan Lin, Barbara Blake-Campbell, Julia Carroll, Mangala Tawde, Eileen White, Julian Stark, Pedro Irigoyen, George Muchita and Tulasha Thapa.

## ENGINEERING TECHNOLOGY

ET-580 Object Oriented Programming (Attachment I of the April 12, 2016 Agenda).
A motion was made, seconded, and approved 44-1-1 to accept ET-580 Object Oriented Programming as a new course in the Department of Engineering Technology (Attachment I of the April 12, 2016 Agenda). No vote: Georgia McGill. Abstentions: Alexandra Tarasko. Did not vote: Aithne Bialo-Padin, Anne Marie Menendez, Gilmar Visoni, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma Fletcher-Anthony, Shele Bannon, Maan Lin, Barbara Blake-Campbell, Kelly Ford, Edmund Clingan, Mangala Tawde, Eileen White, George Muchita and Tulasha Thapa.

ET-585 Computer Architecture (Attachment I of the April 12, 2016 Agenda).
A motion was made, seconded, and approved 47-0-0 to accept ET-585 Computer Architecture as a new course in the Department of Engineering Technology (Attachment I of the April 12, 2016 Agenda). Did not vote: Aithne Bialo-Padin, Gilmar Visoni, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma Fletcher-Anthony, Shele Bannon, Maan Lin, Barbara Blake-Campbell, Kelly Ford, Edmund Clingan, Mangala Tawde, Eileen White, George Muchita and Tulasha Thapa.

DEPARTMENT OF ENGLISH
ENGL-205 Literary History (Attachment I of the April 12, 2016 Agenda).
A motion was made, seconded, and approved 48-0-0 to accept ENGL-205 Literary History as a new course in the Department of English (Attachment I of the April 12, 2016 Agenda). Did not vote: Aithne Bialo-Padin, David Lieberman, Gilmar Visoni, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma Fletcher-Anthony, Maan Lin, Barbara Blake-Campbell, Edmund Clingan, Mangala Tawde, Eileen White, George Muchita and Tulasha Thapa.

ENGL-206 Genre (Attachment I of the April 12, 2016 Agenda).
A motion was made, seconded, and approved 48-0-0 to accept ENGL-206 Genre as a new course in the Department of English (Attachment I of the April 12, 2016 Agenda). Did not vote: Aithne BialoPadin, Gilmar Visoni, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma FletcherAnthony, Shele Bannon, Maan Lin, Barbara Blake-Campbell, Kelly Ford, Edmund Clingan, Mangala Tawde, Eileen White, George Muchita and Tulasha Thapa.

ENGL-220 Introduction to Creative Writing (Attachment I of the April 12, 2016 Agenda).
A motion was made, seconded, and approved 49-0-0 to accept ENGL-220 Introduction to Creative Writing as a new course in the Department of English (Attachment I of the April 12, 2016 Agenda). Did not vote: Aithne Bialo-Padin, Gilmar Visoni, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma Fletcher-Anthony, Maan Lin, Barbara Blake-Campbell, Kelly Ford, Edmund Clingan, Mangala Tawde, Eileen White, George Muchita and Tulasha Thapa.

## Program Revision

Program revision for the A.S. in Engineering Science (Attachment I of the April 12, 2016 Agenda).
A motion was made, seconded, and approved 49-0-0 to changes to the A.S. in Engineering Science (Attachment I of the April 12, 2016 Agenda). Did not vote: Aithne Bialo-Padin, Gilmar Visoni, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma Fletcher-Anthony, Maan Lin, Barbara Blake-Campbell, Kelly Ford, Edmund Clingan, Mangala Tawde, Eileen White, George Muchita and Tulasha Thapa.

## VI. Old Business

The matter of the process of the April 2016 election of faculty to be nominated for service on the University-wide Common Core Review Committee (CCRC) was revisited by Steering Committee Chair Bales, who asked the senate to affirm the vote for the first subcommittee and revote the matter of the senate's selections for the second subcommittee.

The vote tally from Attachment A of the April 12, 2016 agenda:
Subcommittee One: "English Composition," "Creative Expression," World Cultures and Global Issues," and "U.S. Experience in its Diversity."

Beth Counihan (English) 47
Liisa Yonker (Speech \& Theater) 36
Larissa Honey (Social Sciences) 30
Helmut Loeffler (History) 22
A motion was made, seconded, and approved 46-1-0 to send forward the top three names as selected for Subcommittee One at the March 2016 meeting of the Academic Senate (see minutes in Attachment A of the April 12, 2016 agenda). No vote: Philip Pecorino. Did not vote: Aithne Bialo-Padin, Gilmar Visoni, Reuvain Zahavy, Andrew Nguyen, Michael Cesarano, Wilma Fletcher-Anthony, Jose Osorio, Maan Lin, Barbara Blake-Campbell, Kelly Ford, Edmund Clingan, Mangala Tawde, Eileen White, Pedro Irigoyen, George Muchita and Tulasha Thapa.

According to Chair Bales, inconsistencies in how nominations were made in the voting for Subcommittee Two at the March 2016 meeting of the Academic Senate require that the Senate revote to determine its nominations for the CCRC Subcommittee Two.

The vote tally from Attachment A of the April 12, 2016 agenda:
Subcommittee Two: "Mathematical and Quantitative Reasoning," "Life and Physical Sciences," "Scientific World," and "Individual and Society."

> Todd Holden (Physics) 37
> Michael Guy (Math) 35
> Eva Goldhammer (Social Sciences) 34
> Nathan Chao (Eng. Technology) 28

Senator Joe Bertorelli, Chair of the Department of Mathematics and Computer Science, nominated Patrick Wallach to replace Michael Guy and electronic clickers were used to determine three names to send forward as nominations for the CCRC.

The results are as follows:

Patrick Wallach 17
Todd Holden 13
Eva Goldhammer 11
Chao 6

Fifteen members of the senate had left the meeting or did not vote.
VII. New Business

NONE.

The meeting was adjourned at $4: 57 \mathrm{pm}$
Respectfully Submitted,
Joel Kuszai
Secretary, Steering Committee of the Academic Senate

# President's Report 

to the

Academic Senate

May 10, 2016

## Enrollment Update

The Enrollment Management team activities are fully focused on reaching our new and continuing enrollment targets for Fall 2016. While the University as a whole is showing a modest decline in applications, applications to QCC reflect a modest increase in both Freshmen (+1000 applications) and (+100 applications) Transfer pools. Admissions continues to ramp up recruitment and relationship-building activities in Queens and Nassau County. This Spring, our recruitment team conducted visits to every Nassau County high school, followed by a personalized email to the high school counselor. Enrollment Management is working closely with ASAP, College Discovery, CUNY Start and USIP to coordinate outreach to students with the goal of enrolling them in the best option.

The Office of New Student Engagement is currently conducting outreach to new incoming students via email and phone calls. A calling campaign has begun targeting various populations of applicants including ASAP or CD eligible students. Additionally, during the month of April the office has hosted two 'New Student and Family Welcome Sessions' with a combined attendance of over 300 attendees. Staff and Faculty from Enrollment Management, Admissions, Financial Aid, Bursar, ASAP, CD, Undergraduate Research, The Honors Program, CUNY START and Testing Services provided valuable information during the interactive Welcome Sessions.

## Advisement Updates

Advisement for new and continuing students is well underway. Academy Advisers are outreaching to their continuing student caseload through Starfish and phone. These efforts have been supplemented with direct mail, tiger mail blasts, and social and digital media campaigns. Please encourage students that are required to meet with an academic adviser to do so as soon as possible. New Student Advisement and Registration began on April 12, across all Academies. Registration-ready students are being invited to advisement through Hobsons. Extra appointments were opened up during NYC public school spring break. Early and personalized outreach to newly admitted students is being conducted in coordination with Admissions, New Student Engagement and the Office of Testing. Ongoing training and staff development for all advisers is a department priority. Adviser meetings with Department Chairpersons are scheduled for May 5 and May 19 ${ }^{\text {th }}$. If you
would like to update/speak to the advisers, please contact the Director of Academy Advisement, Frantz Alcindor to schedule a convenient time.

## New Accreditations

- Queensborough's list of accredited programs has just become one program longer, with more to come. After two years of concerted effort, the Department of Speech Communication and Theatre Arts has been notified that the new A.S. in Theatre has been accredited and granted associate membership in the National Association of Schools of Theatre (NAST). The commission commended the institution "for its effective attention to the matters of degree title" and "guidelines for promotion and tenure," among other areas. The department's next comprehensive review will be conducted in the 2020-21 academic year. Congratulations to the Theatre department on their newly accredited program!
- The Art and Design department is seeking accreditation from the National Association of Schools of Art and Design (NASAD). The department's self-study, which was submitted in February, seeks accreditation for the new A.S. in Art, the A.S. in Digital Art and Design, and the A.S. in Gallery and Museum Studies. A site visit by an accreditation team took place on April 17-20; during the visit, the team commended the department for the quality of its self-study. The team report should be completed by early summer, and the NASAD commission will meet in October to decide on the prospective accreditations of all applying institutions.
- Finally, the Dance program, in the Department of Health, Physical Education, and Dance, and the Music department will be completing self-studies of their own in the fall. Dance is seeking accreditation for the new A.S. in Dance from the National Association of Schools of Dance (NASD), and Music is seeking accreditation for the new A.S. in Music and the A.A.S. in Music Production from the National Association of Schools of Music (NASM). Both departments will have site visits in spring 2017. We look forward to hearing the news that Art and Design, Dance, and Music have joined Theatre in the ranks of accredited programs in the visual and performing arts.


## FY 17 Budget Update

QCC's annual Resource Planning \& Allocation Process for FY 17 is underway. Each academic department and administrative division was provided with historical information and templates to assist in preparing budget requests for the coming academic year. In keeping with our practices, this process is designed to ensure our resources support our highest priorities, as reflected in the Strategic Plan developed by the College Advisory Planning Committee. Through the respective Vice President, each department has submited budget request proposals for new funding related to strategic priorities and operational needs. These proposals will be reviewed and prioritized by the Cabinet. The Budget Subcommittee of the Faculty P\&B Committee and the Academic Senate Budget Advisory Committee will be consulted for their funding recommendations prior to our final expenditure plan for FY 17.

## General Education Assessment Task Force

The General Education Assessment Task Force has sent its year-end report to the Curriculum Committee, for transmission to the Senate, and to the Assessment Committee. The report includes findings from the faculty survey (December- January) and the faculty forum in March, and includes recommendations and next steps. The Task Force is conducting the spring assessment project, collecting artifacts from courses across the disciplines, to be scored against the task force-written rubrics during June. Rubrics include Writing, Analytical Reasoning, Information Management, and Quantitative Reasoning. Some artifacts (especially those from courses participating in the WI initiative) will be loaded into Digication, the college's ePortfolio platform. The majority will be loaded into a new, streamlined software for assessment, Taskstream Aqua. The new software will allow for easier uploading of artifacts and easier scoring, and provides data reports for assessment. The assessment process this spring has received IRB approval, so participating faculty may use the aggregated results from their particular class sections for their own research purposes. Artifact scoring is scheduled for the weeks of June 13 and 20.

## 2016-20 Technology Plan

The 2016-20 Technology Plan Committee has submitted its final report to the Senate for its review and approval on May $10^{\text {th }}$. I would like to thank the Committee for all their extraordinary efforts and, in particular, thank all of the campus community and our students who contributed to the plan with input and suggestions.

## Student Honors

- On Friday, April $15^{\text {th }}$, several QCC students competed in the $16^{\text {th }}$ Annual Long Island Subsection of the New York Section of the American Chemical Society's Chemistry Challenge. We are proud to acknowledge that Queensborough won the Gold award in the 2-year College category. I wish to acknowledge Mr. Tao Hong, Ms. Jane Jiang and Ms. Yueli Chen for their hard work and triumphant victory.
- 15 QCC students have returned from their study abroad trip as part of the 2016 Salzburg Global Seminar Study Abroad Program. I wish to thank faculty advisors Dr. Franca Ferrari and Mr. Sebastian Murolo for accompanying the students on their excursion.
- Four (4) QCC students have been selected as recipients of the Friends of Veterans New York Award. Ms. Ana Zarate, Mr. Derek Floyd, Mr. Lianghua Jiang, and Mr. Hooman Arya were each awarded $\$ 500$ in tuition assistance to continuing their education. Each of the above-mentioned students has served respectively in the Armed Forces and are anticipated to have completed their degree requirements for graduation at the conclusion of the academic year. Friends of Veterans New York is a non-profit organization, with a main objective of helping to end homelessness among the New York Veterans population. The organization also assists with other projects such as financial aid for veterans' educational expenses.
- The Lambda Sigma Chapter of the Phi Theta Kappa International Honor Society held their annual Induction Ceremony on Monday, May $9^{\text {th }}$ in the Student Union Lounge.

Over 60+ students were inducted into this prestigious collective of bright academic scholars. I wish to thank Dr. Emily Tai and Dr. Paris Svoronos for all of their hard work with the inductees during the academic year and Mercy College for serving as this year's official sponsor of the ceremony.

- QCC students Mr. Bobby Lopez and Mr. Ricky Panayoty have been selected as honorees for CUNY Vice Chancellor's Excellence in Leadership Award. Both students have displayed outstanding leadership in service to the College, community, and the University through scholastic and services-related activities during the academic year and as such, will be acknowledged by Dr. Frank Sanchez, CUNY Vice Chancellor of Student Affairs, during the award ceremony which will be held at the Great Hall of The City College of New York on Friday, May $13^{\text {th }}$.
- In a tribute to student talent and faculty commitment to student success, in and out of the classroom, three Queensborough students took $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ prize in the 2016 David A. Garfinkel Essay Scholarship: You, the Juror. The Essay Contest is sponsored by the Historical Society of the New York Courts. The following student winners received prizes of $\$ 1,500, \$ 1,000$ and $\$ 500$, respectively.

Daniel Savitz
1st Prize Winner
Faculty Advisor: Prof. Leslie Francis
Wai Shan Ng
2nd Prize Winner
Faculty Advisor: Prof. Leslie Francis
Mavis Duncan-Dyer
3rd Prize Winner
Faculty Advisor: Prof. Theodore Rosen
For more information about the Society or the Essay Scholarship, visit http://www.courts.state.ny.us/history/.

## Faculty Honors

- We are pleased to announce that the Board of the CUNY Academy of the Humanities and Sciences has selected Dr. Frank Jacobs of the History Department for the Henry Wasser Award. The Henry Wasser Awards are given to outstanding CUNY Assistant Professors based on nominations provided by members of the Academy.
- The Speech and Theatre Department has received full accreditation by the National Association of Schools of Theatre (NAST). This makes Queensborough one of eight community colleges nationally to receive such an accreditation, and the only community college in New York. We are the first program in all of CUNY and the only public college in the metropolitan area to be accredited.


## Financial Aid/Scholarships/Grants

- The 2016-2017 Federal Application for Federal Student Aid (FAFSA) is currently available on-line for students and families to begin the application process. Although the priority filing deadline was Tuesday, April 19 ${ }^{\text {th }}$, please encourage students who haven't already completed it to do so as soon as possible to ensure timely processing and disbursement of their financial aid award packages for the upcoming 2016-2017 academic year.
- The Carroll and Milton Petrie Foundation awarded QCC a three-year grant, of up to $\$ 100,000$ per year, for three years, to provide one-time, emergency grants to students in good standing with short-term financial emergencies to enable them to remain in school, rather than being forced to leave or drop out. The college completed the second year of the grant on December 31, 2015 and has successfully awarded $\$ 200,000$ to Queensborough students in need. As of April 27, 2016 the college has awarded $\$ 35,500$ for the third year of the grant which runs through December 31, 2016. Ms. Veronica Lukas, Executive Director of Student Financial Services, will be sending periodic e-mail reminders to the college community outlining the grant eligibility and encouraging faculty and staff to refer students to apply. Ms. Karen O'Sullivan, Associate Director of Student Financial Services, will serve as the Grants Manager for this campus initiative. Please refer students with short-term financial emergencies to Ms. O'Sullivan at your earliest convenience. Additional information can be found at www.qcc.cuny.edu/scholarships
- The CUNY Thomas Tam is currently available for interested students to apply. The Scholarship awards $\$ 1,000$ to an individual qualified undergraduate student that is currently enrolled at any CUNY college, Asian or non-Asian, who has demonstrated creativity in the communication of the concerns of the Asian American community in areas such as health, education, culture, media and advocacy. Additional information on this scholarship can be found at http://www.qcc.cuny.edu/scholarships/.
- The Finch Foundation Scholarship is still available for eligible students to apply. The $\$ 5000$ scholarship is available to female community college students over the age of 22 attending college in the state of New York, New Jersey, or Connecticut. Additional information can be found at http://finchcollege.org/newscholarships.html.
- Please encourage our students to avail themselves of the valuable and free resources through the QCC Single Stop Program. A list of the services provided include (but are not limited to) financial benefits screening, financial counseling, legal assistance, tax preparation services and more. Additional information can be found on their website at http://www.qcc.cuny.edu/singlestop/index.html.


## Grants Report

- PSC-CUNY Awards - Round 47- The College received results from the most recent round of PSC CUNY applications - QCC had 62 applications from Faculty and have 35 confirmed awards. We are still awaiting results on 1 Enhanced proposal, which will be
announced in May. PSC-CUNY Round 47 Awards by department \& Principal Investigator:
Art \& Design - Prof. Anissa Mack, Dr. Kathleen Wentrack
Biological Sciences \& Geology - Dr. Peter Novick, Dr. Amos Orlofsky, Dr. Regina Sullivan
Chemistry - Dr. Tirandai Hemraj-Benny, Dr. Sasan Karimi, Dr. Sujun Wei
English - Dr. Kathleen Alves, Dr. Aliza Atik, Prof. Noelia Diaz, Dr. Robin Ford, Dr. George Fragopoulos, Dr. Matthew Lau, Dr. Robert McAlear, Dr. William J. Ryan, Dr. Angela Ridinger-Dottrman, Dr. Mark Schiebe, Dr. John Talbird, Dr. Meghmala Tarafdar, Dr. Elizabeth Toohey, Dr. Agnieszka Tuszynska
Foreign Languages \& Literature - Dr. Aranzazu Borrachero, Dr. Maurizio Santoro
Mathematics \& Computer Science - Dr. Jonathan Funk, Dr. Azita Mayeli, Dr. David Pham, Dr. Fei Ye
Music - Dr. Mirma Lekic
- CETL has issued a call for proposals for its Pedagogical Research Challenge Awards program. Faculty interested in conducting pedagogical research can receive a grant for up to $\$ 15,000$. Applications are due May 6th.


## BTECH

The workplace experience for BTECH students at SAP North America in Newtown Square, PA. was a success. Prior to the event, BTECH students competed for thirty-seven available spots on the tour. They had to present an argument for why they wanted to go; what they hoped to learn from the visit; and define a problem they wanted solved through a Design Thinking exercise. The six hour day started with a tour of the green facility, one which has attained Platinum Status awards. They met with representatives from various business lines including pre-sales, sales, consulting, customer service, business analysis, product design and development, implementation and training. SAP employees talked through the SAP Customer Experience Framework including identification of a problem, problem resolution, development, and resolution. The representatives talked in layman's terms and gave relevant examples. Students saw SAP's Design Laboratory and work on new technologies including those supporting virtual reality through oculus solutions. They also witnessed SAP's 24/7 Worldwide Command Center. And lastly they participated in a Design Thinking Challenge in which they presented problems to be solved.

The main problem students wanted solved was: How to raise motivation levels of BTECH students to achieve at high levels and to foster pride in advancement. One of the problem resolutions was to provide various incentives that were tied directly to student interests. Engaged in the very professional Design Thinking process taught students how to analyze and dissect a problem and reach possible alternative solutions. For all the students, this was the first time they had ever experienced or been on a corporate campus. Another exciting development at BTECH is the start of the design FAB Lab --- a Fabrication Laboratory - one that uses various technologies to solve everyday problems i.e., an incubator of design solutions through technology.

## Upcoming Events

- The Department of Art \& Design's will open its eighth annual Juried Student Exhibition on May $5^{\text {th }}$ at 5 pm in the QCC Art Gallery and will be on view through June $12^{\text {th }}$. This
exhibition features select works from Queensborough Community College's students majoring in various Art and Design mediums.
- The $\mathbf{1 2}^{\text {th }}$ Honors Conference will be held on Friday, May $6^{\text {th }}$ starting at 11 am in the Medical Arts Building. Students will present their scholarly work, and share their research findings in their disciplines, including physics, biology, English, mathematics, the arts and foreign languages.
- An African Art exhibit, Spirit \& Tradition - Vessels from Africa, opens on May $10^{\text {th }}$ at 5 pm and runs through June $12^{\text {th }}$. This QCC Art Gallery exhibition will acquaint the audience with the techniques used to create traditional ceramic vessels as well as their purpose within specific African cultures.
- The CSTEP Program will be holding its annual award ceremony on Wednesday, May $11^{\text {th }}$ at 12:00 p.m. in the Oakland Dining Room to recognize their students for the academic achievements as well as research, internship, and community service participation during the academic year.
- To support the Kupferberg Holocaust Resource Center's newest original exhibition, Producing Silence: Hollywood, The Holocaust, and the Jews, a screening of the 1941 film, The Great Dictator, will be shown on Wednesday, May $11^{\text {th }}$ at $12: 10 \mathrm{pm}$.
- The Chancellor is hosting the annual CUNY grants reception on May $12^{\text {th }}$ to recognize recipients of institutional grants. The Chancellor holds a similar reception in the fall to honor academic research grants. Queensborough's honorees are:

1) Mr. Jeff Chen, Director of Workforce and Professional Development, Continuing Education for the ConEdison STEM Careers Grant;
2) Dr. Joan Petersen and Dr. Simran Kaur, from Biological Sciences and Geology for the STEP Grant; and
3) Ms. Marie Francesca Berrouet, Director of the CSTEP Grant.

- The KHRCA will host its Spring 2016 Internship Showcase on Wednesday May 18th, 2016 at $12: 10 \mathrm{pm}$. Students from the three different internship programs will speak about their experiences in the program, what they learned, how it impacted them, and what actions they will take in the future based on lessons learned from the Holocaust.
- Queensborough's 55th Commencement Exercises will be held on Friday, June 3, 2016, led by Professor Anne Marie Menendez as Grand Marshal. Faculty members and HEOs are encouraged to participate in this event, which is so very meaningful to our graduates and their families. For further information about this year's ceremony, please visit the Commencement webpage at http://www.qcc.cuny.edu/commencement/index.html.


# STEERING COMMITTEE OF THE ACADEMIC SENATE 

## QUEENSBOROUGH COMMUNITY COLLEGE, CUNY

## MONTHLY REPORT

May 10, 2016
All Senate committees are fully staffed and functioning smoothly. The Steering Committee met with all the Senate committee chairs on April 20th and discussed numerous issues including formatting for committee reports and resolutions, making changes to the Senate's web pages, procedures for electing new committee chairs, and the submission of annual reports. In addition, we would like to welcome all newly elected senators: Joanne Chang, Margot Edlin, Urszula Golebiewska, Mi-Seon Kim, Craig Weber and Peter Irigoyen from English, who joins his father Pedro from Chemistry in representing the CLTs.

Elections for positions on the Academic Senate Steering Committee will be conducted at this afternoon's meeting.

The Steering Committee would like to thank Vice President Faulkner and all the members of the Technology Plan Committee for their efforts in preparing the 2016-2020 Technology Plan. The plan was included in your agenda materials and the Steering Committee has placed it on today's agenda for approval by the full Senate.

The Steering Committee in support of Queensborough's Lambda Sigma Chapter of Phi Theta Kappa, acting in concert with co-sponsoring Student Association Clubs, and the Subcommittee on Food Insecurity of the Academic Senate, would like to invite you to consider contributing non-perishable foods to a Food Drive to stock a new food pantry we will shortly be inaugurating at Queensborough Community College. Immediately after today's Senate meeting there will be a ribbon cutting ceremony to officially open the Lucille A. Bova Food Pantry on the second floor of the Library building. All are invited to attend.

At the April meeting of the Senate, a motion was made, seconded, and approved 54-3-2 to have the Steering Committee draft language for a communication to Chancellor Milliken about the Common Core Review Committee (CCRC) process for creating subcommittees. That letter, which appears below, is submitted for Senate approval. Steering Committee members will all sign the letter and any Senator who wishes to add their signature is welcome to do so.

We, the undersigned, are writing about the selection process for members of the CUNY Common Core Curriculum Committee (CCRC). Your email of February 18, 2016 to our provost stated that "faculty members who serve on the CCRC are now chosen through the college governance process." On October 14, 2014, our Academic Senate elected one member each to the three proposed CCRC subcommittees. At our Senate meeting of March 8, 2016, we did likewise and elected one member each to serve on what are now two proposed CCRC subcommittees. At that meeting, the Senate noted your request for three names for each of the two subcommittees, but it did not feel that a need to "balance the disciplines" was a compelling reason and rejected that premise.

Subsequently, you asked our Provost to request that the Senate reconsider its position. At our meeting on April 11, 2016, the Senate did so and, recognizing the need for Queesborough Community College to be represented on these important CCRC subcommittees, voted to send three names from separate disciplines forward for both subcommittees.

Please be advised that in future requests for University-wide committees, the QCC Academic Senate would like to be on the record as favoring increased discretion for shared governance, i.e., a request for an exact number of members on a given committee rather than a larger number to be winnowed by the CUNY Administration.

Sincerely,

Recently, the University Faculty Senate (UFS) passed a resolution affirming the principles of the Chicago Statement on freedom of expression (formally, the Report of the Committee on Freedom of Expression at the University of Chicago). The UFS has requested that all College Senates in CUNY follow suit. It is hoped that the two task forces created by Chancellor Milliken-one on expressive activities and another on civility-will take the UFS and individual College Senates' support of the Chicago Statement into account when crafting their policies. The Steering Committee will present a resolution to that effect this afternoon.

The Steering Committee would like to express their appreciation to Provost Marchese and all the members of the Mission Statement Committee for their work in creating a new mission statement for Queensborough Community College. The Senate is asked to approve the following:

Queensborough Community College is dedicated to academic excellence and rigor, and to providing an affordable high quality education to college, pre-college and lifelong learners. Our faculty and staff are committed to the holistic development of today's students in a nurturing and diverse environment that prepares them to be successful in a dynamic workforce. The College affirms its open admissions policy, and its strong support of intellectual inquiry, global awareness, civic responsibility, as well as cultural and artistic appreciation.

## Queensborough Community College

## Candidates for Spring 2016 Graduation (1353)

| First Name | MN | Last Name | Acad Plan |
| :---: | :---: | :---: | :---: |
| Abdul |  | Abdallah | LA-AA |
| Taaj | A | Abdullah | LA-AA |
| Matthew | A | Abrams | LS-AS |
| Chabely |  | Abreu | LA-AA |
| Eldy | J | Abreu | BT-AS |
| Gabriel |  | Abreu | CJ-AS |
| Maria |  | Abreu | BT-AS |
| Edwin | A | Abrew | LS-AS |
| Elizabeth |  | Acevedo | LS-AS |
| John | J | Acevedo | DD-AAS |
| Patricia | M | Acosta Almonte | LA-AA |
| Emani |  | Adams | LA-AA |
| Fariza |  | Adeen | LA-AA |
| Fabiola | R | Adrianzen | MA-AAS |
| Wajahat |  | Aftab | BA-AAS |
| Krysten |  | Agard | LA-AA |
| Antonio |  | Agro | LA-AA |
| Julyana |  | Agustin | LA-AA |
| Ariful |  | Ahad | BT-AS |
| Nerissa | N | Ahmad | LA-AA |
| Farhana |  | Ahmed | LE-AA |
| Kamrun | N | Ahmed | BS-AAS |
| Zawad | E | Ahmed | LA-AA |
| Olusegun |  | Akanji | LA-AA |
| Joselyn | C | Alao | BT-AS |
| Vanessa |  | Alba | LA-AA |
| Gabriele | A | Albrecht | LA-AA |
| Nicholas | S | Albrecht | LA-AA |
| Francisco |  | Alejo | CT-AAS |
| Naicke | v | Alexandre | LA-AA |
| Jean Gardy |  | Alexis | HS-AS |
| Kenji | L | Alford | LA-AA |
| Khadeza |  | Alim | LA-AA |
| Aelita |  | Allayeva | HS-AS |
| Giovanni |  | Aller | LA-AA |
| Christine |  | Allred | CJ-AS |
| Taylor |  | Ally | BT-AS |
| Jose |  | Almonte | CJ-AS |
| Bryan | R | Alonzo | LA-AA |


| Guylsda |  | Alphonse | NS-AAS |
| :---: | :---: | :---: | :---: |
| Anais | 1 | Altamirano | LE-AA |
| Beyanka |  | Altema | AF-AS |
| Andrea | V | Alva-Araya | LA-AA |
| Matthew |  | Aman | LA-AA |
| Maria |  | Amay | CJ-AS |
| Alina |  | Amin | BY-AS |
| Brandon | S | Anderson | BM-AAS |
| Milynda |  | Andino | BT-AS |
| Fernanda | J | Andrade | LS-AS |
| Ricardo |  | Anez | LA-AA |
| Marie Jeanne C |  | Angrand | LS-AS |
| Princess | T | Antenor | LE-AA |
| Saeed |  | Anwar | BT-AS |
| Jonathan |  | Apana | BA-AAS |
| Krystal | M | Aponte | LA-AA |
| Louis |  | Aponte | TX-AAS |
| Gabrielle |  | Arce | BM-AAS |
| Juan Javier | A | Arcenas | PE-AS |
| Adrienne | B | Arcienega | LA-AA |
| Diana | A | Arevalo | LS-AS |
| Antonio |  | Argento | LA-AA |
| Ana | L | Arias | BT-AS |
| David | M | Arias | LS-AS |
| Diego | G | Arias | ME-AAS |
| Paula |  | Arias | LA-AA |
| Joseph | C | Arneaud | LA-AA |
| Rena |  | Aronov | LA-AA |
| Julia |  | Aronova | LA-AA |
| Beverly |  | Arrue | CJ-AS |
| Zoi |  | Arvanitidis | LE-AA |
| Carol | 0 | Asaro | LA-AA |
| Aisha |  | Ashfaq | LS-AS |
| Kevin |  | Astudillo | LA-AA |
| Michelle |  | Auquilla | LE-AA |
| Grace | A | Awosogba | LA-AA |
| Bolaji |  | Ayorinde | BT-AS |
| Maryia |  | Azhar | HS-AS |
| Ahmad | J | Azizi | LA-AA |
| Aliza |  | Bababekov | BT-AS |
| Adam |  | Babat | DA-AS |
| Daniella | 0 | Babayeva | NS-AAS |
| Martina |  | Bacarella | LA-AA |


| Daryl | C | Bailey | CJ-AS |
| :---: | :---: | :---: | :---: |
| Oneka | A | Baker | LA-AA |
| Althea | S | Baksh | LS-AS |
| Jaraad |  | Baksh | LA-AA |
| Lisa |  | Balcacer | LA-AA |
| Moohanie | D | Balkaran | LA-AA |
| Shari | D | Balkaran | LA-AA |
| Anisha |  | Baptiste | CJ-AS |
| Monika |  | Barajas | HS-AS |
| Nicholas | D | Barbery | FA-AS |
| Calvin | T | Barnwell | LA-AA |
| Abraham | A | Barrios | LA-AA |
| Alton | C | Bartley | LA-AA |
| Ashley | N | Barzvi | LE-AA |
| Clinton | S | Bascom | ME-AAS |
| Sukhtej | S | Bassi | CJ-AS |
| Isaias |  | Batista | CJ-AS |
| Leonel |  | Batista | BT-AS |
| David |  | Baum | LA-AA |
| Sophia |  | Beaubrun | LA-AA |
| Kiyante |  | Beaugris | NS-AAS |
| Tori | N | Bebbs | LA-AA |
| Alexis |  | Beck | BT-AS |
| Kyerra | C | Beckwith | DP-AAS |
| Leonora |  | Bediner | CJ-AS |
| Steven |  | Bedoya | EN-CERT |
| Joevin | J | Bedward | BM-AAS |
| Megan | V | Belanich | MA-AAS |
| Kevin |  | Benitez | CJ-AS |
| Nicole | T | Benjamin | LA-AA |
| Dominque |  | Bennett | LA-AA |
| Marsha |  | Bercy | LA-AA |
| Genesis |  | Bermudez | LA-AA |
| Veronica |  | Bermudez | LA-AA |
| Carlos | A | Betancur | CJ-AS |
| Zafeer |  | Bhatti | DP-AAS |
| Reshma |  | Bheir | BM-AAS |
| Ruposri |  | Bhowmic | CT-AAS |
| Marcello |  | Biasiolo | DA-AS |
| Adam | M | Binder | LA-AA |
| Shantel | S | Bissoon | BT-AS |
| Abhishek |  | Biswas | LA-AA |
| Hazelanne |  | Blackette | HS-AS |


| Tassoula |  | Blake-Cameron | CJ-AS |
| :---: | :---: | :---: | :---: |
| Wendy | L | Blanco | HS-AS |
| Jonathan | J | Blandon | CJ-AS |
| Andrew | C | Bloch | LA-AA |
| Viktoria |  | Blumenfeld | MA-AAS |
| Maria Laura |  | Bobadilla | CJ-AS |
| Joseph | P | Boccia | FA-AS |
| Vanja |  | Bojic | BT-AS |
| Tamziduzzaman |  | Bokshi | BT-AS |
| Kevin |  | Bongiovanni | LA-AA |
| Vesean |  | Boodram | MT-AAS |
| Cherimonee | B | Boone | MA-AAS |
| Sebastien | T | Bordes | BT-AS |
| Aisha | T | Boston | LA-AA |
| Kathy |  | Botticello | TX-AAS |
| Denise |  | Boursiquot | CJ-AS |
| Bledar |  | Brahimi | BT-AS |
| Maria | C | Brango | LA-AA |
| Kate | A | Brennan | NS-AAS |
| Sandro | A | Brevetti | LA-AA |
| Michael |  | Brewster | FA-AS |
| Frederick | M | Brid | TX-AAS |
| Melanie | L | Brodie | LA-AA |
| James | F | Brooks-Reid | LA-AA |
| Pamela |  | Brown | LA-AA |
| Marcel |  | Brummell | LA-AA |
| Amanda |  | Budhram | NH-AAS |
| Satie |  | Bunsee | HS-AS |
| Daomi |  | Burch | LA-AA |
| Paul | A | Burns | LA-AA |
| Saidiann | T | Burton | BT-AS |
| Crystal |  | Butler | NS-AAS |
| Ernest |  | Butler | ME-AAS |
| Patrick | B | Butler | LS-AS |
| Stephanie | D | Butler | NS-AAS |
| Nabila |  | Butt | LA-AA |
| Bianca | A | Caban | NS-AAS |
| Maillerline |  | Cabral-Joseph | NS-AAS |
| Jeremy | M | Cabrera | LA-AA |
| Jose |  | Cabrera | LA-AA |
| Deborah |  | Cadogan | FA-AS |
| Edwin | A | Cajiao | HS-AS |
| Rudelina |  | Calcano | CJ-AS |


| Jenna | M | Calchi | LA-AA |
| :---: | :---: | :---: | :---: |
| Laura |  | Calderon | CJ-AS |
| Roberto |  | Calderon | LS-AS |
| Dwayne | D | Calinda | CJ-AS |
| Bintou |  | Camara | LA-AA |
| Fallon |  | Campbell | LA-AA |
| Ligia | P | Campos | LA-AA |
| Nicole |  | Campos | BT-AS |
| Eric | S | Campoverde | HS-AS |
| Nicole | E | Cando | LE-AA |
| Katherine |  | Canela | LA-AA |
| Allison | C | Cantos | LA-AA |
| Yanwen |  | Cao | MA-AAS |
| Briana |  | Capo | LS-AS |
| Anthony | J | Caraballo | DA-AS |
| Solansh |  | Carbonel | CT-AAS |
| Katia | E | Cardenas | LA-AA |
| Miguel | A | Cardona | LS-AS |
| Jonathan | M | Carela | ET-AAS |
| Tiffany | B | Carhuaricra | MA-AAS |
| Rosa | 1 | Carias | LA-AA |
| Alexa | R | Carman | CJ-AS |
| Ada |  | Carnero | LA-AA |
| Samantha | D | Carpen | LA-AA |
| Andreina | M | Carrasco | LA-AA |
| Stephanie | M | Carrasco | MA-AAS |
| Andrea | C | Carriero | LA-AA |
| Yoan | F | Carrillo | BA-AAS |
| Taneshia | E | Carrington | LA-AA |
| Brandon |  | Carroll | FA-AS |
| Amali | R | Carvajal | FA-AS |
| Olivier |  | Casimir | LA-AA |
| Jorge | L | Castillo | DA-AS |
| Lenin | C | Castillo | DA-AS |
| Raquel |  | Castillo | LA-AA |
| Tommy |  | Castro | LA-AA |
| Faride |  | Castro-Iturry | LA-AA |
| Guiliana | M | Catalfamo | LE-AA |
| Jorge | L | Catano | LA-AA |
| Tisha |  | Causeway | LA-AA |
| Nadine |  | Cavanaugh | LA-AA |
| Jessica |  | Cedano | LA-AA |
| Joshua |  | Cercado | BT-AS |


| Jasmine |  | Ceron Reyes | LA-AA |
| :---: | :---: | :---: | :---: |
| Jessica | M | Cerrato | HS-AS |
| Caroline | M | Cesar | LA-AA |
| Anny |  | Cevallos | LE-AA |
| Sandy | P | Cevallos | LA-AA |
| Fredric |  | Chaleff | TX-AAS |
| Manuela |  | Chalen | LA-AA |
| Michael | L | Champion | LA-AA |
| Hong |  | Chan | HS-AS |
| Kevin |  | Chan | EN-CERT |
| Vicky | C | Chan | LA-AA |
| Benjamin |  | Chang | BT-AS |
| Joseph | R | Charles-Pierre | LA-AA |
| Sonam |  | Chauhan | LS-AS |
| Suny | D | Chavarria | LS-AS |
| Chenda |  | Chen | BT-AS |
| Chieh Wei |  | Chen | CJ-AS |
| Genyi |  | Chen | HS-AS |
| Janel |  | Chen | LA-AA |
| Meng | Y | Chen | BT-AS |
| Mengyuan |  | Chen | FA-AS |
| Michelle | H | Chen | LE-AA |
| Qi |  | Chen | HS-AS |
| Shirley |  | Chen | FA-AS |
| Xiang |  | Chen | BT-AS |
| Yan |  | Chen | BT-AS |
| Yueli |  | Chen | LS-AS |
| Zhangqun |  | Chen | BT-AS |
| ZiYing |  | Chen | BA-AAS |
| Lai | L | Chen Wu | BT-AS |
| Kimberly |  | Chevalier | LA-AA |
| Kunsang |  | Chodon | NS-AAS |
| Amir |  | Chohan | LA-AA |
| Darren |  | Chong | LA-AA |
| Shaniyat | H | Chowdhury | HS-AS |
| Alexander |  | Chung | LS-AS |
| Da Eun | J | Chung | LA-AA |
| Ka Wai |  | Chung | HS-AS |
| Michael |  | Clark | TX-AAS |
| Sophia | J | Clarke | LA-AA |
| John | C | Clauzel | LA-AA |
| Robert | P | Clemens | TX-AAS |
| Scarlet | S | Coello | LA-AA |


| Amanda | A | Coll | HS-AS |
| :---: | :---: | :---: | :---: |
| Edwin | S | Collado | LA-AA |
| Estevan | V | Collado | BT-AS |
| Selena |  | Collado | CJ-AS |
| Cristina | M | Commisso | LA-AA |
| Evelyn |  | Condo | SF-AS |
| Adam |  | Constant | FA-AS |
| Miguel |  | Contla | LA-AA |
| Brittney | J | Cora | LA-AA |
| Brayan |  | Cordova | CJ-AS |
| Jessica |  | Correa | LA-AA |
| Richard |  | Corrigan | TX-AAS |
| Joseph | N | Costanzo | LS-AS |
| Earl |  | Cox | CJ-AS |
| Jamal | $N$ | Cox | BT-AS |
| Harry |  | Cresser | TX-AAS |
| Stephanie |  | Criollo | LA-AA |
| Marilyn |  | Cruz | CJ-AS |
| Yeisa | Y | Cruz | LA-AA |
| Ary | F | Cruz De Bustillo | LA-AA |
| Angela | M | Cunningham | LA-AA |
| Samantha | D | Cuscione | FA-AS |
| Erika | L | Cuzco | LA-AA |
| Navindra |  | Cyril | DD-AAS |
| Sarah | M | D'Angelo | LA-AA |
| Na |  | Dai | FA-AS |
| Qin |  | Dai | BT-AS |
| Ying |  | Dai | BT-AS |
| George |  | Daifakos | BT-AS |
| Owen | M | Daniel Sanchez | BT-AS |
| Xnobia |  | Darnley | MA-AAS |
| Pinki |  | Dass | LA-AA |
| Daniel | J | Davenel | BT-AS |
| Evan | D | Daviotis | BM-AAS |
| Dajon | J | Davis | ME-AAS |
| Michel Anton |  | Davis | NH-AAS |
| Helen |  | Dawson | BS-AAS |
| Anthony |  | De Souza | LA-AA |
| Dawn | M | Delure | CJ-AS |
| Chandelle |  | DeJesus | LE-AA |
| Tenzin |  | Deckyi | NS-AAS |
| Diamond | M | Dejesus | FA-AS |
| Kelfi |  | Dejesus | CJ-AS |


| Lissette |  | Del Valle | BA-AAS |
| :---: | :---: | :---: | :---: |
| Angelis |  | Deleon | LA-AA |
| William | G | Delima | LA-AA |
| William | A | Dennehy Parrinello | BT-AS |
| Malique | A | Dennis | FA-AS |
| Nicholai | 0 | Dennis | BT-AS |
| Kevin | A | Denny | ME-AAS |
| Geordine | N | Denton | LA-AA |
| Erick |  | Deodatt | NS-AAS |
| Arif |  | Deonarine | CJ-AS |
| Nadia | S | Deopersaud | HS-AS |
| Lashmi |  | Devi | HS-AS |
| Silvana |  | Di Maggio | BT-AS |
| Ariel | R | Diaz | FA-AS |
| Perla | M | Diaz | LA-AA |
| Maya |  | Dinkins Rheams | LA-AA |
| Justine | A | Dixon | LA-AA |
| Tellesha | K | Dixon | NS-AAS |
| Catherine | D | Domingo | LA-AA |
| Eduardo |  | Dominguez | FA-AS |
| Paul | S | Donato | BT-AS |
| Shannon | E | Doran | LE-AA |
| Amaya |  | Douglas | BT-AS |
| Frederick |  | Du | LA-AA |
| Khia |  | Duncan | LA-AA |
| Francia | L | Duque | LE-AA |
| Denise | L | Duran | BW-CERT |
| Euric |  | Duran | LA-AA |
| Gina | K | Duran | LE-AA |
| Hernan |  | Duran | CJ-AS |
| Jean | R | Duvivier | CJ-AS |
| Brandon | J | Easterling | BT-AS |
| Ciera |  | Eastman | CJ-AS |
| Donna | A | Edinboro | BA-AAS |
| Osamwanse | A | Edosomwan | FA-AS |
| Jamala | D | Edwards | CJ-AS |
| Tameka | N | Edwards-Nancis | LA-AA |
| Cassidy | C | Ellis | LA-AA |
| Stephany |  | Encarnacion | LA-AA |
| Lauren | E | Endriss | BT-AS |
| Carlo Rafael | A | Enriquez | DD-AAS |
| Damaris |  | Enriquez | CJ-AS |
| Rafael | M | Espinal | BM-AAS |


| Rosalina |  | Espinal | LE-AA |
| :---: | :---: | :---: | :---: |
| Gregory | M | Espinosa | CJ-AS |
| Venice |  | Esson | BT-AS |
| Kiara | J | Esteves | LS-AS |
| Mireya | C | Estevez | LA-AA |
| Rafael |  | Estrella | BT-AS |
| Nicholas |  | Estremera | BT-AS |
| Isaac |  | Etienne | CJ-AS |
| Christopher |  | Evans | FA-AS |
| Glen |  | Evans | CJ-AS |
| Tiffany |  | Evans | LA-AA |
| Ashley | C | Fajardo | CJ-AS |
| Oscar |  | Fajardo | LS-AS |
| loannis | G | Falidas | BT-AS |
| Chloe | A | Fallon | LA-AA |
| Luke | J | Fallon | FA-AS |
| Amina |  | Farrukh | BT-AS |
| Kaniz |  | Fatema | CJ-AS |
| Rida |  | Fatima | LE-AA |
| Joy | M | Fearon | CJ-AS |
| Robert |  | Fein | DP-AAS |
| Mathew |  | Feisel | CJ-AS |
| Lirazen Rose | P | Felipe | ME-AAS |
| Kimberly |  | Fenelon | NS-AAS |
| Haoquan |  | Feng | LA-AA |
| Lovelle |  | Fenico | CJ-AS |
| Everett | R | Ferguson | LA-AA |
| Rasheed |  | Ferguson | LA-AA |
| Cesar | D | Fernandez | LA-AA |
| Claudia |  | Fernandez | HS-AS |
| Daniel | 1 | Ferrara | LA-AA |
| Ssence | S | Festus | FA-AS |
| Irena | 1 | Figueroa | LA-AA |
| Dana | R | Fine | CJ-AS |
| John | A | Fleming | FA-AS |
| Alannah | M | Flores | LA-AA |
| Anthony |  | Flores | BT-AS |
| Jonathan | A | Flores | CT-AAS |
| Jordan |  | Flores | FA-AS |
| Sandra | $N$ | Flores | BT-AS |
| Ruth |  | Florville | CJ-AS |
| Derek | C | Floyd | HS-AS |
| Woodens | Y | Fonrose | TM-AAS |


| Suellen |  | Fonseca | LA-AA |
| :---: | :---: | :---: | :---: |
| Dominique | L | Forbes | BS-AAS |
| St. Clair | C | Forbes | TX-AAS |
| Venice | P | Foster | NS-AAS |
| Ashley | P | Fraser | LA-AA |
| Natasha |  | Freire | NS-AAS |
| Pietro |  | Frisina | BT-AS |
| Alejandro |  | Fulgencio | NS-AAS |
| Sadaf |  | Gabol | HS-AS |
| Amelia | T | Gacevic | LE-AA |
| Jenny |  | Gachelin | NS-AAS |
| Anthony | J | Gadsden | TX-AAS |
| Juan |  | Galarza | HS-AS |
| Natalia |  | Galarza | CJ-AS |
| Sean | F | Gallagher | LA-AA |
| Tiffany |  | Galloway | LA-AA |
| Wenxin |  | Gao | BT-AS |
| Brandon | J | Garcia | EM-AAS |
| Lennox | N | Garrick | TX-AAS |
| Jaclyn | M | Gasero | BS-AAS |
| Arta |  | Gashi | HS-AS |
| Jody-ann | C | Gayle | HS-AS |
| Farah | A | Gedeon | HS-AS |
| Christopher |  | Geman | BT-AS |
| Elizabeth |  | German | LA-AA |
| Matthew | D | Gibbons | BT-AS |
| Tiara |  | Gibbs | CJ-AS |
| Andrelina |  | Gil | LA-AA |
| Adrian | A | Gil | LA-AA |
| Shaydee |  | Gil | BT-AS |
| Esthefanie |  | Giordano | NS-AAS |
| Sara | J | Gluck | LA-AA |
| Matthew |  | Gluick | BT-AS |
| Kavita |  | Gobind | LA-AA |
| Adreanna |  | Goindoo | BT-AS |
| David | D | Golaszewski | BT-AS |
| Andrew | S | Goldstein | LA-AA |
| Franklin | M | Gomez | CT-AAS |
| Melissa | S | Gomez | LA-AA |
| Vanessa |  | Gomez | LA-AA |
| Dominique | F | Gomillion | LA-AA |
| Joren | A | Gonzales | HS-AS |
| Destiny | J | Gonzalez | BM-AAS |


| Emily |  | Gonzalez | LA-AA |
| :---: | :---: | :---: | :---: |
| Jennifer |  | Gonzalez | LA-AA |
| Karen | M | Gonzalez | LA-AA |
| Rayvon | A | Grandison | LS-AS |
| Gerard | F | Grant | LA-AA |
| Jodi-Ann | S | Grant | LA-AA |
| Benjamin | F | Greenberg | LA-AA |
| Kwante |  | Greenidge | ME-AAS |
| Samuel |  | Griffiths | BT-AS |
| Patricia |  | Grippi | LA-AA |
| Sebastian |  | Grisales Quiroga | LA-AA |
| Marsha | N | Grizzle | CJ-AS |
| Sherlie |  | Guaman | LA-AA |
| Jorge | G | Guaman Palaguachi | BT-AS |
| Qing Qiao |  | Guan | CT-AAS |
| Bailey | E | Guerrier | FA-AS |
| Vanessa | M | Guglielmo | FA-AS |
| Linze |  | Guo | BT-AS |
| Arbinda |  | Gurung | HS-AS |
| Betsy |  | Gutierrez | LS-AS |
| Conrod | M | Hall | LS-AS |
| Rayneil |  | Hall | ME-AAS |
| Devon | C | Hamilton | LA-AA |
| Jason | R | Hamilton | CJ-AS |
| Stephen Isaac | B | Hamilton | FA-AS |
| Amanda |  | Hammond | LA-AA |
| Jasmina |  | Hamza | LA-AA |
| Olivia | M | Hand | LA-AA |
| Divya |  | Hansraj | LA-AA |
| Shing | F | Har | LE-AA |
| Afrika |  | Harmon | LA-AA |
| Aneesa | Y | Harrichandra | LE-AA |
| Jamara |  | Harris | CJ-AS |
| Paul |  | Harris | CT-AAS |
| Destiny | D | Harrison | FA-AS |
| Tyree | S | Harvey | BT-AS |
| Nada |  | Hassan | DA-AS |
| Kimberly |  | Hauer | TM-AAS |
| Sharese | R | Hawkins | LA-AA |
| Erica |  | Hay | TX-AAS |
| Li Juan |  | He | BT-AS |
| Shengfan |  | He | DA-AS |
| Tyler |  | Healy | LA-AA |


| Sydney |  | Helmke | HS-AS |
| :---: | :---: | :---: | :---: |
| Tammyshae | A | Henderson | MA-AAS |
| Damian | G | Henry | BM-AAS |
| Leroy | J | Herbert | LA-AA |
| Jasmine |  | Hernandez | FA-AS |
| Krystina | M | Hernandez | LA-AA |
| Percy | W | Hernandez | CT-AAS |
| Wilber | 1 | Hernandez | LA-AA |
| Alexander |  | Herrera | CT-AAS |
| Angelica |  | Herrera | BT-AS |
| Justin |  | Herrera | FA-AS |
| Leticia |  | Herrera | HS-AS |
| Noemi |  | Herrera Peguero | CJ-AS |
| Nicheal | K | Hickson | FA-AS |
| Lorenzo | A | Hill | LA-AA |
| Tammara | C | Hinds | LA-AA |
| Joseph | Y | Hipol | LE-AA |
| Michael | C | Hirschfeld | LA-AA |
| Bohdan |  | Hladun | HS-AS |
| Amose |  | Ho | LS-AS |
| Demille |  | Hodge | LA-AA |
| Janine |  | Holder | CJ-AS |
| Craig | S | Hollis | CJ-AS |
| Kimberly |  | Holmes | LA-AA |
| Mohammed | M | Hoque | EM-AAS |
| Kevin |  | Hsiu | BT-AS |
| Chin Chuan |  | Hsu | LS-AS |
| Wenxi |  | Hu | BT-AS |
| Da Ming |  | Huang | EM-AAS |
| Jiamin |  | Huang | LA-AA |
| Keke |  | Huang | BT-AS |
| Nathalie |  | Hunter | LE-AA |
| Amir |  | Hussain | CJ-AS |
| Farrah | F | Hussain | BY-AS |
| Mahnoor |  | Hussain | HS-AS |
| Hayleh |  | Hussein | CJ-AS |
| Rhmha |  | Hussein | LA-AA |
| Shanise | R | Hutchinson | LA-AA |
| Shemoria | A | Hutchinson | BT-AS |
| Jean | J | Hwang | HS-AS |
| Cadijah | J | Hyacinth | LA-AA |
| Raul |  | Ibragimov | MT-AAS |
| Erdal | J | Ibram | CJ-AS |


| Paul |  | Ioannou | TX-AAS |
| :---: | :---: | :---: | :---: |
| Thalia | K | Irizarry | FA-AS |
| Carolina |  | Isaza | LA-AA |
| Meshach |  | Ishmail | BM-AAS |
| Raihan |  | Islam | HS-AS |
| Marina |  | Ivezaj | HS-AS |
| Malik |  | Jackson | BT-AS |
| Olivia | M | Jackson | HS-AS |
| Ismat |  | Jahan | MA-AAS |
| Sumaiya |  | Jamal | BA-AAS |
| Tranell | R | James | BS-AAS |
| Vanessa |  | Jan | BT-AS |
| Jiwoong |  | Jang | ME-AAS |
| Ruey Yau |  | Jang | LA-AA |
| John |  | Janny | TX-AAS |
| Natalia | M | Jaquez | LA-AA |
| Antonella | L | Jara | LA-AA |
| Nataly | M | Jara | HS-AS |
| Luis |  | Jaramillo | BT-AS |
| Stephanie |  | Jaramillo | NS-AAS |
| Danyal |  | Javeid | BT-AS |
| Karla | D | Javier | CJ-AS |
| Vanessa |  | Javier | LA-AA |
| James | S | Jean Baptiste | BT-AS |
| Ludwens |  | Jean Baptiste | HS-AS |
| Jomere |  | Jean-Baptiste | CJ-AS |
| Elizabeth | B | Jean-Gilles | LA-AA |
| Natasha |  | Jemmott | NS-AAS |
| Christopher | J | Jettoo | BT-AS |
| Henry |  | Jiang | LA-AA |
| Jeffrey |  | Jiang | LA-AA |
| Lianghua |  | Jiang | ET-AAS |
| Shuyu |  | Jiang | BA-AAS |
| Winnie | W | Jiang | LA-AA |
| Yun |  | Jiang | CT-AAS |
| Daniella | M | Jimenez | LA-AA |
| Jennifer | M | Jimenez | CJ-AS |
| Joshua |  | Jimenez | LA-AA |
| Rafael |  | Jimenez | HS-AS |
| David |  | Jimenez Lemus | CT-AAS |
| Gang |  | Jin | BT-AS |
| Senyoung |  | Jin | HS-AS |
| Annmarie |  | Johnson | CJ-AS |


| Carlton | A | Johnson | ET-AAS |
| :---: | :---: | :---: | :---: |
| Jennifer | C | Johnson | LA-AA |
| Seth | M | Johnson | BA-AAS |
| Antoinette |  | Jones | LE-AA |
| Shaquille | P | Jones | LA-AA |
| Alena |  | Joseph | BT-AS |
| Regine |  | Joseph | NS-AAS |
| Marie | E | Joseph Charles | LA-AA |
| Tania | A | Joseph-Pauline | BT-AS |
| Anthony | M | Juarbe | BT-AS |
| Jessica |  | Juarez | LS-AS |
| Suyeon |  | Jun | BT-AS |
| Julia |  | Kafarski | TM-AAS |
| Marlon |  | Kalicharan | LS-AS |
| Liming |  | Kang | BT-AS |
| Shakuntala | D | Kanhai | LA-AA |
| Vasim |  | Kapadia | DP-AAS |
| Mary |  | Kasworm | DP-AAS |
| Athanasios | G | Kavounidis | FA-AS |
| James |  | Kay | LE-AA |
| Kevin |  | Keane | TX-AAS |
| Amanda | M | Keen | LA-AA |
| Dimitrina |  | Kehaian | BA-AAS |
| Miran |  | Keheian | BT-AS |
| Joshua |  | Kellerman | BT-AS |
| Kristen |  | Kelly | NS-AAS |
| Tajia | B | Kelly | LA-AA |
| Thomas | R | Kennedy | TX-AAS |
| Nida |  | Khalid | BT-AS |
| Faiyaz |  | Khan | ET-AAS |
| Jawwad | M | Khan | LA-AA |
| Mohammad T. |  | Khan | DP-AAS |
| Nadia |  | Khan | CJ-AS |
| Sana |  | Khan | HS-AS |
| Sharaz |  | Khan | EM-AAS |
| Nazli |  | Khurana | LA-AA |
| Diana | R | Kim | NS-AAS |
| Hanna |  | Kim | BA-AAS |
| Hyaemee |  | Kim | LA-AA |
| Kalam |  | Kim | LA-AA |
| Ku Hee |  | Kim | LS-AS |
| Richard |  | Kim | NH-AAS |
| Sarang |  | Kim | FA-AS |


| Sharon |  | Kim | BT-AS |
| :---: | :---: | :---: | :---: |
| Kharise |  | King | LA-AA |
| Crystal | A | King-Charles | FA-AS |
| Schamona | 0 | Knight | LA-AA |
| Rachel |  | Ko | NS-AAS |
| Tsui Yan |  | Kong | HS-AS |
| Alicia |  | Koshy | LA-AA |
| Katarina |  | Koullias | LA-AA |
| Keith | A | Kratchel | PE-AS |
| Tenzin |  | Kunchok | LA-AA |
| Tenzing |  | Kunsang | LA-AA |
| Marina | L | Kurtz | LA-AA |
| Yuri |  | Kwang | LA-AA |
| Thuya |  | Kyaw | BM-AAS |
| Desirae | M | La Furno | LA-AA |
| Jeraldine |  | Labuguen | LA-AA |
| Semona |  | Lachhman | CJ-AS |
| Rohit | D | Lachman | CJ-AS |
| Stephanie |  | Lagakis | DA-AS |
| Robert |  | Lago | CJ-AS |
| Vishal | A | Lakharam | LS-AS |
| Shivani | A | Lalla | DA-AS |
| Tenzin | S | Lama | DP-AAS |
| Dalan |  | Lambert | HS-AS |
| Ross | M | Langhorne | BT-AS |
| Jelaini |  | Lantigua | LA-AA |
| Deedra |  | Larmond | LA-AA |
| Cora | K | Larocque | CJ-AS |
| Samantha | M | Latorre | CJ-AS |
| Tingting |  | Lau | DD-AAS |
| Edward | R | Lauro | TX-AAS |
| James | D | Laza | LA-AA |
| Brian | N | Le | LA-AA |
| Alejandro |  | Leal Pulido | AM-AS |
| John | D | Ledesma | LA-AA |
| Mark | A | Ledesma | PE-AS |
| Abigail | H | Lee | SF-AS |
| Ashley |  | Lee | LA-AA |
| Christian | A | Lee | FA-AS |
| Erica Oi Yi |  | Lee | BT-AS |
| Justin | G | Lee | LA-AA |
| Kelsey |  | Lee | LA-AA |
| Kevin |  | Lee | BA-AAS |


| Nickolan |  | Lee | BT-AS |
| :---: | :---: | :---: | :---: |
| Raymond |  | Lee | LA-AA |
| Richard | H | Lee | DP-AAS |
| Wing Yan |  | Lee | FA-AS |
| Yi Hung |  | Lee | BT-AS |
| Cristian | R | Leon | BT-AS |
| Daniel |  | Leon | LA-AA |
| Eric |  | Leong | LA-AA |
| Bianca | M | Leto | LA-AA |
| Iris |  | Leung | LA-AA |
| Adrianna |  | Lewis | CJ-AS |
| Brittany | R | Lewonka | LA-AA |
| Yaneris | C | Leyba | LA-AA |
| Hui |  | Li | BT-AS |
| Junhui |  | Li | BT-AS |
| Lan |  | Li | LA-AA |
| Qian |  | Li | LA-AA |
| Qingwen |  | Li | BT-AS |
| Wenting |  | Li | BM-AAS |
| Weixuan |  | Liang | BA-AAS |
| Corey | A | Lides | LA-AA |
| Brianna | N | Lightbourne | CJ-AS |
| Steven |  | Lim | LA-AA |
| Chuwei |  | Lin | LA-AA |
| Eric |  | Lin | BT-AS |
| Ting Ting |  | Lin | LS-AS |
| Wenjing |  | Lin | LA-AA |
| Yan |  | Lin | BA-AAS |
| Zhao |  | Lin | BT-AS |
| Tzyychii |  | Liou | EM-AAS |
| Chuanyun |  | Liu | LS-AS |
| Haiyang |  | Liu | LS-AS |
| Haotian |  | Liu | BT-AS |
| Jiayin |  | Liu | BT-AS |
| Jiqin |  | Liu | BA-AAS |
| Xiliang |  | Liu | LE-AA |
| Zhaoxin |  | Liu | BA-AAS |
| Mei Hui |  | Liu Yan | LA-AA |
| Julio | A | Lliguichuzhca | CT-AAS |
| Ginnilyn |  | Lombardi | TX-AAS |
| Ninoshka | S | Lombardo | LA-AA |
| Gisselle |  | Londono | LA-AA |
| Bobby | J | Lopez | BT-AS |


| Daniel |  | Lopez | HS-AS |
| :---: | :---: | :---: | :---: |
| Jose |  | Lopez | CT-AAS |
| Karla | A | Lopez | LA-AA |
| Yuliana |  | Lopez | FA-AS |
| Michael |  | Loprete | LA-AA |
| Janice | N | Louis | DA-AS |
| Ralph | W | Louissaint | LA-AA |
| Alice | D | Macdonald | LS-AS |
| Kevin | A | Machuca | CJ-AS |
| Alison |  | Macias | LA-AA |
| Nicholas | A | Magnone | LA-AA |
| Monique |  | Mahbeer | FA-AS |
| Ahsen |  | Mahmood | LA-AA |
| Daniel |  | Maks | LA-AA |
| Anthony |  | Maldari | TX-AAS |
| Stephanie |  | Maldonado | LE-AA |
| Midge | J | Malivert | LA-AA |
| Maria Regina | D | Manio | FA-AS |
| Michelle |  | Manzueta | LA-AA |
| Tania | L | Maradiaga | BT-AS |
| Chantal |  | Marajh | BL-AAS |
| Nicholas | R | Marasciulo | ME-AAS |
| Jorge |  | Marca | ET-AAS |
| Brian |  | Marcelino | DA-AS |
| Elizabeth | C | Marcos | BT-AS |
| Dylan |  | Marengo | BT-AS |
| James |  | Marine | CJ-AS |
| Ileana |  | Marinescu | LA-AA |
| Suzanne |  | Markland | BT-AS |
| Daniella | M | Markovic | HS-AS |
| Daniella | M | Marotta | LA-AA |
| Sergio | N | Marquez | LA-AA |
| Jose | R | Marte | LA-AA |
| Luisa | M | Marte | MA-AAS |
| Amanda |  | Martell | FA-AS |
| Greg |  | Martinez | DP-AAS |
| Jhoceline |  | Martinez | LE-AA |
| Katia |  | Martinez | BA-AAS |
| Monique |  | Martinez | CJ-AS |
| Romel |  | Martinez | LA-AA |
| Yamilka | D | Martinez | BT-AS |
| Avraam |  | Matatov | HS-AS |
| Selena | H | Matos | FA-AS |


| Juan | C | Maygua | CJ-AS |
| :---: | :---: | :---: | :---: |
| Saidy | P | Maygua | HS-AS |
| Sierra | N | Maynard | NS-AAS |
| Nicole | M | Mazza | LA-AA |
| Ginger | E | McDonough | BA-AAS |
| Sabreena |  | McLaulin | BS-AAS |
| Traycina |  | McNeil | LA-AA |
| Ashley |  | McAuley | CJ-AS |
| Danielle | T | McCain | CJ-AS |
| Adawna | L | McDaniels | LA-AA |
| Donnette | K | McFarlane | BT-AS |
| Carmel | A | McGauran | DP-AAS |
| Shanya | K | McLeary | BT-AS |
| Jermaine | J | Meadows | LA-AA |
| Javel | S | Meghie | CJ-AS |
| Andrea |  | Mejia | FA-AS |
| Andrew | L | Melvin | LA-AA |
| Bienvenido |  | Mendez | LA-AA |
| Gino |  | Mendez | BT-AS |
| Silvia | L | Mendez | LS-AS |
| Jason | E | Mendez-Faneytt | ME-AAS |
| Emmanuel |  | Mendoza | LA-AA |
| Francesse |  | Menelas | LA-AA |
| Margaretha |  | Menig | NS-AAS |
| Tatiana |  | Meono | LA-AA |
| Elisabeth | R | Mercado | LA-AA |
| Diana | C | Meredith | HS-AS |
| Christopher |  | Merk | LA-AA |
| Alexandra | R | Miah | LA-AA |
| Chanyu |  | Miao | EM-AAS |
| Ashley | A | Mickulas | LA-AA |
| Breutigam |  | Milfort | FA-AS |
| Catrease |  | Miller | LA-AA |
| Thomas | J | Mincone | BT-AS |
| Markus | A | Miraglia | BT-AS |
| Leslie |  | Miramon | LA-AA |
| Yessica |  | Miranda | NS-AAS |
| Asif |  | Mobin | HS-AS |
| Narissa | N | Mohamed | CJ-AS |
| Katrina | K | Mok | BT-AS |
| Marisabel |  | Molina | LA-AA |
| Maliha |  | Momtaj | HS-AS |
| Nathalie F.A |  | Monchais | LA-AA |


| Leah |  | Mont | LE-AA |
| :---: | :---: | :---: | :---: |
| Darnyng | J | Montas | LA-AA |
| Carlos | A | Montayes | TX-AAS |
| Pedro | V | Montes Mendoza | HS-AS |
| Steven | A | Montiel-Melgar | HS-AS |
| Juan | E | Montoya Jr | LA-AA |
| Tanasia |  | Moore | LE-AA |
| Christopher |  | Morales | LA-AA |
| Mary |  | Morales | CJ-AS |
| Mayra |  | Morales | LA-AA |
| Steven |  | Morales | CJ-AS |
| Vivianne |  | Morales | NS-AAS |
| Timothy | V | Moriarty | CJ-AS |
| Jessica | A | Morocho | BA-AAS |
| Oscar |  | Morocho | LA-AA |
| Zev |  | Moshon | ME-AAS |
| Raluca | E | Mosora | LA-AA |
| Dena | G | Mourssi | CJ-AS |
| Nicole | A | Mowatt | NH-AAS |
| Ibtehaj |  | Mudassar | LS-AS |
| Valon |  | Mujaj | BA-AAS |
| Damali | A | Mullings | LA-AA |
| Keisha | C | Mullings | HS-AS |
| Whitney |  | Mulzac | CJ-AS |
| Nazia |  | Mumtahana | LA-AA |
| Mohamed | N | Muntaz | BT-AS |
| Tara | A | Murphy | LE-AA |
| Rafael |  | Musayev | CJ-AS |
| Sebastian | v | Mustacchia | LA-AA |
| Yasmeen | V | Mustafa | LA-AA |
| Terry | C | Myers | BM-AAS |
| Farrah | A | Naeem | LA-AA |
| Deorannie |  | Nagamootoo | LA-AA |
| Alyssa |  | Nanan | MA-AAS |
| Rebecca |  | Napoletano | LA-AA |
| Kaleem |  | Naqvi | LA-AA |
| Obaid | T | Naqvi | LA-AA |
| Daniel | A | Naranjo | LA-AA |
| Steve |  | Narvaez-Carreto | LS-AS |
| Ismail |  | Naser | FA-AS |
| Verhaazkhan |  | Nasirkhan | LA-AA |
| Marzieh |  | Nassiri | HS-AS |
| Angel | L | Naula | ET-AAS |


| Farah |  | Naz | BT-AS |
| :---: | :---: | :---: | :---: |
| Miryam | M | Nektalova | LA-AA |
| Jordan | A | Neman | LA-AA |
| Jeovanni | S | Nembhard | LA-AA |
| Chaitannand | R | Netram | MA-AAS |
| Valentim | F | Neves | EM-AAS |
| Wai Shan |  | Ng | BA-AAS |
| Jennifer |  | Niaupari | HS-AS |
| Thomas |  | Nicasio | LA-AA |
| Laura | C | Nici | NS-AAS |
| Charles | J | Niemeyer | LA-AA |
| Alvin |  | Nieves | CJ-AS |
| Wilson | E | Nieves Vasquez | LS-AS |
| Linda |  | Nimron | BS-AAS |
| Sitorabonu |  | Niyazmetova | BA-AAS |
| Tyron | M | Noel | LA-AA |
| Milena |  | Noguera-Csernick | BT-AS |
| Christian |  | Nolasco | LA-AA |
| Erica |  | Noriega | TX-AAS |
| Joangela | J | Nouel | LS-AS |
| Ismail |  | Nouri | LA-AA |
| Cristian | D | Nunez | BT-AS |
| Jasmin | A | Nunez | CJ-AS |
| Cathal |  | O'Toole | LA-AA |
| Jitaek |  | Oh | CJ-AS |
| Minna |  | Oh | BS-AAS |
| Swan |  | Oh | HS-AS |
| Liat | E | Ohayon | LA-AA |
| Melissa | D | Olah | LA-AA |
| Devin | D | Olivas | LA-AA |
| Victoria | A | Olivier | LA-AA |
| Lynnette |  | Olivo | LA-AA |
| Sitara |  | Olomi | LA-AA |
| Nicholas | A | Ong | BT-AS |
| Marlina | V | Oppedisano | HS-AS |
| Prince | A | Opuni | BT-AS |
| Danielle | D | Oralis | LA-AA |
| Jorge | R | Ordonez | CJ-AS |
| Carolina |  | Ortega | CJ-AS |
| Caroline | E | Ortiz | LS-AS |
| Daniel |  | Ortiz | BT-AS |
| Elkin |  | Ortiz | BT-AS |
| Natalie | M | Ortiz | LA-AA |


| Tiara | A | Ortiz | ME-AAS |
| :---: | :---: | :---: | :---: |
| Victor | S | Ortiz | DD-AAS |
| Fatima |  | Osman | LE-AA |
| Rony | S | Osorio | LA-AA |
| John | P | Ostil | CJ-AS |
| Diana |  | Ovsepyan | NS-AAS |
| Johnson | 0 | Oye | BT-AS |
| Folasade |  | Oyewo | LA-AA |
| Gabriela |  | Pachon | LA-AA |
| Vanessa |  | Padilla | CJ-AS |
| Patricia | F | Paez | FA-AS |
| Raissa |  | Pajuelo | LA-AA |
| Allisun |  | Pak | FA-AS |
| Armen |  | Pakhladzhyan | TX-AAS |
| Derek | S | Palaguachi | CJ-AS |
| Luis | G | Palaguachi | CJ-AS |
| Maria | C | Palaguachi | NS-AAS |
| Andrea | M | Pamparau | LA-AA |
| Theofilos |  | Papadopoulos | PE-AS |
| John |  | Papageorgiou | LS-AS |
| David | A | Parada | LA-AA |
| Rewea | L | Paras | LA-AA |
| Feria |  | Pariage | LA-AA |
| Scott | B | Pariona | CJ-AS |
| Brian |  | Park | PE-AS |
| Da Young |  | Park | NS-AAS |
| Jong Geun |  | Park | LA-AA |
| Bria | N | Parker | BT-AS |
| Aviva | J | Pasternak | CJ-AS |
| Jatinkumar | A | Patel | DP-AAS |
| Sapna | V | Patel | MA-AAS |
| Stephanie | M | Patino | LA-AA |
| Melissa | A | Paucar | LA-AA |
| Hazel |  | Paul | LA-AA |
| Jovanie |  | Paul | LA-AA |
| Emilyn |  | Paulino | BT-AS |
| Kenneth |  | Pawlukiewicz | LA-AA |
| Matthew |  | Pawson | CJ-AS |
| Mariapia |  | Pazos | LA-AA |
| Spyridon |  | Pefanis | LA-AA |
| Daphne | C | Pell | LA-AA |
| Virginia |  | Pellegrini | LE-AA |
| Michael | S | Pena | LA-AA |


| Allana | M | Pepaj | LA-AA |
| :---: | :---: | :---: | :---: |
| Monica |  | Pereira | LA-AA |
| Catherine |  | Perez | LA-AA |
| Diana |  | Perez | HS-AS |
| Grace | T | Perez | LA-AA |
| Joanne | J | Perez | AM-AS |
| Kristina |  | Perez | HS-AS |
| Matthew | R | Perez | CJ-AS |
| Oscar | R | Perez | NH-AAS |
| Stephanie | A | Perez | CJ-AS |
| Anil | L | Periana-Pillai | LA-AA |
| Eleftheria |  | Permeti | LA-AA |
| Derek | C | Perry | LS-AS |
| Amanda | G | Persaud | LA-AA |
| Christopher | A | Persaud | LA-AA |
| Darshanie |  | Persaud | BT-AS |
| Mohanie |  | Persaud | HS-AS |
| Sherry | R | Persaud | LA-AA |
| Tarawattie |  | Persaud | NS-AAS |
| Vishaal |  | Persaud | BM-AAS |
| Lakshmi |  | Persaud-Sooman | BT-AS |
| Stacey | L | Peters | TX-AAS |
| Herland |  | Petion | BT-AS |
| Rebecca |  | Philantrope | LS-AS |
| Georgia |  | Piazza | FA-AS |
| Briana | C | Pierre | LA-AA |
| Janna |  | Pierre | EM-AAS |
| Jordan |  | Pierre | LA-AA |
| Kimberly |  | Pierre | CJ-AS |
| Victoria | J | Pierre-Louis | LA-AA |
| Althea |  | Pieters | BH-CERT |
| Joann |  | Pietsch | LA-AA |
| Christian | A | Pillago | BT-AS |
| Alejandra | X | Pineda | FA-AS |
| Rosa |  | Pinto | NS-AAS |
| Peter | J | Pipia | LA-AA |
| Joseph |  | Plonski | LA-AA |
| Artur |  | Podgorski | HS-AS |
| William | R | Podmore | TX-AAS |
| Andrea | L | Polak | TM-AAS |
| Aralesky | M | Polanco | LA-AA |
| Michael | J | Pontino | CJ-AS |
| Rossella |  | Porcasi | LA-AA |


| Giuseppe |  | Porretto | CJ-AS |
| :---: | :---: | :---: | :---: |
| Tyler | A | Portelli | TM-AAS |
| Kathryn | T | Powers | BT-AS |
| Nathaly | R | Pozo | BA-AAS |
| Janin | M | Prado | LA-AA |
| Gaitree |  | Prasaud | BT-AS |
| Michael | P | Pressey | NS-AAS |
| Mariejose | H | Prismy | BS-AAS |
| Matthew | J | Psaltakis | LA-AA |
| Chenshuang |  | Pu | FA-AS |
| Paola |  | Puentes | LE-AA |
| Amanda |  | Puhi | LE-AA |
| Li Hao |  | Qu | BT-AS |
| Steve |  | Quallo | BT-AS |
| John |  | Quashie | CJ-AS |
| Mim |  | Quddus | DP-AAS |
| Nicole | J | Queirolo | LA-AA |
| Katherine |  | Quindi | BW-CERT |
| Aristeo |  | Quiroz | BY-AS |
| Kevin |  | Quiroz | CJ-AS |
| Ali | A | Qureshi | LA-AA |
| Farlann |  | Racine | HS-AS |
| Sarina | A | Raffa | LA-AA |
| Cameal |  | Ragoobir | LA-AA |
| Rafeea |  | Rahim | HS-AS |
| Mohid |  | Rajib | LA-AA |
| Stephan |  | Rakotoniaina | ME-AAS |
| Padmanie |  | Ramdas | NS-AAS |
| Melinda | M | Ramdass | LA-AA |
| Isaura |  | Ramirez | LA-AA |
| Jordy | A | Ramirez | LS-AS |
| Karla | C | Ramirez | NS-AAS |
| Michelle | A | Ramirez | FA-AS |
| Natalie |  | Ramirez | CJ-AS |
| Kavita |  | Ramjattan | LA-AA |
| Dianne | A | Ramkumar | HS-AS |
| Melissa | S | Ramlakhan | HS-AS |
| Alyssa | S | Ramlogan | HS-AS |
| Stephanie | Y | Ramos | CJ-AS |
| Premini |  | Ramprasad | LA-AA |
| Kamal | C | Ramroop | BT-AS |
| Sarah |  | Ramsudh | HS-AS |
| Dewval | D | Ranson | NS-AAS |


| Rashida |  | Rashid Farokhi | HS-AS |
| :---: | :---: | :---: | :---: |
| Michael | P | Rashkover | ME-AAS |
| Scott |  | Recinos | LA-AA |
| Shahrukh |  | Rehan | LS-AS |
| Shelly |  | Reichler | LA-AA |
| Cassie | E | Reilly | LA-AA |
| Juan |  | Reinoso | LA-AA |
| Cynthia | E | Reitman | FA-AS |
| Adrienne |  | Rendon | LS-AS |
| Melisa |  | Rendon | CJ-AS |
| Mathew |  | Restrepo | LA-AA |
| Oscar | 1 | Restrepo | BT-AS |
| Catherine |  | Reyes | LE-AA |
| Catherine | M | Reyes | FA-AS |
| Mario | A | Reyes | LS-AS |
| Scarline |  | Reyes | CJ-AS |
| Phillip | J | Reynolds | HS-AS |
| Margarita |  | Rice | LA-AA |
| Diane |  | Riley | TX-AAS |
| Julie | J | Rivas | CJ-AS |
| Amanda | K | Rivera | FA-AS |
| Gabrielle |  | Rivera | LA-AA |
| Michael | C | Rivera | BT-AS |
| Roseann | M | Rock | LA-AA |
| Christopher |  | Rodriguez | PE-AS |
| Darisson |  | Rodriguez | LA-AA |
| Denzil |  | Rodriguez | LA-AA |
| Erica | L | Rodriguez | NS-AAS |
| Francisbely |  | Rodriguez | LA-AA |
| Gabriela | C | Rodriguez | HS-AS |
| Henry | J | Rodriguez | LA-AA |
| Indira |  | Rodriguez | LA-AA |
| Jalene |  | Rodriguez | BT-AS |
| Jennifer |  | Rodriguez | LA-AA |
| Juan | M | Rodriguez | CJ-AS |
| Lisa | P | Rodriguez | BT-AS |
| Samantha | L | Rodriguez | FA-AS |
| Stephanie |  | Rodriguez | LA-AA |
| Stephanie |  | Rodriguez | LA-AA |
| Tania | B | Rodriguez | LA-AA |
| Vanessa |  | Rodriguez | LA-AA |
| Dshon |  | Rogers | LA-AA |
| Steven |  | Rojas | HS-AS |


| Raquel | M | Romaine | HS-AS |
| :---: | :---: | :---: | :---: |
| Brandon | J | Romero | CJ-AS |
| Edward |  | Romero | LA-AA |
| Kelly | X | Romero | BT-AS |
| Miguel |  | Romero | CJ-AS |
| Jasmine |  | Rosado | LA-AA |
| Marisol |  | Rosado | LA-AA |
| Jessica |  | Rosales | LA-AA |
| Alexander | M | Rosario | CJ-AS |
| Renee |  | Rose | LA-AA |
| Zakiyra |  | Ross | DA-AS |
| Jerald |  | Rotunno | TX-AAS |
| Dany | M | Roumain-Kalim | LA-AA |
| Kiana | L | Roundtree | LA-AA |
| Prattay |  | Roy | PE-AS |
| Kelly | J | Rubio | LA-AA |
| Dusan |  | Rula | BT-AS |
| Natisha |  | Rupee | LE-AA |
| Iliass |  | Sabillah | DP-AAS |
| Miguel |  | Sabujo | CJ-AS |
| Charlotte | L | Saenz | LA-AA |
| Kiran |  | Sagheer | BM-AAS |
| Manideepa |  | Saha | NS-AAS |
| Anjana |  | Sahni | BT-AS |
| Bernard |  | Saintval | ET-AAS |
| Sherif | S | Salah | LA-AA |
| David |  | Salazar | PE-AS |
| Kevinn |  | Salazar | DD-AAS |
| Katherine |  | Salcedo | BT-AS |
| Nourhan |  | Saleh | NS-AAS |
| Mariam |  | Salim | MA-AAS |
| Marie Christine |  |  |  |
| $N$. |  | Salomon | LA-AA |
| Ahmdullah | M | Samady | CT-AAS |
| Richeal | S | Samaroo | LA-AA |
| Yashoda |  | Samaroo | LA-AA |
| Joshua |  | Samet | LA-AA |
| Mardee Mollandt | C | Samper | HS-AS |
| Zimran | H | Samuel | CJ-AS |
| Moe | T | San | HS-AS |
| Ashley |  | San Andres | LA-AA |
| Christian | A | Sanchez | CT-AAS |
| Estefani | S | Sanchez | CJ-AS |


| Samantha | G | Sanchez | LA-AA |
| :---: | :---: | :---: | :---: |
| Alexandra |  | Sandovalmoscoso | LA-AA |
| Nicole | S | Santarelli | LA-AA |
| Fernando | B | Santiago | LA-AA |
| Rochelle | L | Santiago | LE-AA |
| Bryan |  | Santillan | BT-AS |
| Edward |  | Santos | ME-AAS |
| Katherine | G | Santos | LA-AA |
| Mirtha |  | Santos | LA-AA |
| Jeffrey | R | Sarmiento | LA-AA |
| Odual | E | Sarria | CJ-AS |
| Connor | F | Scanlon | LA-AA |
| Jessica | L | Schedlbauer | FA-AS |
| Yosef |  | Schlusselberg | ET-AAS |
| Vincent | J | Scudiero | BT-AS |
| Jessica |  | Scullion | LA-AA |
| Nadia |  | Seecheran | MO-CERT |
| Satkatu |  | Seecheran | CJ-AS |
| Sara |  | Sekhery | NS-AAS |
| Daniel |  | Senesca | LA-AA |
| Joanne | C | Senquiz | BT-AS |
| Monica |  | Serhan | LA-AA |
| Amneris |  | Serrano | LE-AA |
| Emily | D | Serrano | CJ-AS |
| Fausia | M | Seunarine | LA-AA |
| Geeta |  | Sewdat | LA-AA |
| Farhana |  | Shabnam | BT-AS |
| Aleyah | N | Shah | LA-AA |
| Iqra | A | Shah | BT-AS |
| Jahanzaib |  | Shah | LA-AA |
| Shafiullah |  | Shah | LA-AA |
| Mohamed |  | Sharif | DD-AAS |
| Michael | David | Shaw | LA-AA |
| Nigel |  | Shaw | BT-AS |
| Omar | T | Shefa | BA-AAS |
| Trevor | 0 | Sheppard | HS-AS |
| Yang |  | Shi | BT-AS |
| Daniel | M | Shimunov | BT-AS |
| Daniel | J | Shipman | TX-AAS |
| Daniel |  | Shitrit | BT-AS |
| Bibin |  | Shrestha | FA-AS |
| Sze Wing |  | Shum | FA-AS |
| Yancy | E | Sibrian | CJ-AS |

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\begin{array}{llll}\text { Farzanah } & \text { K } & \begin{array}{l}\text { Siddique } \\
\text { Muzammil }\end{array} & \text { H }\end{array}
$$ \begin{array}{l}Siddiqui <br>

Siddiqui\end{array}\right]\)| CJ-AS |
| :--- |
| Rubayat |$\quad$ HS-AS


| Heni |  | Stambolski | LE-AA |
| :---: | :---: | :---: | :---: |
| Claudia |  | Stanislawek | CJ-AS |
| Sharon |  | Stark | CJ-AS |
| Alicia |  | Stephenson | CJ-AS |
| Ariel |  | Strauss | LA-AA |
| Violeta |  | Suarez Hidalgo | CJ-AS |
| Roshni |  | Subkaran | CJ-AS |
| Shriromani |  | Sukhwa | HS-AS |
| Darshan |  | Suknundun | BT-AS |
| Megan |  | Sullivan | LE-AA |
| Keis | R | Sultani | PE-AS |
| Fang-I | C | Sun | LS-AS |
| Yu |  | Sun | BT-AS |
| Ana | L | Suriel | LA-AA |
| Shivraj |  | Surujdin | BT-AS |
| Monika | T | Szabo | BT-AS |
| Arfa |  | Tahir | BT-AS |
| Christopher | J | Tandoi | PE-AS |
| David | P | Tanis | BM-AAS |
| Antonia |  | Tavarez | LA-AA |
| Graicy |  | Taveras | LA-AA |
| Celyne | A | Taylor | CJ-AS |
| Sharlene |  | Tejada | LA-AA |
| Danielle Sarah |  | Tejeda | LA-AA |
| Anette |  | Teleki | LA-AA |
| Alex | Y | Tenadu | CJ-AS |
| Abigail | E | Tenecela | LE-AA |
| Chenge |  | Teng | BT-AS |
| Karla | Y | Tepatl | LA-AA |
| Ryane |  | Terry | LA-AA |
| Tianna | L | Tettis | LA-AA |
| Queenie | K.Y. | The | MA-AAS |
| Giesensky |  | Then | BT-AS |
| William |  | Thomas | FA-AS |
| Kenneth |  | Thompson | BT-AS |
| Lemar | T | Thompson | DP-AAS |
| Ivana | L | Thomson | LA-AA |
| Samarah |  | Thorpe | LA-AA |
| Ning |  | Tian | LA-AA |
| Vickram |  | Tilakdhari | HS-AS |
| Lyneise |  | Tillman | CJ-AS |
| Daniel |  | Tineo | ET-AAS |
| Melody |  | To | NH-AAS |


| Solange | E | Tofani | LA-AA |
| :---: | :---: | :---: | :---: |
| Pakfai |  | Tong | LA-AA |
| Takira | S | Tong | LA-AA |
| Daniel |  | Topchiev | LS-AS |
| Brenda |  | Torres | HS-AS |
| Esperanza |  | Torres | AF-AS |
| Frances |  | Torres | LA-AA |
| Melissa |  | Torres | LA-AA |
| Aberdeen |  | Toth | LA-AA |
| Marvin |  | Toussaint | LA-AA |
| Robert | A | Townsend | BT-AS |
| Philippe | G | Trabado | NH-AAS |
| Stephanie |  | Troumouhis | LA-AA |
| Jose Ignacio | 1 | Troya Macias | DP-AAS |
| Catherine | R | Tulloch | LA-AA |
| Christopher |  | Tung | BT-AS |
| Taylor | A | Turner | LA-AA |
| Antonino |  | Tuttolomondo | TX-AAS |
| Ronallen |  | Twitty | BT-AS |
| Brian |  | Udairam | CT-AAS |
| Balal |  | Uddin | LS-AS |
| Omolegho | P | Ugbeva | HS-AS |
| Lorena | V | Ulloa | HS-AS |
| Anahit |  | Ulubabyan | DA-AS |
| Kenneth |  | Urbina | CJ-AS |
| Miguel |  | Urena | LA-AA |
| John | S | Valcourt | HS-AS |
| Karol |  | Valencia | LA-AA |
| Josselyn | V | Valverde | MA-AAS |
| Solange | M | Vargas | LA-AA |
| Amy | L | Vasquez | HS-AS |
| Bianca | R | Vasquez | LA-AA |
| Dennys |  | Vasquez | HS-AS |
| Fidel | F | Vasquez | CJ-AS |
| Mabel |  | Vasquez | LE-AA |
| Sharon | J | Vassell | CJ-AS |
| Divin |  | Vattamattathil-Mathew | FA-AS |
| Ramsey | F | Vazquez | FA-AS |
| Gabriella |  | Velez | LA-AA |
| Allison | J | Veloso | LE-AA |
| Edwin |  | Ventura | CJ-AS |
| Jennifer |  | Vera | LS-AS |
| Samkieds |  | Vertus | HS-AS |


| Salvatore | F | Vicari | LS-AS |
| :---: | :---: | :---: | :---: |
| Edelin |  | Vidal | LA-AA |
| Edwin |  | Vidal | LA-AA |
| Francisco |  | Vieites | LA-AA |
| Lisa | V | Vigilante | CJ-AS |
| Catalina |  | Villa | HS-AS |
| Lucero |  | Villa | LA-AA |
| Karina | F | Villalba | LE-AA |
| Sanny |  | Villalon | FA-AS |
| Amy | J | Villanueva | LA-AA |
| Christine | G | Villanueva | CT-AAS |
| John-Billy |  | Vincent | HS-AS |
| Marvin |  | Vita | LA-AA |
| Kristy | M | Vitarelli | NS-AAS |
| Heather | S | Wagner | LE-AA |
| Mohammad |  | Waheed | LA-AA |
| Ryan | R | Walfall | LA-AA |
| Edward | C | Wallach | BT-AS |
| Boxi |  | Wang | LS-AS |
| Hui Ling |  | Wang | MO-CERT |
| Mengxia |  | Wang | BT-AS |
| Ruxue |  | Wang | BT-AS |
| Tong |  | Wang | BT-AS |
| Yicong |  | Wang | FA-AS |
| Amanda |  | Warren | LA-AA |
| Jasmine |  | Washington | LA-AA |
| Keisha |  | Watkin | DA-AS |
| Stefan | A | Weaver | CJ-AS |
| Mariah | S | Weeks | LA-AA |
| Huiting |  | Wei | LE-AA |
| Sijia |  | Wei | BT-AS |
| Megan | A | Weiss | LE-AA |
| Raymond |  | Weng | BT-AS |
| Jennifer |  | Wilches | LA-AA |
| Amirah | M | Williams | LA-AA |
| Ashley | M | Williams | DA-AS |
| lasha | T | Williams | LA-AA |
| Jamie |  | Williams | CJ-AS |
| Kayla | S | Williams | HS-AS |
| Kevon | A | Williams | DD-AAS |
| Shem | A | Williams | LA-AA |
| Shanice |  | Willis | LA-AA |
| Esmeralda |  | Wills | NS-AAS |


| Tavon | S | Wilson | LA-AA |
| :---: | :---: | :---: | :---: |
| Jonathan |  | Wong | BT-AS |
| Katie |  | Wong | CJ-AS |
| Li | T | Wong | FA-AS |
| Tony | F | Wong | DP-AAS |
| Yolanda |  | Woods | TX-AAS |
| Julian |  | Wright | LS-AS |
| Karl | S | Wright | BT-AS |
| Pinhong |  | Wu | MA-AAS |
| Shu Ying |  | Wu | MA-AAS |
| YuYu |  | Wu | LA-AA |
| Zeyun |  | Wu | BT-AS |
| Monica | R | Wyette | LA-AA |
| Maxine | A | Wynter | HS-AS |
| Chenyu |  | Xia | BA-AAS |
| David |  | Yagudaev | LA-AA |
| Adam |  | Yakubova | LA-AA |
| Jin |  | Yang | LA-AA |
| Stephanie | S | Yao | DA-AS |
| Pui-E |  | Yap | HS-AS |
| Jie |  | Ye | LA-AA |
| Xinkai |  | Ye | LA-AA |
| Dibanur |  | Yeasmin | BS-AAS |
| Nilufar |  | Yeasmin | CJ-AS |
| Amy | J | Yeom | LA-AA |
| Jae Hee | J | Yim | CJ-AS |
| Christopher |  | Yip | BT-AS |
| Sho |  | Yokotagawa | HS-AS |
| Allysa |  | Yonnas | HS-AS |
| Kevin |  | Yoo | LA-AA |
| Jerome |  | You | DP-AAS |
| Woiser |  | Youdon | LA-AA |
| Lissett |  | Young | LA-AA |
| Aya |  | Yousaf | LA-AA |
| Daniel |  | Yuan | LS-AS |
| Xin |  | Yuan | EM-AAS |
| Yao |  | Yuan | CT-AAS |
| Oscar | J. | Zagalo | BY-AS |
| Sharmin |  | Zaman | LS-AS |
| Trisha | E | Zamis | CJ-AS |
| Roberto |  | Zamora | CJ-AS |
| Emily |  | Zapata | LA-AA |
| Ana | B | Zarate | LA-AA |


| Samra |  | Zareef | BS-AAS |
| :---: | :---: | :---: | :---: |
| Steven | J | Zaslow | LA-AA |
| Italo | B | Zella | CJ-AS |
| Cyrell | E | Zerna | TM-AAS |
| Jhon | E | Zhagnay | FA-AS |
| Marina | Y | Zhai | LA-AA |
| Anna |  | Zhang | LA-AA |
| Binlei |  | Zhang | EM-AAS |
| Mark | H | Zhang | CJ-AS |
| Ming Cheng |  | Zhang | BT-AS |
| Xu |  | Zhang | LA-AA |
| Ying |  | Zhang | LA-AA |
| Zong Yang |  | Zhang | LS-AS |
| Xiyang |  | Zhao | LS-AS |
| Hui |  | Zheng | DP-AAS |
| Jun |  | Zheng | LS-AS |
| Xiao Zheng |  | Zheng | DP-AAS |
| Xing Yu |  | Zheng | LA-AA |
| Yating |  | Zheng | MA-AAS |
| Zhi Yuan |  | Zheng | EM-AAS |
| Jonathan | Er | Zhirzhan | BT-AS |
| Peter | D | Zhong | FA-AS |
| Qianru |  | Zhu | FA-AS |
| Luli | L | Zuazo | FA-AS |
| Samuel | J | Zuniga | LA-AA |

# QUEENSBOROUGH COMMUNITY COLLEGE <br> THE CITY UNIVERSITY OF NEW YORK 

## Report to the Academic Senate

April 20 ${ }^{\text {th }}, 2016$
From: Dr. David Sarno, Chairperson of the Committee on Committees
To: Dr. Joel Kuszai, Secretary of the Academic Senate Steering Committee

## Monthly Report of the Committee on Committees for March 2016

## I. Academic Senate Roster

There were no changes to the membership of the Academic Senate in March 2016. However, Dr. Andrew Nguyen (Biological Sciences and Geology) will be on sabbatical leave for the 2016-2017 academic year. Since this reduces the number of Senators from Biological Sciences and Geology to four, Julian Stark is eligible to serve the rest of this term, which will end in April 2017. He will be approached after the May 10 Senate meeting to confirm his interest.

## II. Standing Committees of the Academic Senate

## A. Rosters

There were no changes to the membership of the Standing Committees in April 2016.

## B. Elections (2016-2019 term)

Article VII, section 4a of the Bylaws of the Academic Senate states:
Nomination to all standing committees except the Committee on Committees shall be made by the Committee on Committees and shall be circulated to the members of the instructional staff at least two weeks prior to the election. Additional nominations may be made by a petition to be signed by seven (7) members of the instructional staff, and submitted to the Chairperson of the Committee on Committees at least one week prior to the election.

In accordance with the Bylaws, the ballots prepared by the CoC were distributed via email on March 28 to CLTs, faculty, and HEOs. A self-nomination form with detailed instructions was prepared and included in this mailing. There were no selfnominations. At the April 12 Academic Senate meeting, paper copies of the ballots were distributed to all voting members of the Senate. The members of the Standing Committees for 2016-2019 were unanimously elected as a single slate. A list of those candidates who were not elected will be maintained by the CoC. This list will be consulted to fill vacancies as they arise during the year. The CoC will also make suggestions to the Steering Committee regarding suitable Steering Committee Designees. The rosters for the Standing Committees follow. The corresponding committee webpages will be updated at the end of the spring semester. Committee Rosters for 2016-2019. All terms are for three years, except those marked by *.

2016-2019: Committee on Academic Development \& Elective Programs (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Hemraj-Benny, Tirandai | Chemistry | $\mathbf{2 0 1 9}$ |
| Srivastava, Anuradha | Biological Sciences \& Geology | $\mathbf{2 0 1 9}$ |
| VanDerHorn-Gibson, Jodi | Speech Communication \& Theatre Arts | $\mathbf{2 0 1 9}$ |
| Lekic, Mirna | Music | $\mathbf{2 0 1 7 *}$ |
| Lopez-Jantzen, Nicole | History | 2018 |
| Mohess, Neera | Library | 2018 |
| Shekoyan, Vazgen | Physics | 2018 |
| Gurtas, Yusuf | Mathematics \& Computer Science | 2017 |
| Berry, Emily | Health, Physical Education \& Dance | 2017 |

2016-2019: Committee on Admissions (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Alleyne, Carol | New Student Engagement Office | $\mathbf{2 0 1 9}$ |
| Urciuoli-Treue, Jannette | Student Affairs | $\mathbf{2 0 1 9}$ |
| Ellerton, Sharon | Biological Sciences \& Geology | $\mathbf{2 0 1 8 *}^{*}$ |
| Chiu, Kwai Bon | Mathematics | 2018 |
| Dahlke, Steven | Music | 2017 |
| Weber, Dolores | Nursing | 2017 |

2016-2019: Committee on Assessment \& Institutional Effectiveness (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Meltzer, Linda | Business | $\mathbf{2 0 1 9}$ |
| Salis, Andrea | Health, Physical Education \& Dance | $\mathbf{2 0 1 9}$ |
| Santoro, Maurizio | Foreign Languages \& Literatures | $\mathbf{2 0 1 9}$ |
| Ferrari-Bridgers, Franca | Speech Communication \& Theatre Arts | 2018 |
| Goldenberg, Joseph | Engineering Technology | 2018 |
| Schiebe, Mark | English | 2018 |
| Alizadeh, Changiz | Mathematics \& Computer Science | 2017 |
| Colalillo, Georgina | Nursing | 2017 |
| Dehipawala, Sunil | Physics | 2017 |

2016-2019: Committee on Awards \& Scholarship (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Roblodowski, Christopher | Biological Sciences \& Geology | $\mathbf{2 0 1 9}$ |
| Seo, Dugwon | Engineering Technology | $\mathbf{2 0 1 9}$ |
| Lall-Ramnarine, Sharon | Chemistry | 2018 |
| Rothman, David | Academic Literacy | 2018 |
| Bannon, Shele | Business | 2017 |
| Muchita, George | Career Services | 2017 |

2016-2019: Committee on Bylaws (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Jacobowitz, Susan | English | $\mathbf{2 0 1 9}$ |
| Micieli, Richard | Mathematics \& Computer Science | $\mathbf{2 0 1 9}$ |
| Stroehlein, Margaret | Nursing | $\mathbf{2 0 1 8 *}^{*}$ |
| Altimari, Michael | Biological Sciences \& Geology | 2018 |
| Bruzewicz, Derek | Chemistry | 2017 |
| Hammel, Stephen | Business | 2017 |

2016-2019: Committee on Ceremonial Occasions (3 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| -- | -- | -- |
| -- | -- | -- |
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2016-2019: Committee on Computer Resources (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Bulawa, Andrew | Mathematics \& Computer Science | 2019 |
| Ward, Leslie | Library | 2019 |
| Williams, Darryl | Foreign Languages \& Literatures | 2019 |
| Damas, M. Chantale | Physics | 2018 |
| Lau, Matthew | English | 2018 |
| Moreno, Marlon | Chemistry | 2018 |
| Cesarano, Michael | Speech Communication \& Theatre Arts | 2017 |
| Drini, Merlinda | Engineering Technology | 2017 |
| Moody, Anissa | Social Sciences | 2017 |

2016-2019: Committee on Continuing Education (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Goldfond, Carol | Business | $\mathbf{2 0 1 9}$ |
| Robertson, Rommel | Social Sciences | $\mathbf{2 0 1 9}$ |
| Cheng, Steven | Mathematics \& Computer Science | $\mathbf{2 0 1 7}^{*}$ |
| Metaxas, Mike | Engineering Technology | 2018 |
| Rosa, Mary Ann | Nursing | 2018 |
| Carmona, Naydu | Biological Sciences \& Geology | 2017 |

2016-2019: Committee on Course and Standing (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Armstrong, Daniel | Health, Physical Education \& Dance | $\mathbf{2 0 1 9}$ |
| Capozzoli, Gina | Student Affairs | $\mathbf{2 0 1 9}$ |
| Desruisseaux, Katwicia | College Discovery | $\mathbf{2 0 1 9}$ |
| Aikas, Rosie-Marie | Social Sciences | 2018 |
| Fragopoulos, George | English | 2018 |
| Mauro, Hayes | Art \& Design | 2018 |
| Nguyen, Andrew | Biological Sciences \& Geology | 2017 |
| Shin, Jun | Chemistry | 2017 |
| Warsi, Jilani | Academic Literacy | 2017 |

2016-2019: Committee on Cultural \& Archival Resources (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Beckford, lan | Strategic Planning, Assessment \& Institutional <br> Effectiveness | $\mathbf{2 0 1 9}$ |
| Francis, Leslie | Business | $\mathbf{2 0 1 9}$ |
| Lane, Cary | Academic Literacy | $\mathbf{2 0 1 9}$ |
| Gilleaudeau, John | Social Sciences | 2018 |
| Katz, Zivah Perel | English | 2018 |
| Lizzul, Isabella | Health, Physical Education \& Dance | 2018 |
| Khomyak, Nataliya | Mathematics \& Computer Science | 2017 |
| Kim, Mi-Seon | Library | 2017 |
| Lynch, Barbara | Speech Communication \& Theatre Arts | 2017 |

2016-2019: Committee on Curriculum (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Carroll, Julia | Academic Literacy | $\mathbf{2 0 1 9}$ |
| Petersen, Joan | Biological Sciences \& Geology | $\mathbf{2 0 1 9}$ |
| Yuster, Richard | Engineering Technology | $\mathbf{2 0 1 9}$ |
| Ellis, Lorena | Foreign Languages \& Literatures | 2018 |
| Volchok, Edward | Business | 2018 |
| Wallach, Patrick | Mathematics \& Computer Science | 2018 |
| Bonous-Smit, Barbara | Library | 2017 |
| Holden, Todd | Physics | 2017 |
| Tai, Emily | History | 2017 |

2016-2019: Committee on eLearning (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Kolack, Kevin | Chemistry | $\mathbf{2 0 1 9}$ |
| Tarafdar, Meghmala | English | 2019 |
| White, Eileen | Speech Communication \& Theatre Arts | 2019 |
| Geismar, Aviva | Health, Physical Education \& Dance | 2018 |
| Kokkinos, Dimitrios | Physics | 2018 |
| Namdar, Hamid | Engineering Technology | 2018 |
| Kim, Kwang Hyun | Mathematics \& Computer Science | 2017 |
| Reeves, Sharon | Foreign Languages \& Literatures | 2017 |
| Saur, Barbara | Nursing | 2017 |

2016-2019: Committee on Environmental, Quality of Life \& Disability Issues (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Davis, Edward | Engineering Technology | $\mathbf{2 0 1 9}$ |
| Funk, Jonathan | Mathematics \& Computer Science | $\mathbf{2 0 1 9}$ |
| Freier, Benami | Services for Students with Disabilities | $\mathbf{2 0 1 9}$ |
| Hull, Dominic | Chemistry | 2018 |
| Lai, Wei | Foreign Languages \& Literatures | 2018 |
| Ye, Weier | Academic Literacy | 2018 |
| Anderst, Leah | English | 2017 |
| Danzi, Sara | Biological Sciences \& Geology | 2017 |
| Rothenberg, Julia | Social Sciences | 2017 |

2016-2019: Committee on Library (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Honey, Larissa | Social Sciences | $\mathbf{2 0 1 9}$ |
| Tuszynska, Agnieszka | English | $\mathbf{2 0 1 9}$ |
| Chang, Joanne Chiung Wen | Music | 2018 |
| Timbilla, James | Biological Sciences \& Geology | 2018 |
| Loeffler, Helmut | History | 2017 |
| Scandaliato, Lisa | Art Gallery \& Community Outreach | 2017 |

2016-2019: Committee on Publications (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| lkwueze, Chukwudi | Social Sciences | $\mathbf{2 0 1 9}$ |
| Javdan, Mohammad | Biological Sciences \& Geology | $\mathbf{2 0 1 9}$ |
| Ford, Wendy | Business | 2018 |
| Maloy, Jennifer | Academic Literacy | 2018 |
| Alves, Kathleen Tamayo | English | 2017 |
| Armendariz, Raul | Physics | 2017 |

2016-2019: Committee on Student Activities (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Howell, Margaret | Financial Aid Office | $\mathbf{2 0 1 9}$ |
| Smith, Kerri-Ann | Academic Literacy | $\mathbf{2 0 1 9}$ |
| Bentley, Lawrence | Nursing | 2018 |
| Sexton, Danny | English | 2018 |
| King, Carolyn | Mathematics \& Computer Science | 2017 |
| Luedtke, Adam | Social Sciences | 2017 |

2016-2019: Committee on Vendor Services (6 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Quiroz, Miguel | Accounting \& Related Entities (Finance) | $\mathbf{2 0 1 9}$ |
| Proteasa, Gheorghe | Biological Sciences \& Geology | $\mathbf{2 0 1 9}$ |
| Li, Lixu | Mathematics \& Computer Science | 2018 |
| Tokke, Cheryl | Business | 2018 |
| Burgers, Johannes | English | 2017 |
| Sideris, Paul | Chemistry | 2017 |

2016-2019: WID WAC Committee (9 Members)

| Name | Department | Term Ends |
| :--- | :--- | :--- |
| Garbin, Daniel | Mathematics \& Computer Science | $\mathbf{2 0 1 9}$ |
| Litroff, Scott | Music | $\mathbf{2 0 1 9}$ |
| Tsimounis, Areti (Tsiola) | Biological Sciences \& Geology | $\mathbf{2 0 1 9}$ |
| Ambruso, Kimberly | Nursing | 2018 |
| Jimenez, Christopher | Speech Communication \& Theatre Arts | 2018 |
| Smith, Lakersha | Social Sciences | 2018 |
| Gayle, Marvin | Engineering Technology | 2017 |
| Gray, Peter | English | 2017 |
| Nichols, James David | History | 2017 |

A breakdown of the committee assignments by department follows.

Committee Assignments by Department

| Department | \# members | applied | \# continuing | \# new | total serving | \% dept applied | \% applicants placed | \% total dept placed | \% seats |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Literacy | 14 | 5 | 4 | 3 | 7 | 36 | 60 | 50 | 5.4 |
| Art \& Design | 12 | 0 | 1 | 0 | 1 | 0 | 0 | 8 | 0.8 |
| Biological Sciences \& Geology | 32 | 12 | 5 | 7 | 12 | 38 | 58 | 38 | 9.3 |
| Business | 30 | 6 | 5 | 3 | 8 | 20 | 50 | 27 | 6.2 |
| Chemistry | 14 | 4 | 6 | 2 | 8 | 29 | 50 | 57 | 6.2 |
| Engineering Technology | 18 | 6 | 5 | 3 | 8 | 33 | 50 | 44 | 6.2 |
| English | 45 | 9 | 9 | 3 | 12 | 20 | 33 | 27 | 9.3 |
| Foreign Languages \& Literatures | 14 | 4 | 3 | 2 | 5 | 29 | 50 | 36 | 3.9 |
| Health, Physical Education \& Dance | 17 | 4 | 3 | 2 | 5 | 24 | 50 | 29 | 3.9 |
| History | 15 | 1 | 4 | 0 | 4 | 7 | 0 | 27 | 3.1 |
| Library | 13 | 2 | 3 | 1 | 4 | 15 | 50 | 31 | 3.1 |
| Mathematics \& Computer Science | 58 | 13 | 8 | 5 | 13 | 22 | 38 | 22 | 10.1 |
| Music | 9 | 3 | 2 | 2 | 4 | 33 | 67 | 44 | 3.1 |
| Nursing | 28 | 7 | 6 | 1 | 7 | 25 | 14 | 25 | 5.4 |
| Physics | 15 | 2 | 6 | 0 | 6 | 13 | 0 | 40 | 4.7 |
| Social Sciences | 31 | 6 | 6 | 3 | 9 | 19 | 50 | 29 | 7.0 |
| Speech Communication \& Theatre Arts | 16 | 5 | 4 | 2 | 6 | 31 | 40 | 38 | 4.7 |
| Office of Student Affairs | ? | 2 | 0 | 2 | 2 | ? | 100 | ? | 1.6 |
| HEO | 183 | 29 | 1 | 1 | 2 | 16 | 21 | 4 | 1.6 |
| HEA |  |  | 0 | 5 | 5 |  |  |  | 3.9 |
| HEa |  |  | 0 | 0 | 0 |  |  |  | 0.0 |
| aHEO |  |  | 1 | 0 | 1 |  |  |  | 0.8 |
| TOTALS 120 |  |  |  | 47 open seats | 129total seats |  |  |  | total |

## III. Committee on Committees Election at the May Academic Senate Meeting

The terms of three members of the CoC will expire in May: Dona Boccio, Jeffrey Jankowski, and David Sarno. At the May meeting of the Academic Senate, nominations for new members will be presented, followed by a vote. The CoC, Steering Committee, and Department Chairs have all been asked to suggest nominees.

| Current Members of the Committee on Committees |  |  |  |
| :--- | :--- | :--- | :--- |
| Name | Rank | Department | Term End |
| Boccio, Dona | Professor | Mathematics | 2016 |
| Jankowski, Jeffrey | Professor | Social Sciences | 2016 |
| Sarno, David | Associate Professor | Chemistry | 2016 |
| Jue, Chong | Associate Professor | Biological Sciences \& Geology | 2017 |
| Mooney, Christine | Associate Professor | Business | 2017 |
| Murley, Jean | Associate Professor | English | 2017 |
| Blake-Campbell, Barbara | Associate Professor | Nursing | 2018 |
| Wentrack, Kathleen | Associate Professor | Art \& Design | 2018 |
| Yuster, Richard | Professor | Engineering Technology | 2018 |

## IV. Upcoming business

A. The CoC database must be updated with the newly elected committee members.
B. The Senate has voted to revive the Committee on Ceremonial Occasions. Three members will have to be appointed. In order to comply with recently enacted membership policies, one member will have a three-year term, one will have a twoyear term, and one will have a one-year term. Shannon Kincaid may be interested and should be approached.
C. The CoC guidebook needs to be updated.
D. Article VII, section 4 a of the Bylaws should be examined with the Bylaws Committee. Self-nomination after the CoC has already prepared the committee ballots should either be removed or revised.
E. The "What Faculty Need To Know" webpage should be renamed and revised to include all instructional staff by referring to CLTs and HEOs in addition to Faculty.

Respectfully submitted,
Qavid MP. ©farno
David M. Sarno, PhD
Chairperson, Committee on Committees

## QUEENSBOROUGH COMMUNITY COLLEGE

 CITY UNIVERSITY OF NEW YORK
## COMMITTEE ON CURRICULUM

To: Peter Bales, Academic Senate Steering Committee<br>From: Lorena B. Ellis, Chairperson, Committee on Curriculum<br>Date: April 28, 2016<br>Subject: April Monthly Report for the May 10, 2016 Senate<br>CC: College Archives (CWilliams@qcc.cuny.edu)

The Committee on Curriculum has voted to send the following recommendations to the Academic Senate:

```
3 0 \text { Course revisions (Item 1)}
1 0 \text { Pre-requisite revisions (Item 1)}
    2 New courses (Item 2)
1 0 \text { Course deletions (Item 3)}
2 Program revisions (Item 4)
1 \text { New program (Item 5)}
1 \text { Discontinuation of a Concentration in a Program (Item 6)}
1 \text { General Education Assessment Task Force Report to the Academic Senate (Item 7)}
```


## 1. Course Revisions

## ENGINEERING TECHNOLOGY

Departmental approval: March 16, 2016

## FROM:

(Requisite and hours revision)
ET575 Introduction to C++ Programming Design and Implementation
Pre-requisites: None
Co-requisites: None
3 class hourst 3 credits

## Course Description:

This foundation course provides a general understanding of the use and development of computer software applications in fields such as science, mathematics, and business using a high level computer language. The course will concentrate on assessing the practical requirements of a software package and developing applications in $\mathrm{C}++$, which is a high level computer language that teaches the basic skills necessary for implementing it in a variety of real world applications. Topics include the analysis and use of concepts such as: primitive data types and their operators, basic I/O, control statements, decision making, looping, subprograms, arrays, strings and computer ethics. Each student will have a computer platform at his/her disposal from which he/she will design, develop, implement and test programs, while evaluating the interactions between a user and the computer.

TO:
ET575 Introduction to C++ Programming Design and Implementation
Pre-requisites: Prerequisite of MA-321 or co-requisite of MA-114 or MA119 or MA-440
Co-requisites: Prerequisite of MA-321 or co-requisite of MA-114 or MA119 or MA-440
2 class hours, 2 lab hours, 3 credits

## Course Description:

This foundation course provides a general understanding of the use and development of computer software
applications in fields such as science, mathematics, and business using a high level computer language. The course will concentrate on assessing the practical requirements of a software package and developing applications in $\mathrm{C}++$, which is a high level computer language that teaches the basic skills necessary for implementing it in a variety of real world applications. Topics include the analysis and use of concepts such as: primitive data types and their operators, basic I/O, control statements, decision making, looping, subprograms, arrays, strings and computer ethics. Each student will have a computer platform at his/her disposal from which he/she will design, develop, implement and test programs, while evaluating the interactions between a user and the computer.

## Rationale:

Course contact hours are increased to be in line with to introductory programming classes at other colleges such as Queens College and City College. Both these colleges stipulate 3 credits with 2 hours lecture and 2 hours lab for their introductory programming classes. It will be difficult for our students to get transfer credit for this course if the course has fewer contact hours.

The lab outline is provided in the syllabus form.
A math requirement has been added because we have found that students who do not have sufficient math skills do poorly in this class. Presently the course has no requisites.

## BUSINESS DEPARTMENT

## FROM:

(Requisite revision)
BU-203 Principles of Statistics
4 class hours 3 credits
Pre-requisites: MA-128 or MA-260 or MA-321 or MA-440 (Students who have taken MA-240, which is no longer offered, have satisfied the mathematics prerequisite for BU-203)

## Course Description:

An introduction to statistical methods and statistical reasoning; nature and scope of statistical inquiries; collection and presentation of data; descriptive methods with particular reference to frequency distributions, correlation, index numbers and time series analysis; elements of probability, sampling methods, sampling error and principles of estimation.

TO:
Departmental approval date April 6, 2016.
BU-203 Principles of Statistics
4 class hours 3 credits
Pre-requisites: MA-114 or MA-119 or MA-321 (Students who have taken MA-240, which is no longer offered, have satisfied the mathematics prerequisitefor BU-203.

## Course Description:

An introduction to statistical methods and statistical reasoning; nature and scope of statistical inquiries; collection and presentation of data; descriptive methods with particular reference to frequency distributions, correlation, index numbers and time series analysis; elements of probability, sampling methods, sampling error and principles of estimation.

## Rationale:

Faculty that teach BU-203 believe that MA-114 or MA-119 or MA-321 provide a sufficient basis for taking BU-203. In addition, students close to graduation often need MA-128, MA-260 or MA-440 and BU-203 in order to graduate and by requiring taking the Mathematics course and BU-203 in sequence instead of concurrently often delays graduation.

CIS-251 Analysis and Design of System Projects
2 class hours, 2 laboratory hours, 3 credits
Pre-requisites: CIS-152, CIS-208 and MA-10 or satisfactory score on the Mathematics Placement Test.

## Course Description:

Students use all previously learned data processing concepts and techniques in this laboratory course to design and implement a complete data processing application package for common business needs, such as payroll, inventory management, accounts receivable files, and management information systems.
Development of the application will be accomplished concurrently with the study of the phases of Systems Analysis and Designs.

## TO:

Departmental approval date November 4, 2015
CIS-251 Analysis and Design of System Projects
2 class hours, 2 laboratory hours, 3 credits
Pre-requisites: CIS-152, CIS-153, CIS-208 and MA-10 or satisfactory score on the Mathematics Placement Test.

## Course Description:

Students use all previously learned data processing concepts and techniques in this laboratory course to design and implement a complete data processing application package for common business needs, such as payroll, inventory management, accounts receivable files, and management information systems. Development of the application will be accomplished concurrently with the study of the phases of Systems Analysis and Designs.

## Rationale:

When the CIS (Computer Information Systems) Program revisions were submitted to the Committee on Curriculum last year, one of the pre-requisites - CIS-153 Microcomputer Operating Systems and Utility Software - was inadvertently omitted.

## FOREIGN LANGUAGES AND LITERATURES Revised courses

Departmental approval date April 16, 2016: LX111 (Requisite and course description revision)

## FROM:

LA-111 Elementary Arabic I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is designed for students who have no previous background in Arabic. It focuses on the four essential language skills: listening, speaking, reading and writing. The alphabet, sound system, and basic greetings and expressions will be covered this semester. The main focus is on Modern Standard Arabic (MSA), although students are also trained to speak using spoken Arabic. Weekly attendance in the tanguage laboratory is required.

## TO:

LA-111 Elementary Arabic I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures

## Course Description:

This is an introduction to Arabic language and culture for students who wish to develop basic listening, speaking, reading and writing skills in Arabic, and explore aspects of culture in Arabic-speaking countries. The alphabet, sound system and Arabic orthography will be covered, as well as elementary greetings and expressions. Students learn Modern Standard Arabic (MSA) , with some exposure to colloquial Arabic forms. Weekly individual practice online or in the language laboratory is required.

## Rationale:

The course description for LA-111 needs to be updated in order to: 1) indicate that the culture(s) of Arabicspeaking countries are introduced alongside the teaching of Arabic language; 2) "lab" exercises emphasizing listening and speaking activities can now be completed online and/or in the language laboratory; 3) the Department of Foreign Languages has adopted a new formulation of the prerequisite; 4) the expression " lecture hours" should be replaced by "class hours," in use for all other languages.

## FROM:

LC-111 Elementary Chinese I
4 class hours, 4 credits
Pre-requisites: None

## Course Description:

An introduction to Mandarin Chinese. Practice in the four language skills-listening, speaking, reading, and writing. Emphasis on pronunciation and conversation. Both the pinyin romanization system and characters will be introduced. This is the first semester of a two-semester course of beginning Chinese. Weekly attendance in the language laboratory is required.

## TO:

LC-111 Elementary Chinese I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is an introduction to Chinese language and culture designed for students who have not learned Mandarin at home. Students will develop basic listening, speaking, reading and writing skills in Mandarin, and explore aspects of culture in Chinese-speaking countries. Both the pinyin Romanization system and characters will be introduced. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LC-111 course description for Chinese language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) this course is not for heritage speakers of Mandarin; b) the four language skills are taught in the context of, and alongside, culture; c) "lab" exercises emphasizing listening comprehension and speaking can now be completed in the language laboratory or online. It was decided to indicate that placement by Department of Foreign Languages is a prerequisite for LC-111.

## FROM:

LF-111 Elementary French I
4 class hours, 4 credits
Pre-requisites: None

## Course Description:

Elements of French grammar; learning to understand and speak the language. Intensive oral practice, as well as practice in writing simple compositions. Weekly attendance in the language laboratory is required.

## TO:

LF-111 Elementary French I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is an introduction to French language and culture designed for students who have no previous background in French. Students will develop basic listening, speaking, reading and writing skills, and explore aspects of French and Francophone cultures. Weekly listening, speaking and viewing activities
online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LF-111 course description for French language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) courses at the 111level are for beginners only; b) the four language skills are taught in the context of, and alongside, culture;
c) "lab" exercises emphasizing listening comprehension and speaking can now be completed in the language laboratory or online. It was also decided to indicate that placement by the Department of Foreign languages is a prerequisite to LF-111.

## FROM:

LG-111 Elementary German I
4 class hours, 4 credits
Pre-requisites: None

## Course Description:

Students learn the elements of German grammar and learn to understand and speak the language. Intensive oral practice as well as an introduction to writing simple compositions. Weekly attendance in the tanguage laboratory is required.

## TO:

LG-111 Elementary German I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is an introduction to German language and culture designed for students who have no previous background in German. Students will develop basic listening, speaking, reading and writing skills, and explore aspects of culture in German-speaking countries. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LG-111 course description for German language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) courses at the 111level are for beginners only; b) the four language skills are taught in the context of, and alongside, culture;
c) "lab" exercises emphasizing listening comprehension and speaking can now be completed in the language laboratory or online. It was also decided to indicate that placement by the Department of Foreign Languages is a prerequisite to LG-111.

## FROM:

LH-111 Elementary Hebrew I
4 class hours, 4 credits
Pre-requisites: None

## Course Description:

Reading of elementary Hebrew prose, understanding the spoken language; oral expression and simple written composition. Weekly attendance in the language laboratory is required.

## TO:

LH-111 Elementary Hebrew I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is an introduction to Hebrew language and culture. Students will develop basic listening, speaking, reading and writing skills, and explore aspects of Israel and Jewish culture. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LH-111 course description for Hebrew language was found to be outdated, and therefore the Department of Foreign Languages has decided to specify the following the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises emphasizing listening comprehension and speaking can be completed in the language laboratory or online. It was decided to indicate that placement by the Department of Foreign Languages is a prerequisite to LH-111.

## FROM:

LI-111 Elementary Italian I
4 class hours, 4 credits
Pre-requisites: None

## Course Description:

Introduction to reading, writing, and speaking the language; study of the grammar; oral practice. Weekly attendance in the Language Laboratory is required.

## TO:

LI-111 Elementary Italian I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is an introduction to Italian language and culture designed for students who have no previous background in standard Italian. Students will develop basic listening, speaking, reading and writing skills, and explore aspects of Italian culture. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LI-111 course description for Italian language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) courses at the 111level are for beginners only; b) the four language skills are taught in the context of, and alongside, culture; c) "lab" exercises emphasizing listening comprehension and speaking can be completed in the language laboratory or online. It was also decided to indicate that placement by the Department of Foreign Languages is a prerequisite to LI-111.

## FROM:

LS-111 Elementary Spanish I
4 class hours, 4 credits
Pre-requisites: None

## Course Description:

Elements of Spanish grammar and orthography with emphasis on everyday practical vocabulary. Intensive aurat-oral practice. Weekly attendance in the Language Laboratory is required.

## TO:

LS-111 Elementary Spanish I
4 class hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages and Literatures.

## Course Description:

This course is an introduction to Spanish language and culture designed for students who have no previous background in Spanish. Students will develop basic listening, speaking, reading and writing skills, and explore aspects of Spanish and Spanish-American cultures. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LS 214 course description for Spanish language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) courses at the 111-
level are for beginners only; b) the four language skills are taught in the context of, and alongside, culture; c) "lab" exercises emphasizing listening comprehension and speaking can now be completed in the language laboratory or online. It was also decided to indicate that placement by the Department of Foreign Languages is a prerequisite to LS-111.

Departmental approval date April 16, 2016: LX112 (Requisite and course description revision)

## FROM:

LA-112 Elementary Arabic II
4 lecture hours, 4 credits
Pre-requisites: Placement by the Department of Foreign Languages

## Course Description:

This is the second semester course for elementary Modern Standard Arabic. It focuses on the four essential language skills: listening, speaking, reading and writing. Students will continue studying the tanguage through a communicative approach. They will also develop basic conversational and grammatical skills, and they will acquire additional insight into the cultural and social contexts of the Arabic-speaking World. Consistent emphasis is placed on authentic materials that are derived from the living cultural context. Weekly attendance in the language laboratory is required.

## TO:

LA-112 Elementary Arabic II
4 class hours, 4 credits
Pre-requisites: LA-111 with a grade of "C" or higher, or placement by the Department of Foreign
Languages and Literatures

## Course Description:

This course is the second half of a first-year course in Modern Standard Arabic. Emphasis is on the progressive development of listening, speaking, reading and writing skills, and learning basic grammatical constructs. Students continue to learn about cultural and social contexts of the Arabic-speaking world. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

The course description for LA-112 needs to be updated in order to: 1) indicate that the culture(s) of Arabicspeaking countries are introduced alongside the teaching of Arabic language; 2) "lab" exercises emphasizing listening and speaking activities can now be completed online and/or in the language laboratory; 3) the Department now uses a different formulation for the prerequisite to LA-112; 4) the expression "lecture hours" should be replaced by "class hours," the term in use for all other languages.

## FROM:

LC-112 Elementary Chinese II
4 class hours, 4 credits
Pre-requisites: LC-111 (or the equivalent), with a grade of $C$ or better.

## Course Description:

Gontinuation of LG-111. Further practice in the four language skills to help students develop-simple, practical conversational skills in Mandarin. Weekly attendance in the language laboratory is required.

## TO:

LC-112 Elementary Chinese II

## 4 class hours, 4 credits

Pre-requisites: LC-111 with a grade of "C" or higher, or placement by the Department of Foreign Languages
and Literatures

## Course Description:

This course is the second half of a first-year course in Mandarin. Emphasis is on the progressive
development of listening, speaking, reading and writing skills. Students continue to explore the culture of Chinese-speaking countries. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LC-112 course description for Chinese language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises emphasizing listening comprehension and speaking can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite to LC-112.

## FROM:

LF-112 Elementary French II
4 class hours, 4 credits
Pre-requisites: LF-111 (or the equivalent), with a grade of $C$ or better.

## Course Description:

Continuation of LF-111. Weekly attendance in the language laboratory is required.

## TO:

LF-112 Elementary French II
4 class hours, 4 credits
Pre-requisites: LF-111 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is the second half of a first-year course in French. Emphasis is on the progressive development of listening, speaking, reading and writing skills. Students continue to explore the culture of France and Francophone countries. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LF-112 course description for French language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises emphasizing listening comprehension and speaking can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite to LF-112.

## FROM:

LG-112 Elementary German II
4 class hours, 4 credits
Pre-requisites: LC-111 (or the equivalent), with a grade of $C$ or better.

## Course Description:

The study of basic German grammar is completed. Students learn to read easy German prose and express their ideas. Weekly attendance in the language laboratory is required.

TO:
LG-112 Elementary German II
4 class hours, 4 credits
Pre-requisites: LG-111 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is the second half of a first-year course in German. Emphasis is on the progressive development of listening, speaking, reading and writing skills. Students continue to explore the culture of German-speaking countries. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LG-112 course description for German language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises emphasizing listening comprehension and speaking can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite to LG-112.

## FROM:

LH-112 Elementary Hebrew II
4 class hours, 4 credits
Pre-requisites: $\mathrm{LH}-111$ (or the equivalent), with a grade of $G$ or better.

## Course Description:

Gontinuation of Hebrew 1. Weekly attendance in the language laboratory is required.

## TO:

LH-112 Elementary Hebrew II
4 class hours, 4 credits
Pre-requisites: $\underline{\mathrm{LH}-111 \text { with a grade of "C" or higher, or placement by the Department of Foreign Languages }}$ and Literatures

## Course Description:

This course is the second half of a first-year course in Hebrew. Emphasis is on the progressive development of listening, speaking, reading and writing skills. Students continue to explore Israel and Jewish culture. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LH-112 course descriptions for Hebrew language were found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises emphasizing listening comprehension and speaking can now be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite to LH-112.

## FROM:

LI-112 Elementary Italian II
4 class hours, 4 credits
Pre-requisites: L1-111 (or the equivalent), with a grade of $C$ or better.

## Course Description:

Continuation of Ll-111. Weekly attendance in the Language Laboratory is required.

## TO:

LI-112 Elementary Italian II
4 class hours, 4 credits
Pre-requisites: 니-111 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is the second half of a first-year course in Italian. Emphasis is on the progressive development of listening, speaking, reading and writing skills. Students continue to explore Italian culture. Weekly listening, speaking, and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LI-112 course description for Italian language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language
skills are taught in the context of, and alongside, culture; b) "lab" exercises emphasizing listening comprehension and speaking can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite to LI-112

## FROM:

LS-112 Elementary Spanish II
4 class hours, 4 credits
Pre-requisites: LS-111 (or the equivalent), with a grade of $C$ or better.

## Course Description:

Complete study of Spanish grammar with emphasis on everyday practical vocabulary. Weekly attendance in the Language Laboratory is required.

TO:
LS-112 Elementary Spanish II
4 class hours, 4 credits
Pre-requisites: $\underline{L S}-111$ with a grade of " C " or higher, or placement by the Department of Foreign Languages and Literatures

## Course Description:

This course is the second half of a first-year course in Spanish. Emphasis is on the progressive development of listening, speaking, reading and writing skills. Students continue to explore Spanish and Spanish-American cultures. Weekly listening, speaking, and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LS-112 course description for Spanish language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises emphasizing listening comprehension and speaking can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite to LS-112.

Departmental approval date April 20, 2016: LX213 (Requisite and course description revision)

## FROM:

LA-213 Intermediate Arabic I
Pre-requisites: Placement by the Department of Foreign Languages
3 lecture hours, 3 credits

## Course Description:

Intermediate Arabic I is a third-semester course, continuing to develop listening, speaking, reading and writing in Modern Standard Arabic (MSA), and fostering acquaintance with colloquial variants of Arabic. The course builds vocabulary as well as knowledge of the Arabic grammar system and conventional Arabic usage within the context of assignments designed to familiarize students with everyday activities in the Arabic-speaking world. Weekly attendance in the language laboratory is required.

## TO:

LA-213 Intermediate Arabic I
Pre-requisites: LA-112 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

Intermediate Arabic I continues to develop listening, speaking, reading and writing in Modern Standard Arabic (MSA), and to foster acquaintance with colloquial variants of Arabic. New vocabulary, idiomatic phrases and grammatical structures will be introduced within the context of assignments that familiarize students with everyday activities in the Arabic-speaking world. Weekly individual listening, speaking and
viewing activities in the language laboratory or online are part of the course.

## Rationale:

The course description for LA-213 needs to be updated in order to: 1) indicate that the culture(s) of Arabicspeaking countries are introduced alongside the teaching of Arabic language; 2) "lab" exercises emphasizing listening and speaking activities can now be completed online and/or in the language laboratory; 3) the Department of Foreign Languages has adopted a new formulation for the prerequisite; 4) the expressions "lecture hours" should be replaced by "class hours," in use for all other languages.

## FROM:

LC-213 Intermediate Chinese I
Pre-requisites: LC-112 or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

This course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading, and writing. Content-appropriate cultural information will be presented to promote the students' understanding of the Chinese-speaking world. This is the first semester of a two-semester course of intermediate Chinese.

## TO:

LC-213 Intermediate Chinese I
Pre-requisites: $\underline{\text { LC-112 }}$ with a grade of " C " or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Cultural material will be introduced at an appropriate level in order to foster students' understanding and appreciation of the culture of Chinese-speaking countries. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LC 213 course description for Chinese language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LF-213 Intermediate French I
Pre-requisites: LF-112 or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

Review of French grammar; selected readings in French literature studied and analyzed.

## TO:

LF-213 Intermediate French I
Pre-requisites: LF-112 with a grade of " C " or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course is for students who wish to strengthen and expand their vocabulary and knowledge of grammar, and improve their ability to converse on everyday subjects. Students will be exposed to
contemporary social and cultural issues of the French-speaking world through film and multimedia. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LF 213 course description for French language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, French and Francophone culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LG-213 Intermediate German I
Pre-requisites: LG-112 or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

Intensive review of German grammar through practice of the phonological and grammatical structure of German orally and in writing. Selected readings in contemporary German prose.

## TO:

LG-213 Intermediate German I
Pre-requisites: LG-112 with a grade of "C" or higher, or placement by the Department of Foreign
Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Cultural material will be introduced at an appropriate level in order to foster students' understanding and appreciation of the culture of German-speaking countries. Weekly listening, speaking, and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LG-213 course description for German language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can now be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LH-213 Intermediate Hebrew I
Pre-requisites: LH-112 or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

General review of grammar covered in Hebrew I (LH-111) and Hebrew II (LH-112); readings, short stories, reports, and discussion in the language.

## TO:

LH-213 Intermediate Hebrew I
Pre-requisites: LH-112 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Cultural material will be introduced in order to broaden students' understanding and appreciation of

Israel and Jewish culture. Weekly listening, speaking, and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LH 213 course descriptions for Hebrew language were found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can now be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite to LH-213.

## FROM:

LI-213 Intermediate Italian I
Pre-requisites: $+1-112$ or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

General review of grammar; readings and discussion in Italian.

## TO:

LI-213 Intermediate Italian I
Pre-requisites: 니-112 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course provides an opportunity to acquire increased fluency in spoken Italian with an emphasis on natural, colloquial usage. New vocabulary, idiomatic phrases and grammatical structures will be introduced in a cultural context. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LI-213 course description for Italian language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LS-213 Intermediate Spanish I
Pre-requisites: $L-112$ or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

Review of Spanish grammar with intensive aural-oral practice, through the use of videotapes and selected readings.

## TO:

LS-213 Intermediate Spanish I
Pre-requisites: LS-112 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Cultural material will be introduced in order to broaden students' understanding and appreciation of Spanish-speaking cultures. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LS-213 course description for Spanish language was found to be outdated, therefore the Department of Foreign Languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite

Departmental approval date April 20, 2016: LX214 (Pre-requisite and course description revision)

## FROM:

LC-214 Intermediate Chinese II
Pre-requisites: LC213 or the equivalent, with a grade of $C$ or better or permission of the Department
3 class hours, 3 credits

## Course Description:

The focus of this course is to continue the improvement of oral communication skills, along with reading, writing and grammar. It is designed to help students expand their vocabulary, and to study more complex grammatical structures. Components of Chinese culture will be integrated through readings, discussions and realia.

TO:
LC-214 Intermediate Chinese II
Pre-requisites: $\underline{L C-213}$ with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

The focus of this course is to continue the improvement of oral communication skills, along with reading, writing and grammar. It is designed to help students expand their vocabulary, and to study more complex grammatical structures. Components of Chinese culture will be integrated through readings, discussions and realia. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LC-214 course description for Chinese language was found to be outdated, therefore the Department of Foreign languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite

## FROM:

LF-214 Intermediate French II
Pre-requisites: LF213 or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

Intensive training in literary analysis through study of French works. Emphasis on French composition and conversation.

## TO:

LF-214 Intermediate French II
Pre-requisites: LF-213 with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course emphasizes authentic texts, more complex grammar, and practice in oral and written expression. Social and historical topics relating to France and the Francophone world presented through literary texts, film and multimedia will form the basis for discussion and writing assignments. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course. This course is appropriate for heritage speakers.

## Rationale:

Upon review, the LF-214 course description for French language was found to be outdated, therefore the Department of Foreign languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can now be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LG-214 Intermediate German II
Pre-requisites: LG213 or the equivalent, with a grade of $G$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

Intensive training in literary analysis through study of German works. Emphasis on German composition and conversation.

## TO:

LG-214 Intermediate German II
Pre-requisites: LG-213 with a grade of "C" or higher, or placement by the Department of Foreign
Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course emphasizes authentic texts, more complex grammar, and practice in oral and written expression. Social and historical topics of German-speaking countries presented through literary texts, film and multimedia will form the basis for discussion and writing assignments. Weekly listening, speaking, and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LG-214 course description for German language was found to be outdated, therefore the Department of Foreign languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can now be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LH-214 Intermediate Hebrew II
Pre-requisites: LH 213 or the equivalent, with a grade of $G$ or better or permission of the Department
3 class hours, 3 credits

## Course Description:

Gompositions, readings, and discussion of the material covered in class. Short stories, poems, scenes from plays, reports, and discussions in the language.

## TO:

LH-214 Intermediate Hebrew II
Pre-requisites: $\underline{L H-213}$ with a grade of "C" or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course emphasizes authentic texts, more complex grammar, and practice in oral and written expression. Social and historical topics of Israel and Jewish culture presented through literary texts, film and multimedia will form the basis for discussion and writing assignments. Weekly listening, speaking, and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LH 214 course description for Hebrew language was found to be outdated, therefore the Department of Foreign languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can now be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LI-214 Intermediate Italian II
Pre-requisites: H 213 or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

Short stories, poems, scenes from plays, reports, and discussion in Italian.

## TO:

LI-214 Intermediate Italian II
Pre-requisites: LI-213 with a grade of " C " or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course emphasizes reading and comprehension of authentic texts, including newspaper or magazine articles, and excerpts from contemporary literary works. More complex grammar and vocabulary are introduced through discussion of selected social and cultural issues presented in the reading material. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LI-214 course description for Italian language was found to be outdated, therefore the Department of Foreign languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## FROM:

LS-214 Intermediate Spanish II
Pre-requisites: LS213 or the equivalent, with a grade of $C$ or better or permission of the Department 3 class hours, 3 credits

## Course Description:

Emphasis on written composition. Selections from Spanish and Spanish-American literature read and analyzed.

## TO:

LS-214 Intermediate Spanish II
Pre-requisites: $\underline{\text { LS-213 }}$ with a grade of " C " or higher, or placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course emphasizes authentic texts, more complex grammar, and practice in oral and written expression. Social and historical topics of Spanish-speaking countries presented through literary texts, film and multimedia will form the basis for discussion and writing assignments. Weekly listening, speaking and viewing activities online or in the language laboratory are part of the course.

## Rationale:

Upon review, the LS 214 course description for Spanish language was found to be outdated, therefore the Department of Foreign languages has decided to specify the following information: a) the four language skills are taught in the context of, and alongside, culture; b) "lab" exercises including listening comprehension, speaking and/or viewing film and multimedia can now be completed in the language laboratory or online; c) the Department now uses a different formulation for the prerequisite.

## HISTORY DEPARTMENT (These items might have to be put on hold?)

Prefix + requisite revisions: Com.Curr.2-25-16; Senate 3-8-2016; Chancel. Rep. April 2016)
HIST 110 Introduction to Ancient Civilization
HIST 111 Introduction to Medieval and Early Modern Western Civilization
HIST 112 Introduction to Modern Western Civilization
HIST 127 Growth of American Civilization I: Colonial Period Through Reconstruction
HIST 128 Growth of American Civilization II: Reconstruction to the Present
(Pre-fix and requisite changes)

| FROM: | TO: |
| :---: | :---: |
| H1 123 Recent American Civilization Prorequisite: BE-122 (or BE-226) and BE-112 (or BE205), or satisfactory score on the CUNY/ACT Assessment Test 3 hours; 3 credits | HIST 123 Recent American Civilization Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits |
| H1 132 World History Since 1500 <br> Prorequisite: BE-122 (or BE-226) and BE-112 (or BE205), or satisfactory score on the CUNY/ACT Assessment Test <br> 3 hours; 3 credits | HIST 132 World History Since 1500 Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits |

HI 133 Introduction to Modern East Asian Civilization
Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/ACT Assessment Test 3 hours; 3 credits

## HI 135 History of New York State

Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/ACT Assessment Test
3 hours; 3 credits

HI 136 African-American History
Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/ACT Assessment Test 3 hours; 3 credits

HI 140 Latin American History I: Ancient Times to Independence (1500 b.c. to 1825)
Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/ACT Assessment Test
3 hours; 3 credits

HI 141 Latin American Story II: Independence to the Present

Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/ACT Assessment Test
3 hours; 3 credits

## HI 154 History and Health Care

Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/ACT
Assessment Test
3 hours; 3 credits

HI 178, 179 Special Topics in History
Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/ACT
Assessment Test
3 hours; 3 credits

HI 193 Introduction to the History of Borderlands
Prerequisite: BE-122 (or BE-226) and BE-112 (or BE-205), or satisfactory score on the CUNY/AGT Assessment Test
3 hours; 3 credits

HIST 133 Introduction to Modern East Asian Civilization
Prerequisite or Co-requisite: ENGLISH 101
3 hours; 3 credits

HIST 135 History of New York State Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits

HIST 136 African-American History Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits

HIST 140 Latin American History I: Ancient Times to Independence (1500 b.c. to 1825) Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits

HIST 141 Latin American History II: Independence to the Present Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits

HIST154 History and Health Care Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits

HIST 178, 179 Special Topics in History Prerequisite or Co-requisite: ENGLISH 101 3 hours; 3 credits

HIST 193 Introduction to the History of Borderlands
Prerequisite or Co-requisite: ENGLISH 101
3 hours; 3 credits

These new courses were approved by the QCC Senate in Sp-2016

| FROM | TO |
| :---: | :---: |
| HIST-186: Introduction to Legal History I: The Ancient World through the Early Modern Period Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO <br> HIST-186: Introduction to Legal History I: The Ancient World through the Early Modern Period Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST-187: Introduction to Legal History II: The Enlightenment through the Present Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO <br> HIST-187: Introduction to Legal History II: The Enlightenment through the Present <br> Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST-281: History of Nationalism and the Politics of Identity Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO <br> HIST-281: History of Nationalism and the Politics of Identity <br> Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST-292: History of Fascism, Nazism, and Communism. <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO <br> HIST-292: History of Fascism, Nazism, and Communism. <br> Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST-292: History of Fascism, Nazism, and Communism. <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/AGT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits. | TO <br> HIST-292: History of Fascism, Nazism, and Communism. <br> Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST-252 History of Medieval and Early Modern Spain <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits <br> Course Description: | TO <br> HIST-252 History of Medieval and Early Modern Spain <br> Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST-205 History of the First World War: 19141918 <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT | TO: <br> HIST-205 History of the First World War: 1914- <br> 1918 |


| Assessment Test. Co-requisite: English 101 3 class hours; 3 credits | Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| :---: | :---: |
| HIST-242 History of Modern Japan: 1868-1989 Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credit | TO: <br> HIST-242 History of Modern Japan: 1868-1989 Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST-227 British History since 1688 <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT <br> Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO: <br> HIST-227 British History since 1688 <br> Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST 211 History of Early Christianity: (See deletions below) <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO: <br> HIST 211 History of Early Christianity Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST 236 History of Germany <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO: <br> HIST 236 History of Germany <br> Pre-requisites: Prerequisite or Co-requisite: <br> English 101 <br> 3 class hours; 3 credits |
| HIST 208 History of the Romans and Their <br> Empire <br> Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO: <br> HIST 208 History of the Romans and Their Empire <br> Pre-requisites: Prerequisite or Co-requisite: English 101 <br> 3 class hours; 3 credits |
| HIST 238 History of Russia Pre-requisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test. <br> Co-requisite: English 101 <br> 3 class hours; 3 credits | TO: <br> HIST 238 History of Russia <br> Pre-requisites: Prerequisite or Co-requisite: <br> English 101 <br> 3 class hours; 3 credits |

## 2. New Courses

## FOREIGN LANGUAGES AND LITERATURES

Departmental approval date April 20, 2016

LC-322 Introduction to Chinese Linguistics
Pre-requisite: Placement by the Department of Foreign Languages and Literatures
3 class hours, 3 credits

## Course Description:

This course introduces the basic linguistic structure, history and variation of Mandarin Chinese to undergraduate students who already have prior knowledge of Chinese. Linguistic topics include: phonetics, phonology, morphology and etymology, as well as syntax, semantics and pragmatics of modern Chinese. Individual and group projects will complement lectures, readings and discussions.

## Rationale:

Queensborough Community College has a growing population of Chinese students from China, Taiwan, Malaysia and other regions of Asia. This course serves advanced-level Chinese students who would like to continue to broaden their knowledge of Chinese language and linguistics. For students who take Chinese to fulfill their language requirement, this course can serve as either the first or second course of the required language classes. Students can also take this course as an elective.

LF-217 French for Business and the Professions
Pre-requisite: A grade of "C" or higher in LF 213, or placement by the Department of Foreign
Languages and Literatures
3 class hours, 3 credits

## Course Description:

A course with emphasis on learning how business is conducted in French, for students interested in working in any business or professional capacity. Students will create conversations in formal (business) settings, acquire business vocabulary and related grammar, write a CV and cover letter, and create a marketing campaign. Fundamental work-related cultural differences of English-and French-speaking countries will be discussed. Students will also complete an oral presentation on a business, technology or economic issue in a French-speaking country. Weekly individual listening or viewing assignments online or in the language laboratory are part of the course.

## Rationale:

This course is intended to serve heritage and non-heritage speakers of French who would like to prepare to use French in a business or professional setting. Grammar, vocabulary and pragmatics will be treated at the intermediate level, and will focus on practical situations calling for an oral or written response, for example: a job interview, or writing a business letter. Students will be assigned to view videos and research topics relating to cultural and economic topics in several French-speaking countries.

Starting in Fall 2016, heritage/native speakers of French will be placed into either LF 213 or LF 214/217, depending on their level. Students who take LF 213 will be able to choose between LF 214 and LF 217 for the second half of their language requirement. Students who start in LF 214 will take LF 217 for the second half of their language requirement, and students who take LF 217 first, may take LF 214 second.

LF 214 and LF 217 will be offered in alternating semesters. The vocabulary and grammar material presented in the two courses will not be the same.

## 3. Course deletions

## DEPARTMENT OF HISTORY

Course deletions: Departmental approval 3-30-2016
HI 120 American Civilization 1 (Duplication HI 127)
3 credits, 3 hours
HI 211 American Civilization 1 (Duplication HI 127)
3 credits, 3 hours

HI 121 American Civilization 2 (Duplication HI 128)
3 credits, 3 hours
HI 221 American Civilization 2 (Duplication HI 128)
3 credits, 3 hours
HI 123 American Civilization 3 (Duplication HI 129)
3 credits, 3 hours
HI 213 American Civilization 3 (Duplication HI 129) 3 credits, 3 hours

HI 220 History and Health Care (Duplication HI 154)
3 credits, 3 hours
HI 210 A History of Modern Israel (Duplication HI 190) 3 credits, 3 hours

HI 150 Revolution if Modern Times (Duplication HI 350)
3 credits, 3 hours
HI 410 The Negro in American History (replaced by HI 136 African American History) 3 credits, 3 hours

## 4. Program Revision

VAPA Visual \& Performing Arts
(Change in title only)
(As the State of New York does not register concentrations, the titles of the new degrees need to be adjusted to the titles approved by the State of New York.)
Departmental approval: approval date March, 31, 2016
The following title changes are proposed in the QCC/Visual and Performing Arts A.S. Program:
Program: Visual and Performing Arts - Associate in Science (A.S.) Degree - Concentrations in Art and Design, Dance, Music, Theatre Arts

Program Code: 81303
HEGIS: 5610
Effective: Fall 2016

## SUMMARY OF CHANGES

| FROM: | TO: Associate in Science (A.S.) Degree in Art |
| :--- | :--- |
| Associate of Science in Visual and Performing Arts <br> (FAAS) with Concentrations in: Art and Design, Art <br> History, Dance, Music and Theatre Arts |  |
| FROM: <br> Associate of Science in Visual and Performing Arts <br> (FA-AS) with Concentrations in: Art and Design, Art <br> History, Dance, Music and Theatre Arts | TO: Associate in Science (A.S.) Degree in Dance |
| FROM: | TO: Associate in Science Degree (A.S.) in Music |



| recommended to take a Foreign Language course; or HI-110, HI- |
| :--- |
| 11, HI-112; or a Social Sciences course. |
| 4 Students who have taken a STEM Variant course in the Common |
| Core 1C have fulfilled this requirement. |
| All students must successfully complete two (2) writing-intensive |
| classes (designated "WI") to fulfill degree requirements. Sections of |
| the following courses denoted as "WI" may be taken to partially |
| satisfy the Writing Intensive Requirement: ARTH-100, ARTH-101, |
| ARTH-120, ARTH-202; MU-110; SP-142, SP-433, SP-275, SP- |
| 434, TH-111, TH-120, TH-221, DAN-111, BI-140, BI-202, GE-101, |
| GE-125, CH-101, CH-102, CH-110, CH-111; MA-301, MA-321; |
| ECON-101, ECON-102, SOCY-101, SOCY-230, SOCY-275, |
| PLSC-101, PLSC-180, PSYC-101, PSYC-220, PHIL-101, PHIL- |
| 130, PHIL-140; HI-110, HI-111, HI-112, HI-127, HI-128; LF-401, |
| LG-401, LI-401, LS-402; HE-102; PH-110 |
|  |
| CONCENTRATIONS |
| Gourses may be selected from the following categories to fulfill the |
| 21-23 credit concentration in the Fine and Performing Arts |

AND DESIGN CONCENTRATION - Students select 21-23 credits in consultation with a departmental adviser as follows:

## Six (6) credits from:

ARTH-100 Introductory Survey of Art
ARTH-101 History of Art I
ARTH-115 Modern Art
ARTH-116 American Art
ARTH-117 History of Photography
ARTH-120 Contemporary Art
ARTH-126 History of Asian Art
ARTH-202 History of Art II

## 14-20 credits from:

ARTH-115 Modern Art
ARTH-116 American Art
ARTH-117 History of Photography
ARTH-120 Contemporary Art
ARTH-126 History of Asian Art
ARTH-128 History of African Arts
ARTH-150 Art Administration
ARTS-121 Two-Dimensional Design
ARTS-122 Three-Dimensional Design: Introduction to Sculpture
ARTS-130 Art for Teachers of Children I
ARTS-131 Art for Teachers of Children II
ARTS-132 Introduction to Art Therapy
ARTS-141 Introduction to Photography
ARTS-151 Drawing I
ARTS-161 Painting I
ARTS-182 Sculpture
ARTS-186 Ceramics I
ARTS-191 Introduction to Video Art
ARTS-192 Web-Animation
ARTH-225 History of Graphic Design
ARTH-251 Art Curating
ARTH-252 Art Institutions and the Business of Art
ARTS-221 Color Theory
ARTS-242 Advanced Photographic Skills
ARTS-243 Digital Photography
ARTS-252 Drawing II
ARTS-253 IIlustration
ARTS-262 Painting II
ARTS-263 Painting III
ARTS-270 Printmaking: Relief and Stencil
ARTS-271 Printmaking: Intaglio
ARTS-286 Ceramics II
ARTS-290 Advertising Design and Layout
ARTS-291 Electronic Imaging
ARTS-292 Design for Desktop Publishing
ARTS-293 Design for Motion Graphics
ARTH-380 Gallery Internship I
ARTH-381 Gallery Internship II
ARTS-343 Large Format and Studio Photography
ARTS-344 Photography as Fine Art
ARTS-345 Creating The Documentary Image
ARTS-346 Color Photography
ARTS-348 Photographing People
to take a Foreign Language course; or HI-110, HI-11, HI-112; or a Social Sciences course.
4 Students who have taken a STEM Variant course in the Common Core 1C have fulfilled this requirement.
All students must successfully complete two (2) writing-intensive classes (designated "WI") to fulfill degree requirements. Sections of the following courses denoted as "WI" may be taken to partially satisfy the Writing Intensive Requirement: ARTH-100, ARTH-101, ARTH-120, ARTH-202; MU-110; SP-142, SP-433, SP-275, SP434, TH-111, TH-120, TH-221, DAN-111, BI-140, BI-202, GE-101, GE-125, CH-101, CH-102, CH-110, CH-111; MA-301, MA-321; ECON-101, ECON-102, SOCY-101, SOCY-230, SOCY-275, PLSC-101, PLSC-180, PSYC-101, PSYC-220, PHIL-101, PHIL130, PHIL-140; HI-110, HI-111, HI-112, HI-127, HI-128; LF-401, LG-401, LI-401, LS-402; HE-102; PH-110

Associate in Science (A.S.) Degree in Art

ART AND DESIGN CONCENTRATION - Students select 21-23 credits in consultation with a departmental adviser as follows:

## Six (6) credits from:

ARTH-100 Introductory Survey of Art
ARTH-101 History of Art I
ARTH-115 Modern Art
ARTH-116 American Art
ARTH-117 History of Photography
ARTH-120 Contemporary Art
ARTH-126 History of Asian Art
ARTH-202 History of Art II

## 14-20 credits from:

ARTH-115 Modern Art
ARTH-116 American Art
ARTH-117 History of Photography
ARTH-120 Contemporary Art
ARTH-126 History of Asian Art
ARTH-128 History of African Arts
ARTH-150 Art Administration
ARTS-121 Two-Dimensional Design
ARTS-122 Three-Dimensional Design: Introduction to Sculpture
ARTS-130 Art for Teachers of Children I
ARTS-131 Art for Teachers of Children II
ARTS-132 Introduction to Art Therapy
ARTS-141 Introduction to Photography
ARTS-151 Drawing I
ARTS-161 Painting I
ARTS-182 Sculpture
ARTS-186 Ceramics I
ARTS-191 Introduction to Video Art
ARTS-192 Web-Animation
ARTH-225 History of Graphic Design
ARTH-251 Art Curating
ARTH-252 Art Institutions and the Business of Art
ARTS-221 Color Theory
ARTS-242 Advanced Photographic Skills
ARTS-243 Digital Photography
ARTS-252 Drawing II
ARTS-253 Illustration
ARTS-262 Painting II
ARTS-263 Painting III
ARTS-270 Printmaking: Relief and Stencil
ARTS-271 Printmaking: Intaglio
ARTS-286 Ceramics II
ARTS-290 Advertising Design and Layout
ARTS-291 Electronic Imaging
ARTS-292 Design for Desktop Publishing
ARTS-293 Design for Motion Graphics
ARTH-380 Gallery Internship I
ARTH-381 Gallery Internship II
ARTS-343 Large Format and Studio Photography
ARTS-344 Photography as Fine Art
ARTS-345 Creating The Documentary Image
ARTS-346 Color Photography
ARTS-348 Photographing People

| ARTS-349 IIlustration and Fashion Photography ARTS-380 Artist Apprentice Internship I ARTS-381 Artist Apprentice Internship II ARTS-382 Special Problems in Studio Art I ARTS-383 Special Problems in Studio Art II ARTS-390 Portfolio Project in Studio Art | ARTS-349 IIlustration and Fashion Photography ARTS-380 Artist Apprentice Internship I ARTS-381 Artist Apprentice Internship II ARTS-382 Special Problems in Studio Art I ARTS-383 Special Problems in Studio Art II ARTS-390 Portfolio Project in Studio Art |
| :---: | :---: |
|  | Associate in Science (A.S.) Degree in Art |
| ART HISTORY CONCENTRATION - Students select 21-23 credits in consultation with a departmental adviser as follows: <br> The following courses are required ( 6 credits): <br> ARTH-101 History of Art I <br> ARTH-202 History of Art II <br> 14-20 credits from ${ }_{1}$ : <br> ARTH-115 Modern Art <br> ARTH-116 American Art <br> ARTH-117 History of Photography <br> ARTH-120 Contemporary Art <br> ARTH-126 History of Asian Art <br> ARTH-128 History of African Arts <br> ARTH-150 Art Administration <br> ARTH-251 Art Curating <br> ARTH-252 Art Institutions and the Business of Art <br> 1 One studio art course may be substituted for an art history course in consultation with a departmental advisor. | ART HISTORY CONCENTRATION - Students select 21-23 credits in <br> consultation with a departmental adviser as follows: <br> The following courses are required (6 credits): <br> ARTH-101 History of Art I <br> ARTH-202 History of Art II <br> 14-20 credits from ${ }_{1}$ : <br> ARTH-115 Modern Art <br> ARTH-116 American Art <br> ARTH-117 History of Photography <br> ARTH-120 Contemporary Art <br> ARTH-126 History of Asian Art <br> ARTH-128 History of African Arts <br> ARTH-150 Art Administration ARTH-251 Art Curating <br> ARTH-252 Art Institutions and the Business of Art1 <br> 1 One studio art course may be substituted for an art history course in consultation with a departmental advisor. |
| OM: Associate in Science in Visual and Performing Arts (FA-AS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts | TO: The Associate in Science (A.S.) Degree in Dance |
| REQUIREMENTS FOR-THE A.S. DEGREE | REQUIREMENTS FOR THE Associate in Science (A.S.) Degree in Dance |
| COMMON CORE REQUIREMENTS | COMMON CORE REQUIREMENTS |
| REQUIRED CORE 1A: | REQUIRED CORE 1A: |
| English Composition I, II Take EN101 \& 1026 | English Composition I, II Take EN101 \& 1026 |
| REQUIRED CORE 1B: Mathematical \& |  |
| Quantitative Reasoning (select one from 1B) 3 | Quantitative Reasoning (select one from 1B) 3 |
| REQUIRED CORE 1C: Life and Physical Sciences (select one from 1C) | REQUIRED CORE 1C: Life and Physical Sciences (select one from 1C) |
| FLEXIBLE CORE 2A: World Cultures \& Global Issues (select one from 2A) | FLEXIBLE CORE 2A: World Cultures \& Global Issues (select one from 2A) |
| FLEXIBLE CORE 2B: U.S. Experience \& Its Diversity (select one from 2B) | FLEXIBLE CORE 2B: U.S. Experience \& Its Diversity (select one from 2B) |
| FLEXIBLE CORE 2C ${ }^{1}$ : Creative Expression (select one from 2C ${ }^{1}$ ) | FLEXIBLE CORE 2C ${ }^{1}$ : Creative Expression (select one from 2C ${ }^{1}$ ) |
| FLEXIBLE CORE 2D: Individual \& Society (select one from 2D) | FLEXIBLE CORE 2D: Individual \& Society (select one from 2D) |
| FLEXIBLE CORE 2E: Scientific World (select one from 2E) | FLEXIBLE CORE 2E: Scientific World (select one from 2E) |
| FLEXIBLE CORE 2A, 2B, 2C, 2D or 2E: (select one course ${ }^{2}$ ) Sub-total $\frac{3}{30}$ | FLEXIBLE CORE 2A, 2B, 2C, 2D or 2E: (select one course ${ }^{2}$ ) Sub-total $\frac{3}{30}$ |
| MAJOR <br> All students in the Visual and Performing Arts A.S. Degree Program must complete one of the concentrations: Art \& Design, Art History, Dance, Music, or Theatre Arts (see details following pages) to complete the degree requirements. | MAJOR |
|  | All students majoring in the Associate in Science (A.S.) Degree in |
|  | Dance must complete 21-23 credits in Dance major electives as outlined below. |
| Sub-total 21-23 |  |
| ADDITIONAL MAJOR REQUIREMENTS | ADDITIONAL MAJOR REQUIREMENTS |
| SP-211 ${ }^{3}$ Speech Communication ${ }^{3}$ ( 3 | HE-101 Intro. to Health Education or |
| HE-101 Intro. to Health Education or | HE-102 Health Behavior \& Society 1-2 |
| HE-102 Health Behavior \& Society 1-2 | One course in PE-400 or PE-500 series or DAN-100 series 1 |
| One course in PE-400 or PE-500 series or DAN-100 series 1 | Laboratory Science ${ }^{4} \mathrm{BI}-132, \mathrm{BI}-171, \mathrm{CH}-102, \mathrm{CH}-111$, |
| Laboratory Science ${ }^{4} \mathrm{BI}-132, \mathrm{BI}-171, \mathrm{CH}-102, \mathrm{CH}-111$, | CH-121 ET-842, PH-112 $0-1$ |
| Sub-total 5-7 | Sub-total 5-7 |
|  | ELECTIVES |
| ELECTIVES <br> Free Electives | Free Electives ${ }^{\text {Sub-total }}$ S $0-3$ |


| Sub-total 0-3 |  |
| :---: | :---: |
| Total Credits Required 60 | ```Total Credits Required 60 1 Recommended: ARTH-100—ARTH-128, ARTH-202, ARTH-225,``` |
| 1 Recommended: select from area different from concentration (ARTH-100—ARTH-128 including ARTH-202-\& ARTH-225, of DAN-111, or MU-110, of MU-120, or SP-471, or SP-472, or TH111). <br> 2 Recommended: select course from 2C in concentration-discipline. <br> 3 Students who have taken SP-211 in the Common Core are recommended to take a Foreign Language course; or $\mathrm{HI}-110, \mathrm{HI}-$ 11, HI-112; or a Social Sciences course. <br> 4 Students who have taken a STEM Variant course in the Common Core 1C have fulfilled this requirement. <br> All students must successfully complete two (2) writing-intensive classes (designated "WI") to fulfill degree requirements. Sections of the following courses denoted as "WI" may be taken to partially satisfy the Writing Intensive Requirement: ARTH-100, ARTH-101, ARTH-120, ARTH-202; MU-110; SP-142, SP-433, SP-275, SP434, TH-111, TH-120, TH-221, DAN-111, BI-140, BI-202, GE-101, GE-125, CH-101, CH-102, CH-110, CH-111; MA-301, MA-321; ECON-101, ECON-102, SOCY-101, SOCY-230, SOCY-275, PLSC-101, PLSC-180, PSYC-101, PSYC-220, PHIL-101, PHIL130, PHIL-140; HI-110, HI-111, HI-112, HI-127, HI-128; LF-401, LG-401, LI-401, LS-402; HE-102; PH-110 | MU-110, MU-120, SP-471, SP-472, or TH-111). <br> 2 Recommended: select an additional course from 2C in major discipline: DAN-111. <br> 3 Students who elect SP211 as part of the Common Core have satisfied the degree requirement of SP-211 and are recommended to take a Foreign Language course; or $\mathrm{HI}-110, \mathrm{HI}-11, \mathrm{HI}-112$; or a Social Sciences course. <br> 4 Students who have taken a STEM Variant course in the Common Core 1C have fulfilled this requirement. <br> All students must successfully complete two (2) writing-intensive classes (designated "WI") to fulfill degree requirements. Sections of the following courses denoted as "WI" may be taken to partially satisfy the Writing Intensive Requirement: ARTH-100, ARTH-101, ARTH-120, ARTH-202; MU-110; SP-142, SP-433, SP-275, SP434, TH-111, TH-120, TH-221, DAN-111, BI-140, BI-202, GE-101, GE-125, CH-101, CH-102, CH-110, CH-111; MA-301, MA-321; ECON-101, ECON-102, SOCY-101, SOCY-230, SOCY-275, PLSC-101, PLSC-180, PSYC-101, PSYC-220, PHIL-101, PHIL130, PHIL-140; HI-110, HI-111, HI-112, HI-127, HI-128; LF-401, LG-401, LI-401, LS-402; HE-102; PH-110 |
| CONCENTRATIONS <br> urses may be selected from the following categories to fulfill the 21-23 credit concentration in the Fine and Performing Arts |  |
| DANCE CONCENTRATION - Students select 21-23 credits In consultation with a departmental adviser as follows: <br> DAN 110 Foundations of Dance Movement (3 cr) <br> Two courses in Modern Dance technique (4cr) <br> (level determined by placement class) <br> Select from DAN 124, 125, 126, 127, 220, 221 or 222 <br> Two courses in Ballet technique (4cr) <br> (level determined by placement class) <br> Select from DAN 134, 135, 136, 137, 230, 231 or 232 <br> DAN 249 Modern Dance Improvisation (2cr) <br> DAN 251 Choreography I(2cr) <br> Two courses in Repertory or Workshop (4-6 cr) <br> Select from DAN 160, 161 260, 261 or 262 <br> (audition required for 260, 261, 262) <br> One course from Modern Dance or Ballet technique: (2cr) <br> Select from DAN 125, 126, 127, 220, 221, 222 <br> $135,136,137,230,231$ or 232 <br> Technique elective: (0-2cr) <br> Select from Modern Dance (DAN 125, 126, 127, 220, 221, 222), <br> Ballet (135, 136, 137, 230, 231, 232), <br> African/ Afro-Caribbean Dance DAN 103), <br> Advanced Beginning Jazz Dance (140), <br> Contact Improvisation (DAN 252) <br> or Special Topics in Modern Dance (DAN 270, 271, 272) <br> Note: Students are recommended to take DAN 111 as part of the Flexible Core (see note 2 above). | DANCE MAJOR - Students select 21-23 credits <br> In consultation with a departmental adviser as follows: <br> DAN 110 Foundations of Dance Movement (3 cr) <br> Two courses in Modern Dance technique (4cr) <br> (level determined by placement class) <br> Select from DAN 124, 125, 126, 127, 220, 221 or 222 <br> Two courses in Ballet technique (4cr) <br> (level determined by placement class) <br> Select from DAN 134, 135, 136, 137, 230, 231 or 232 <br> DAN 249 Modern Dance Improvisation (2cr) <br> DAN 251 Choreography I (2cr) <br> Two courses in Repertory or Workshop (4-6 cr) <br> Select from DAN 160, 161 260, 261 or 262 <br> (audition required for 260, 261, 262) <br> One course from Modern Dance or Ballet technique: (2cr) <br> Select from DAN 125, 126, 127, 220, 221, 222 <br> $135,136,137,230,231$ or 232 <br> Technique elective: (0-2cr) <br> Select from Modern Dance (DAN 125, 126, 127, 220, 221, 222), <br> Ballet (135, 136, 137, 230, 231, 232), <br> African/ Afro-Caribbean Dance DAN 103), <br> Advanced Beginning Jazz Dance (140), <br> Contact Improvisation (DAN 252) <br> or Special Topics in Modern Dance (DAN 270, 271, 272) <br> Note: Students are recommended to take DAN 111 as part of the Flexible Core (see note 2 above). |
| FROM: Associate in Science in Visual and Performing Arts (FA-AS) | TO: The Associate in Science (A.S.) Degree in Theatre |




obtaining accreditation under four separate degree programs represents a major advancement of the "four arts" at the college, strengthening each program individually and providing students with educational opportunities considerably enhanced by nationally recognized accreditation.
Dates of Votes of approval for a title change by departmental faculty:
Dept. of Speech Communication and Theatre Arts - 5/6/2015;
Dept. of Art and Design - 5/12/2015;
Dept. of Health Related Sciences -5/20/2015;
Dept. of Music - 5/21/2015.

## See details in the attachment (See original document in the attachment)

## BUSINESS DEPARTMENT

## Revisions: Certificate Program

Here is the information to include in a proposal to revise an existing degree or certificate program:
Departmental approval October 7, 2015

1. Program Name: Computer Information Systems - Certificate Program
2. Program Code:

79418
3. HEGIS number: 5101
4. Date approved by the department
5. Date the changes will be effective (if approved)

| 10 | 7 | 2015 |
| :---: | :---: | :---: |
| Month | Day | Year |
| 08 | 25 | 2016 |
| Month | Day | Year |

6. All text or items that will be deleted or changed should be marked with a strikethrough.
7. All new text, courses, credits, etc. should be marked by underlining.
8. All text or items that will be deleted or changed should be marked with a strikethrough.
9. Show the whole set o program requirements in a From/To format (see example below)

| From: |  | To: |  |
| :---: | :---: | :---: | :---: |
| Computer Information Systems - Certificate Program |  | Computer Information Systems - Certificate Program |  |
| Core Requirements | Credits | Core Requirements | Credits |
| Required Core:1 A: English Composition I: ENGL-101 | 3 | Required Core:1 A: English Composition I: ENGL-101 | 3 |
| Flexible Core: 2A, 2B, 2C, 2D, or 2E: Liberal Arts and Sciences Electives (select two courses) | 6 | Flexible Core: 2A, 2B, 2C, 2D, or 2E: Liberal Arts and Sciences Electives (select two courses) | 6 |
| Subtotal | 9 | Subtotal | 9 |
|  |  |  |  |
| Requirements for the Major |  | Requirements for Major |  |
| CIS-101 (formerly BU-500) Introduction to Microcomputer Applications | 3 | CIS-101 (formerly BU-500) Introduction to Microcomputer Applications | 3 |


| CIS-152 (formerly BU-520) Computer Programming for Business - | 3 | CIS-102 Computer Programming Fundamentals for Business | 3 |
| :---: | :---: | :---: | :---: |
| BU-509 Projects in Data Processing | 3 | CIS-153 (formerlv BU-532) <br> Microcomputer Operating Systems and Utility Software | 3 |
|  |  | CIS-206 (formerly BU-530) <br> Spreadsheet Business Applications | $\underline{3}$ |
|  |  | $\frac{\text { CIS-208 (formerly BU-508) }}{\text { Database Management Systems }}$ | $\underline{3}$ |
| Subtotal | 9 | Subtotal | 15 |
| Options (choose A or B) |  | Electives(select 2 courses from the following) |  |
| OPTION A COMPUTER PROGRAMMING |  | CIS-152 (formerly BU-520) <br> Computer Proaramming for Business I | $\underline{3}$ |
| BU-502 COBOL Programming | 3 | $\frac{\text { CIS-201 (formerly BU-534) }}{\text { Local Area Network Management }}$ | 3 |
| BU-504 Systems Analysis and Design with Business Applications | 3 | $\begin{gathered} \hline \text { CIS-204 (formerly BU-524) } \\ \text { Web Desian } \end{gathered}$ | 3 |
| GIS-202 (formerly BU-522) <br> Computer Programming for Business II | 3 | CIS-251 Analysis and Design of Systems Proiects | 3 |
| GIS-153 (formerly BU-532) <br> Microcomputer Operating Systems and Utility Software | 3 |  |  |
| Subtotal | 12 | Subtotal | $\underline{6}$ |
| Option B MICROCOMPUTER APPLICATIONS SOFTWARE |  |  |  |
| CIS-208 (formerly BU-508) Database Management Systems | 3 |  |  |
| CIS-206 (formerly BU-530) Spreadsheet Business Applications | 3 |  |  |
| GIS-153 (formerly BU-532) <br> Microcomputer Operating Systems and Utility Software | 3 |  |  |
| BU-859 Desktop Publishing (Software) | 3 |  |  |
| Subtotal | 12 |  |  |
| Total | 60 | Total | 60 |

10. Write a Rationale for all the changes

The Computer Information Systems (CIS) program was recently updated and revised. The revised CIS program was approved by the Academic Senate in May 2015. The previous program provided CIS majors with a choice of two tracks - Microcomputer Applications Software or Computer Programming. The revised program no longer provides for separate tracks. Creating a single track for CIS majors enables a more extensive set of required core courses which will better prepare our students for employment and/or college transfer. The revisions to existing courses in the revised CIS Program reflected changes to technology and industry directions. The CIS Certificate is being updated to reflect the changes in the recently approved CIS program.
11. Write a Summary for all the changes

The Computer Information Systems Certificate program is now one track and requires more courses in the major. In addition, it reflects the revised courses and course numbering of the CIS courses. All the Computer Information Systems courses have been given a new prefix: CIS (formerly BU).
12. If the program revision includes course revisions or new courses, submit the appropriate Course Revision form and/or New Course Proposal Form, along with the Syllabus and Course Objectives form.
None. [All course revisions and new courses were approved when revising the A.A.S. in Computer Information Systems which was approved by the Academic Senate May 2015.]

Courses new to the Certificate program:
CIS-102 (replaced BU-502 which was not originally required in the Certificate program.)
13. If courses will be deleted from the program, make clear whether the courses are to be deleted from the department's offerings as well.
$\mathrm{BU}-502$ is replaced with CIS-102.

BU-509 and BU-504 is replaced with CIS-251 (a new course which combines topics from the two previous courses).

BU-522 is now CIS-202 but is no longer required in the CIS Certificate program but is still offered A.A.S. in Computer Information Systems in the Business Department.

BU-859 is no longer required in the CIS Certificate program but is still offered in the A.A.S. in Office Administration and Technology program in the Business Department.
14. Explain briefly how students currently in the program will be able to complete the requirements There are only a few students in the certificate program. If a student needs a course no longer offered in the original certificate program, they should go the Business Department for a course substitution.

## 5. New Program

## ENGINEERING TECHNOLOGY

Dual-Joint Degree Program in Computer Science and Information Security with John Jay College of Criminal Justice.
Departmental approval date March 16, 2016.

QUEENSBOROUGH COMMUNITY COLLEGE

AND

JOHN JAY COLLEGE OF CRIMINAL JUSTICE
OF
THE CITY UNIVERSITY OF NEW YORK

PROPOSAL TO ESTABLISH A DUAL ADMISSION / JOINT PROGRAM IN

COMPUTER SCIENCE AND INFORMATION SECURITY (A.S. DEGREE PROGRAM)

AND

COMPUTER SCIENCE AND INFORMATION SECURITY (BS DEGREE PROGRAM)

EFFECTIVE JANUARY, 2017

SPONSORED BY
THE ENGINEERING TECHNOLOGY DEPARTMENT OF QUEENSBOROUGH COMMUNITY COLLEGE

AND

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE OF JOHN JAY COLLEGE OF CRIMINAL JUSTICE

CONTACTS:

PROFESSOR STUART ASSER, CHAIR

ENGINEERING TECHNOLOGY, QCC

DR. DOUGLAS SALANE, CHAIR

MATH AND COMPUTER SCIENCE, JJC

APPROVED BY:

DR. PAUL MARCHESE
PROVOST AND VICE PRESIDENT
FOR ACADEMIC AFFAIRS, QCC

DR. JANE BOWERS
PROVOST AND SENIOR VICE
PRESIDENT FOR ACADEMIC AFFAIRS


#### Abstract

: The Queensborough Community College (QCC) Department of Engineering Technology proposes an Associate in Science (A.S.) dual/joint degree program in Computer Science and Information Security with John Jay College of Criminal Justice (JJC). QCC students will enroll in its lower division program and upon graduation students will pursue a BS at JJC by enrolling in upper division courses at that institution. The lower division courses in computer science and information security are prerequisites for the upper division courses. In addition the curriculum will provide a solid foundation in general education with courses such as, but not limited to; English, Mathematics, and Social Science.

The field of Computer Science and Information Security provides a myriad of job opportunities and career paths. The education and training that will be jointly provided by both QCC and JJC will generate a sense of hope, purpose, and stability for the enrolled students. This is especially important in light of the current security environment of the country.


## Purpose and Goals:

Queensborough Community College proposes to develop a dual joint degree program with John Jay College of Criminal Justice in Computer Science and Information Security. The program will attract and allow students to complete their first two years of college at Queensborough and progress seamlessly to John Jay College of Criminal Justice to complete their bachelor's degree. Furthermore the dual/joint degree program will offer increased educational opportunities for Hispanics, African Americans, Asians, Woman and other underrepresented minorities in the cybersecurity field.

Most community colleges and many independent technical institutes and proprietary schools offer an associate's degree in computer science or a related information technology field. Employers usually look for people who have broad knowledge and experience related to computer systems and technologies, strong problem-solving and analytical skills, and good interpersonal skills. Courses in computer science or systems design offer good preparation for a job in computer occupations. The level of education and the type of training that employers require depend on their needs. One factor affecting these needs is changes in technology. Employers often scramble to find workers capable of implementing new technologies. Workers with formal education or experience in information security, for example, are in demand because of the growing need for their skills and services. Because jobs are better suited to the level of training provided by these programs, the dual joint degree program will offer students the flexibility and training to fill a variety of jobs titles with growth potential.

Queensborough will use existing courses from its Internet and Information Technology Program and create new courses to develop a new Associate in Science Program in Computer Science and Information Security, which will provide the fundamental knowledge required for cybersecurity. Queensborough Community College and John Jay College of Criminal Justice propose a dual admission/joint degree program (A.S./B.S.) in Computer Science and Information Security that will help address the shortage of trained and qualified cybersecurity specialists in the New York City Metropolitan area. In addition, the planned degree aims to:

1) improve student academic success at the community and senior colleges;
2) increase the rate of transfer from the associate degree to the bachelor's degree;
3) bolster opportunities for students' career entry and success in the cyber security and tech fields, and
4) ensure curricular alignment between the colleges and the needs of cybersecurity and tech employers.

## Need for Cybersecurity

Cybersecurity represents an unusually broad, remarkably well-compensated set of new and emerging occupational areas, offering a surfeit of employment opportunities in New York City due to the severe shortage of qualified cyber-workers. These occupations rank among the fastest growing professional employment opportunities in NYC. ${ }^{1}$ The NYC Department of Labor estimates overall growth in cyber-allied fields at over $20 \%$ by 2020 , with higher projections for selected categories ( $36.5 \%$ ), and with near astronomical growth rates anticipated ( $58.6 \%$ ) for the most highly skilled by 2022. ${ }^{2}$ This explosive growth places New York City second nationally-just behind Washington, D.C.-for cybersecurity employment opportunities. ${ }^{3}$

The field offers remarkable earning opportunities for successful college graduates. Entry-level positions in the cybersecurity fields are unusually well-paid, with private sector career entrants earning roughly $\$ 60,000$ to start, a figure that can double within the first two years of employment. The number of those entering the cybersecurity occupations, however, has lagged severely behind the number of openings, causing a critical gap in the public and private sectors' security defense and severe shortages of cyber-workers in specific industries, including financial services, healthcare and retail trade--among the largest industries in the NYC economy. Private sector New York employers point to the problem of inappropriately prepared applicants who lack rudimentary familiarity with the professional work world. They also underscore the dearth of knowledgeable and skills-qualified career entrants, which causes long-term job vacancies, limits the productivity of newly hired cybersecurity professionals, and stunts economic growth as the incidence and costs of cybercrime mushroom and place at grave financial risk both businesses and the public.

Queensborough Community College and John Jay will launch this collaborative program by building on their successful track-record in the CUNY Justice Academy. The CUNY Justice Academy is a unique educational partnership connecting John Jay College of Criminal Justice to CUNY's six traditional community colleges. This program currently provides academic pathways leading from associate degree study to a bachelor's degree and ultimately to exciting careers in the fields of Computer Science, Criminal Justice, Forensic Science and Forensic Financial Analysis. Assessment shows that CUNY Justice Academy programs have led to an unprecedented transfer rate of associate degree students from the participating community colleges to John Jay College when compared to the rate of non-CUNY Justice Academy transfers. The programs of the CUNY Justice Academy have also positively and significantly impacted student G.P.A.s, rates of credit

[^0]accumulation and time to degree completion. We anticipate that students who enroll in the proposed dual admission/joint degree program Computer Science and Information Security will benefit similarly.

The new degree program will benefit from a workforce development partnership with the Cybersecurity Workforce Alliance (CWA)--an association of private sector employers, technology innovators, and educators, including the Federal Reserve Bank of NY, Fidelity Bank, Bank of NY Mellon, J.P. Morgan Chase, Morgan Stanley, Goldman Sachs, SIFMA, Express Scripts, RANE, iQ4, and Capgemini, among others--formed to increase and improve the cybersecurity workforce-- and numerous public sector cybersecurity employers. The curriculum is also consistent with the framework of the National Institute for Standards and Technology's (NIST) National Initiative for Cybersecurity Education (NICE), which will increase our graduate's marketability.

Internship and other experiential learning opportunities developed by the participating colleges and also by external partners will further prepare students for the workforce. The degree program also will make use of new and emerging technologies to optimally ready students ${ }^{4}$ for cybersecurity careers, thereby expanding employment opportunities for the city's lower income college students by providing them with openings to highly paid jobs in the private sector that have been previously unavailable to them. Queensborough, as a CompTIA Authorized Academy Partner, will incorporate into this new program our existing training courses for industry certifications in A+ Certification, Network+ Certification, and Security+ Certification. CompTIA certification exams are an internationally recognized validation of foundation-level security skills and knowledge, and are used by organizations and security professionals around the globe. Computer Science and Information Security careers start with the right education, and research has shown that certified employees have superior communication skills and are better able to understand new or complex technologies. Furthermore, Queensborough' s proven track record and involvement with high schools will help ensure the high enrollment and graduation rate required to meet the workforce demand for cybersecurity specialists in the New York City Metropolitan area.

## Underrepresented Groups in the Computer Science and Information Security Workforce

The fields of computer science, programming, and information security have been growing in popularity for decades, due primarily to solid financial and professional prospects, and the incalculable effect of the digital revolution on every facet of our culture and society. However, the abundant opportunities in the world of computer science have, for the most part, been overlooked by underrepresented minority students, particularly those in the African-American, Hispanic, and Native American communities. The reasons for this problem are numerous and complex, as are its solutions.

The facts are indisputable and disheartening. The computer science education revolution has left our minority communities behind. Statistics on the subject painfully bear this out. For example, data from the National Science Foundation indicates that, although 36.4 percent of the resident population of the United States is non-white, only about 18 percent of all bachelor's degrees in

[^1]computer science in the U.S. go to non-white students. According to the Census Bureau, women make up 47 percent of the workforce, but only 27 percent work in computer related jobs. Blacks account for 11 percent of workers overall, but only 7 percent in the computer science industry. Hispanics make up 15 percent of the workforce and only 6 percent of computer jobs. And the problem appears to be getting worse.

There is no doubt that career opportunities for computer science graduates are plentiful. This is particularly true for underrepresented minority graduates, as employers continue to actively seek them out in an effort to diversify their workforce. The problem is convincing minority students to recognize these opportunities.

Queensborough is located in one of the most diverse counties in the United States and is one of the most diverse campuses in the nation. The college, with nearly 16,000 students, comprises nearly equal populations of African-Americans, Asians, Caucasians and Latinos, representing 143 nations of birth and 84 native languages. Committed equally to open-admission access for all learners and to academic excellence within an environment of diversity, Queensborough emphasizes the integration of academic and support services with a focused attention to pedagogy. Among the nearly 3,500 freshmen students enrolled annually, Hispanic students represent the largest group (31 percent), followed by Black student ( 25 percent), Asian students ( 22 percent) and Caucasian students (15 percent). The College offers Associate degree and certificate programs that prepare students for careers and for transfer to Baccalaureate degree programs. The College offers a broad base of community-oriented activities including continuing education, on- and off-campus learning centers, and cultural and recreational events. The College provides a network of developmental education and student support services designed to enable its diverse students to succeed in their college studies. Students are provided opportunities for challenge, stimulation, and growth through advanced courses, special projects, appropriate academic advisement, and personal and career counseling. Several mentoring programs reinforce this campus climate and ensure retention and will encourage transfer of students to continue on for the B.S. in Computer Science and Information Security degree at John Jay.

## Student Interest/Enrollment

The A.S. Program in Computer Science and Information Security is designed to attract students who have an interest in pursuing a career in computer science and who also wish to specialize in information security. There is a large untapped source of students in the Borough of Queens who can benefit from this type of program, especially in light of the excellent job outlook. QCC's Marketing Department, Office of Admissions and the Engineering Technology Department will market the proposed program with an aggressive information campaign. The QCC Web site will be updated with webpages devoted to the program. The Web pages will include a curriculum outline, employment outlook information, a FAQ list and, if possible, testimonials from recent graduates of John Jay's Bachelor of Science in Computer Science and Information Security. In addition, QCC will take every step necessary to ensure that every incoming student with an interest in a STEM career is made aware of the program. Every incoming freshman student will be given a flyer with a description of the program. Furthermore flyers will be distributed along with other recruitment materials to all New York City and Western Nassau High Schools through a comprehensive database which was created and is maintained by the Engineering Technology Department. A survey conducted in March 2016 among STEM students at QCC showed overwhelming interest in this dual/joint program. The survey was administered to QCC students enrolled in the engineering and
engineering technology majors. The questionnaire included a description of the program along with a list of the freshman and sophomore year required course sequences at QCC ( 60 credits). The questionnaire asked students if they would be interested in the program. Out of 529 responses, 448 respondents expressed interest in the program (approximately 85\%). We also expect the marketing of the program at both major recruitment functions and on the QCC Web site will result in an increase in transfer students to the college. Finally, we expect that this program will be popular among students currently enrolled at QCC and anticipate a slight shift of other majors to this program. According to recent figures from the Office of Institutional Research for Fall 2015 enrollment trends by curriculum, 2,070 students were enrolled in curricular programs (engineering, technology, computer science) from which to draw student interest for the cyber security program.

## Projected Student Enrollment

|  | YEAR I |  | YEAR II |  | YEAR III |  | YEAR IV |  | YEAR V |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | New | Cont. | New | Cont. | New | Cont. | New | Cont. | New | Cont. |
| F-T | 25 | N/A | 50 | 20 | 75 | 50 | 100 | 80 | 125 | 100 |
| P-T | 20 | N/A | 20 | 15 | 30 | 30 | 40 | 40 | 50 | 50 |
| Sub-totals | 45 | N/A | 70 | 35 | 105 | 80 | 140 | 120 | 175 | 150 |
| Totals | 45 |  | 105 |  | 185 |  | 260 |  | 325 |  |

## Curriculum

The proposed Associate in Science degree in Computer Science and Information Security consists of courses that allow students to pursue further education and careers in Computer Science, Cybersecurity and Information Technology, as well as other software and computer networking related fields. The proposed program will allow students to enter the upper division baccalaureate program in Computer Science and Information Security at John Jay. The curriculum emphasizes basic computer science principles and provides a foundation in programming and cybersecurity as well as computer industry certifications. The program meets the general education requirements for the associate degree at QCC and also meets the general education requirements for the baccalaureate degree at John Jay.

## QCC/JJ Dual /Joint Degree Program: A.S. in Computer Science \& Information Security (QCC) and B.S. in Computer SCIENCE \& InFormation Security (J JC)

| QCC A.S. COMPUTER SCIENCE | CR. | JJC EQUIVALENTS | CR. |
| :---: | :---: | :---: | :---: |
| Gen Ed: Required Core |  | Gen Ed: Required Core |  |
| EN 101 English Composition I EN 102 English Composition II | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | ENG 101 College Composition I ENG 201 College Composition II | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |
| MA 119 College Algebra OR MA 440 Precalculus OR MA-441 Analytical Geometry \& Calculus I OR MA 260 Pre-calculus and Elements of Calculus for Business Students | 3-4 | MAT 105 College Algebra OR MAT 141 Pre-calculus OR MAT 241 Calculus I | $\begin{gathered} 3 \text { or } \\ +1 \mathrm{bl} \\ \hline \end{gathered}$ |
| Life and Physical Science | 3-4 | Life and Physical Science | $3+1 \mathrm{bl}$ |
| Gen Ed: Flexible Core |  | Gen Ed: Flexible Core |  |
| World Cultures \& Global Issues | 3 | World Cultures \& Global Issues | 3 |
| U.S. Experience in Its Diversity | 3 | U.S. Experience in Its Diversity | 3 |
| Creative Expression | 3 | Creative Expression | 3 |
| Individual \& Society (Recommended : 2.D. CRIM 101 Intro to the American Criminal Justice System)* | 3 | Individual \& Society | 3 |
| Scientific World | 3 | Scientific World | 3 |
| $6{ }^{\text {th }}$ Flexible Core Course | 3 | $6{ }^{\text {th }}$ Flexible Core Course | 3 |
| General Education Subtotal | 30-32 | Subtotal toward JJ Gen. Ed. | 30-32 |
| Requirements for the Major |  | Requirements for the Major |  |
| MA 440 Pre-Calculus | 4 | MAT 141 Pre-Calculus | $3+1 \mathrm{bl}$ |
| MA 441 Analytical Geometry and Calculus I | 4 | MAT 241 Calculus I | $3+1 \mathrm{bl}$ |
| MA 471 Introduction to Discrete Mathematics | 3 | MAT 204 Discrete Mathematics | 3 |
| ET 704 Networking Fundamentals I | 4 | CSCI 379 Computer Networking | $3+1 \mathrm{bl}$ |
| ET 570 Creating Smartphone Apps | 3 | CSCI blanket (can be used towards Computer Sci Elective) | 3 |
| ET 575 Intro to C++ Programming Design and Implementation | 3 | CSCI 271 Intro to Computing \& Programming | 3 |
| ET 580 Object Oriented Programming | 3 | CSCI 272 Object-Oriented Programming | 3 |
| ET 585 Computer Architecture | 3 | CSCI 274 Computer Architecture | 3 |
| Subtotal toward Major | 27 | Subtotal toward Major | 27 |
| Electives |  |  |  |
| Computer Sci/Security Elective ** | 3 | CSCI blanket | 3 |
| TOTAL CREDITS REQUIRED FOR A.S. | 60 | TOTAL CREDITS ACCEPTED TO JJ | 60 |

Note: *Students are required to take particular courses in some areas of the Common Core that fulfill both general education and major requirements. If students do not take the required courses in the Common Core, they will have to take additional credits to complete their degree requirements. All students must complete two (2) WI designated classes to fulfill degree requirements.
**Elective: ET 725 Computer Network Security strongly recommended

## Junior and Senior Year - Courses to be taken at John Jay

| Course and Title |  |
| :---: | :---: |
| General Education (College Option) and other Required Courses |  |
|  | Credits |
| Justice Core II. Either Justice in Global Perspective OR Struggle for Justice and Equality in U.S. | 3 |
| Learning from the Past OR Communications | 3 |
|  |  |
| PART ONE. Major Core Courses |  |
| CSCI 360 Cryptography and Cryptanalysis | 3 |
| CSCI 373 Advanced Data Structures | 3 |
| CSCI 374 Programing Languages | 3 |
| CSCI 375 Operating Systems | 3 |
| CSCI 377 Computer Algorithms | 3 |
| CSCI 411 Computer Security and Forensics | 3 |
| CSCI 412 Network Security and Forensics | 3 |
| PART TWO. Required Math Courses |  |
| MAT 301 Probability and Statistics | 3 |
| PART THREE. ELECTIVES |  |
| Computer Science Elective (if not taken at QCC: CSCI 362 or 376 or 380) | 0-3 |
| Mathematics Elective (if not taken at QCC: MAT 242 or 310 or 351 or 371 or 380) | 0-3 |
| PART FOUR. ETHICS |  |
| PHI 3XX Ethics and Information Technology | 3 |
| PART FIVE. CAPSTONE COURSES |  |
| CSCI 400 Capstone Experience in Digital Forensics/Cybersecurity I \& II | 6 |
|  |  |
| Subtotal | 33-39 |
| Electives | 15-21 |
|  |  |
| Total Credits at John Jay College of Criminal Justice | 60 |

Total Degree credits for the Bachelor of Science in Computer Science \& Information Security - 120

## Faculty

No additional full-time faculty will be needed for the proposed program in the first three years. Current QCC faculty members already teach the courses that represent the general and major requirements in the program. Additional adjunct faculty will be needed, however, for additional sections of courses required to run the program.

## Cost

There are minimal additional facilities or equipment costs associated with this program. QCC has state-of-the-art computer laboratories already equipped with hardware and software that will support this program. Normal ongoing computer and software updates would be made for the courses already being taught.

The White House: FACT SHEET: Cybersecurity National Action Plan (CNAP)
https://www.whitehouse.gov/the-press-office/2016/02/09/fact-sheet-cybersecurity-national-action-plan
The White House: The Comprehensive National Cybersecurity Initiative
https://www.whitehouse.gov/issues/foreign-policy/cybersecurity/national-initiative
Department Of Homeland Security: Join DHS Cybersecurity
https://www.dhs.gov/homeland-security-careers/dhs-cybersecurity
Forbes Magazine: One Million Cybersecurity Job Openings in 2016
http://www.forbes.com/sites/stevemorgan/2016/01/02/one-million-cybersecurity-job-openings-in-2016/\#4509bb127d27
Forbes Magazine: College Degrees with the Highest Starting Salaries
http://www.forbes.com/sites/susanadams/2013/04/15/college-degrees-with-the-highest-starting-salaries-3/\#147b84077f0b
Computer Science Online: A Guide to Computer Science Careers
http://www.computerscienceonline.org/careers/

Computer Science Zone: The 50 Highest Paying Jobs in Computer Science
http://www.computersciencezone.org/50-highest-paying-jobs-computer-science/

## Additional Computer Science and Information Resources

Codecademy: Interactive tool for learning how to program
https://www.codecademy.com/
MIT: Open Courseware - Online self-study courses in Computer Science
http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/
Harvard: Intensive Introduction to Computer Science Open Learning Course
https://www.extension.harvard.edu/open-learning-initiative/intensive-introduction-computer-science
Stack Exchange: Computer Science Q\&A for Students
http://cs.stackexchange.com/

## Related Sites

Google Developer
https://developers.google.com/
Apple Developer
https://developer.apple.com/
Microsoft Developer
https://msdn.microsoft.com/en-us
Github: Collaborative programming for private and public projects https://github.com/

## Appendices

## Appendix A:

## COURSE DESCRIPTIONS FOR REQUIRED COURSES

ENGL-101 English Composition $\mathrm{I}_{2}\left(1 \mathrm{~A}_{1}\right)$ (formerly EN-101)
3 class hours 1 conference hour 3 credits Prerequisite: A score of 480 on the SAT, or $75 \%$ on the New York State English Regents, or a passing score on the CUNY/ACT Writing and Reading tests. Note: Credit will not be given to students who have successfully completed EN-103.
Development of a process for producing intelligent essays that are clearly and effectively written; library work; 6,000 words of writing, both in formal themes written for evaluation and in informal writing such as the keeping of a journal. During the recitation hour, students review grammar and syntax, sentence structure, paragraph development and organization, and the formulation of thesis statements.
ENGL-102 English Composition II: Introduction to Literature ${ }_{2}\left(1 \mathrm{~A}_{1}\right)($ formerly $\mathrm{EN}-102$ )
3 class hours 1 conference hour 3 credits Prerequisite: EN-101
Continued practice in writing combined with an introduction to literature: fiction, drama, and poetry. During the recitation hour, students review basic elements of writing and analytical and critical reading skills and research strategies.

## MA-119 ${ }_{3}$ College Algebra ${ }_{4}\left(\mathbf{1 B}_{2}\right)$

3 class hours 1 recitation hour 3 credits Prerequisite: MA-10 or exempt from remedial mathematics or permission of Department Corequisite: May be taken as a corequisite to MA-121.
A basic presentation of the fundamental concepts of college algebra, systems of linear equations, inequalities, linear, quadratic, exponential and logarithmic functions. During the recitation hour, students review properties of signed numbers, graphing of linear equations, basic geometric concepts, solution of linear equations, factoring algebraic expressions and its applications to rational expressions. A graphing calculator will be required.

## MA-440 Pre-Calculus Mathematics ${ }_{3}\left(\mathbf{1 B}_{2}\right)$

3 class hours 2 recitation hours 4 credits Prerequisite: MA-119 and MA-121 with a $C$ or better in both courses or MA-114 with a grade of $C$ or better, or satisfactory score on the Mathematics Placement Test, Level II.
Mathematical foundations necessary for the study of the calculus. An introduction to analytic geometry, and the elementary functions of analysis, including algebraic, trigonometric, logarithmic, and exponential functions. The use of the graphing calculator will be included.

## MA-441 Analytic Geometry and Calculus I (1B2)

4 class hours 1 recitation hour 4 credits Prerequisite: MA-440 (with a grade of $C$ or better).
Functions and graphs; derivative of algebraic and trigonometric functions with applications; indefinite and definite integrals with applications; the fundamental theorem of integral calculus; conic sections. Students will develop problem solving skills and construct mathematical models in the computer laboratory using software such as MAPLE, DERIVE, CONVERGE, and MATHCAD.

## MA-471 Introduction to Discrete Mathematics

3 class hours 3 credits Prerequisite: MA-440
Concepts in set theory, functions, logic, proofs, elementary number theory, introduction to abstract algebra.
CRIM-101 Introduction to the American Criminal Justice System ${ }_{4}$ (2D $_{1}$ )
3 class hours 3 credits Offered as needed Prerequisite: BE-122 (or BE-226), or satisfactory score on the CUNY/ACT Assessment Test
This course is an introductory survey of the American criminal justice system with a view to its social and institutional context and its structure and functioning. The course provides an overview of the foundations and components of the criminal justice system, including (substantive and procedural) criminal law, police, courts and corrections. The main emphasis will be placed on the criminal justice process and how the various institutions of criminal justice interact. Key issues will be addressed as they arise at different stages of the process, such as the conflict between crime control and due process, and conflicts related to, for example, gender, class and ethnicity. This course will satisfy the Social Sciences elective requirement for all QCC degree programs.

## ET 570 Creating Smartphone Apps $_{1}\left(2 \mathrm{E}_{2}\right)$

3 Class Hours 3 Credits
This course introduces the use and features of smartphones in modern life and how to create working applications. Students will create apps using existing modules and building blocks. No prior programming knowledge is necessary. After this initial experience, basics of the Java programming language will be introduced along with a minimum of XML programming to introduce the student to the needs of more advanced apps. Software development kits (SDK), along with the development environment will also be covered. In addition, students will have the opportunity to distribute apps into the Marketplace.ET-575 Introduction to C++ Programming Design and Implementation (2E1)
ET-575 Introduction to $\mathrm{C}_{++}$Programming Design and Implementation ( $\mathbf{2 E}_{1}$ )
2 Class Hours, 2 Lab Hours, 3 Credits
Prerequisite MA-321 or corequisite MA-114 or MA-119 or MA-440
This foundation course provides a general understanding of the use and development of computer software applications in fields such as science, mathematics, and business using a high level computer language. The course will concentrate on assessing the practical requirements of a software package and developing applications in C++, which is a high level computer language that teaches the basic skills necessary for implementing it in a variety of real world applications. Topics include the analysis and use of concepts such as: primitive data types and their operators, basic l/O, control statements, decision making, looping, subprograms, arrays, strings and computer ethics. Each student will have a computer platform at his/her disposal from which he/she will design, develop, implement and test programs, while evaluating the interactions between a user and the computer.

## ET-580 Object Oriented Programming

3 Class Hours 3 Credits
Prerequisite ET-575
This course covers object-oriented programming principles and techniques using $\mathrm{C}++$. Topics include pointers, classes, overloading, data abstraction, information hiding, encapsulation, inheritance, polymorphism, file processing, templates, exceptions, container classes, and low-level language features.

## ET-585 Computer Architecture

3 Class Hours 3 Credits
Prerequisite ET-575
The course covers the basic principles of computer organization, operation and performance. It also deals with embedded systems, peripheral devices, memory management, and processor family evolution patterns.

## ET-704 Networking Fundamentals I

3 class hours 3 laboratory hours 4 credits Prerequisite and/or corequisites: None
This is an introductory level course that provides students with the basic terminology and skills needed to design, build and maintain small to medium networks. Topics include: OSI model; electronics and signals, collisions and collision domains, MAC addressing, LANs, structured cabling, cabling tools, Ethernet, network design and documentation, power supply issues, Internet Protocol addressing and subnetting, network protocols. This course is the first in a series of four courses designed to prepare students for taking the Cisco Certified Network Associate (CCNA) certification exam. Students are provided with classroom and laboratory experience in current and emerging networking technology.

## ET-725 Computer Network Security

3 Class Hours 3 Credits
Prerequisite ET-704 or Department Permission
This course covers computer network security design and vulnerabilities. Topics include: Cryptography and encryption, denial-of-service attacks, firewalls and intrusion prevention systems, software and operating system [OS] security, legal and ethical aspects of cybercrime and computer crime.

## Appendix B:

## PROGRAM CONTENT AND REQUIREMENTS

| Program Content and Requirements |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| List each course required for the college core (if applicable) | Course Number and Course Title | No. of Credits | Is this a new course? | Is this a revised course? |
|  | Required Core 1A - ENGL-101, ENGL-102 English Composition I, II* | 6 | No | No |
|  | Required Core 1B - MA 119, College Algebra or higher)* <br> MA 121 Trigonometry (if required) | 3-4 | No | No |
|  | Required Core 1C - Life \& Physical Science* <br> One science laboratory course (STEM variant in common core satisfies this requirement): Applicable courses include $\mathrm{BI}-132$, BI-171; CH-102, CH-111, CH-121; ET-842; PH-112. | 3-4 | No | No |
|  | Flexible Core 2A - World Cultures \& Global Issues* | 3 | No | No |
|  | Flexible Core 2B-U.S. Experience in Its Diversity* | 3 | No | No |
|  | Flexible Core 2C - Creative Expression * | 3 | No | No |
|  | Flexible Core 2D - Individual \& Society ( Recommended: CRIM101 Intro to the American Criminal Justice System)* | 3 | No | No |
|  | Flexible Core 2E - Scientific World * | 3 | No | No |
|  | Flexible Core $2 \mathrm{~A}, \mathrm{~B}, \mathrm{C}, \mathrm{D}$, or $\mathrm{E}^{*}$ | 3 | No | No |
| List each course required for the major (include any field experience, research, thesis, or capstone course) | General Education Core subtotal | 30-32 |  |  |
|  | MA-440 Pre-Calculus* | 4 | No | No |
|  | MA-441 Analytical Geometry and Calculus* | 4 | No | No |
|  | MA-471 Introduction to Discrete Mathematics* | 3 | No | No |
|  | ET-704 Networking Fundamentals I | 4 | No | No |
|  | ET-570 Creating Smartphone Apps | 3 | No | No |
|  | ET-575 Intro to C++ Programming Design and Implementation | 3 | No | No |
|  | ET-580 Object Oriented Programming | 3 | Yes | No |
|  | ET-585 Computer Architecture | 3 | Yes | No |
|  | Major Requirements subtotal | 27 |  |  |
| List each free electives | Computer Science/Security Elective ( Recommended: ET 725 Computer Network Security)** | 3 | No | No |
| Total credits |  | 60 |  |  |

*Students are required to take particular courses in some areas of the Common Core that fulfill both general education and major requirements. If students do not take the required courses in the Common Core, they will have to take additional credits to complete their degree requirements. All students must complete two (2) WI designated classes to fulfill degree requirements.
**Elective: ET 725 Computer Network Security strongly recommended.

## Computer Science \& Information Security A.S. / B.S. <br> Dual/Joint Degree Program with John Jay College of Criminal Justice

Common Core
Credits
REQUIRED CORE: I. A: English Composition I, II (Take ENGL 101 \& 102) ..... 6
REQUIRED CORE: I. B: Mathematical \& Quantitative Reasoning (Required: MA 119 or higher)* ..... 3-4
REQUIRED CORE: I. C: Life \& Physical Sciences ..... 3-4
FLEXIBLE CORE: II. A: World Cultures \& Global Issues (Select one course) ..... 3
FLEXIBLE CORE: II. B: U.S. Experience in Its Diversity (Select one course) ..... 3
FLEXIBLE CORE: II. C: Creative Expression (Select one course) ..... 3
FLEXIBLE CORE: II. D: Individual \& Society (Select one course - Recommended: CRIM 101 ..... 3
Intro to the American Criminal Justice System)
FLEXIBLE CORE: II. E: Scientific World (Select one course) ..... 3
FLEXIBLE CORE: II: $\underline{A}, \underline{B}, \underline{C}, \underline{D}$ or $\underline{E}$ (Select one course) ..... 3
Subtotal ..... 30-32
Major
MA 440 Pre-Calculus ..... 4
MA 441 Analytical Geometry and Calculus I ..... 4
MA 471 Introduction to Discrete Mathematics ..... 3
ET 704 Networking Fundamentals I ..... 4
ET 570 Creating Smartphone Apps ..... 3
ET 575 Intro to C++ Programming Design and Implementation ..... 3
ET 580 Object Oriented Programming ..... 3
ET 585 Computer Architecture ..... 3
Subtotal ..... 27
Elective(s)
Computer Science/Security Elective** ..... 3

[^2]
## Appendix C:

## PROGRAM SCHEDULING

Freshman and Sophomore year course sequences at Queensborough Community College (60 CREDITS)

| FRESHMAN YEAR: FALL |  | FRESHMAN YEAR: SPRING |  |
| :--- | :---: | :--- | :---: |
| COURSE TITLE | Credits | COURSE TITLE | Credits |
| RC: EN 101 English Composition I | 3 | RC: EN 102 English Composition II | 3 |
| RC: MA 119 or higher | $3-4$ | MA 440 Pre-Calculus | 4 |
| FC: Creative Expression | 3 | FC: Individual \& Society <br> (Recommended : 2.D. CRIM 101 Intro to <br> the American Criminal Justice System)* | 3 |
| RC: Life \& Phys Sci | $3-4$ | ET 575 Intro C++ Programming | 3 |
| FC: U.S. Experience | 3 | ET 570 Creating Smartphone Apps | 3 |
| Total Credits |  |  |  | $\mathbf{1 6}$.


| SOPHOMORE YEAR: FALL |  | SOPHOMORE YEAR: SPRING |  |
| :--- | :---: | :--- | :---: |
| COURSE TITLE | Credits | COURSE TITLE | Credits |
| MA 441 Analytical Geo \& Calc I | 4 | ET 704 Network Fundamentals | 4 |
| ET 580 Object Oriented Program | 3 | MA 471 Intro Discrete Math | 3 |
| ET 585 Computer Architecture | 3 | FC: 6 ${ }^{\text {th }}$ Flex Core | 3 |
| FC: World Cultures | 3 | Computer Sci elective | 3 |
| FC: Scientific World | 3 |  | $\mathbf{1 3}$ |
| Total Credits |  |  |  |
| $\mathbf{1 6}$ |  |  |  |
| Total credits required for A.S. in Computer Science |  |  |  |

## Junior and Senior Year Course Sequences to be taken at John Jay College of Criminal justice ( 60 Credits) - Sample Program

| JUNIOR YEAR: FALL |  | JUNIOR YEAR: SPRING |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| COURSE TITLE | Credits | COURSE TITLE | Credits |  |  |
| Col Opt | Justice in Global Perspective | 3 | Col Opt | Learning fr Past or Com | 3 |
| CSCI 373 | Advanced Data Structures | 3 | CSCI 375 | Operating Systems | 3 |
| MAT 301 | Probability \& Statistics | 3 | CSCI 377 | Computer Algorithms | 3 |
| CSCI 374 | Programming Languages | 3 | MAT | Mathematics Elective | 3 |
|  | Elective or Minor | 3 |  | Elective or Minor | 3 |
| Total Credits |  |  |  |  |  |
| $\mathbf{1 5}$ |  |  |  |  |  |


| SENIOR YEAR: FALL |  |  | SENIOR YEAR: SPRING |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COURSE TITLE |  | Credits | COURSE TITLE |  | Credits |
| CSCI 411 | Computer Security \& Forensics | 3 | CSCI 412 | Network Security \& Forensics | 3 |
| CSCI 400 | Capstone Exp in Cybersecurity I | 3 | CSCI 401 | Capstone Exp in Cybersecurity II | 3 |
| PHI 3XX | Ethics \& Info Technology | 3 | CSCI 360 | Cryptography \& Cryptanalysis | 3 |
|  | Elective or Minor | 3 |  | Elective or Minor | 3 |
|  | Elective or Minor | 3 |  | Elective or Minor | 3 |
|  |  |  |  | Total Credits | 15 |
| Total credits to be taken at John Jay College |  |  |  |  | 60 |
| Total credits for the Dual / Joint A.S. in Computer science (QCC)/ B.S. in COMPUTER SCIENCE \& INFORMATION SECURITY (JJC) |  |  |  |  | 120 |

## Appendix D:

## FACULTY TEACHING ASSIGNMENTS

Faculty Assignment

| Faculty Member | Title of Position at Institution | Full-time (FT) or Adjunct (Adj.) at the Institution | Full-time (FT) or Parttime (PT) in the Program | If Part-time in the Program, Specify Other Course Responsibilities |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Titles of Courses Taught Which Are Not Part of the Program | Related Credits |
| Stuart Asser | Professor | Full-time | Full-time |  |  |
| Belle Birchfield | Professor | Full-time | Full-time |  |  |
| John Buoncora | Lecturer | Full-time | Full-time |  |  |
| Nathan Chao | Professor | Full-time | Full-time |  |  |
| Edward Davis | Assistant Prof. | Full-time | Full-time |  |  |
| Merlinda Drini | Assistant Prof. | Full-time | Full-time |  |  |
| Marvin Gayle | Associate Prof. | Full-time | Full-time |  |  |
| Joseph Goldenberg | Associate Prof. | Full-time | Full-time |  |  |
| MD.Shahadat Hossain | Assistant Prof. | Full-time | Full-time |  |  |
|  |  |  | Full-time |  |  |
| Robert Kueper | Assistant Prof. | Full-time | Full-ti |  |  |
| Danny Mangra | Associate Prof. | Full-time |  |  |  |
|  |  |  | Full-time |  |  |
| Mike Metaxas | Assistant Prof. | Full-time | Full-time |  |  |
| Hamid Namdar | Associate Prof. | Full-time | Full-time |  |  |
| Kee Park | Assistant Prof. | Full-time | Full-time |  |  |
| Jeffrey Schwartz | Assistant Prof. | Full-time | Full-time |  |  |
| Dugwon Seo | Assistant Prof. | Full-time | Full-time |  |  |
| Dimitrios Stroumbakis | Assistant Prof. | Full-time | Full-time |  |  |
| Graig Weber | Associate Prof. | Full-time | Full-time |  |  |
| Richard Yuster | Professor | Full-time | Full-time |  |  |
| Kuaile Zhao | Assistant Prof. | Full-time | Full-time |  |  |
| Faculty Member | Title of Position at Institution | Full-time (FT) or Adjunct (Adj.) at the Institution | Full-time (FT) or Parttime (PT) in the Program | If Part-time in the Program, Specify Other Course Responsibilities |  |
|  |  |  |  |  |  |
|  |  |  |  | Titles of Courses Taught Which Are Not Part of the Program | Related Credits |



Academic Senate Agenda—May 10, 2016—Attachment F

## FACULTY

| Course Title (a) | No. of Credits <br> (b) | Faculty Member(s) Assigned to Each Course. (Use "D" to Specify Program Director) (c) | Highest Earned Degree \& Discipline, College or University (d) | Relevant Occupational Experience (e) | Relevant other experience (sucl as certification/ licensure) (f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ET 575 Intro <br> C++ <br> Programming | 3 | Merlinda Drini <br> Nathan Chao <br> Steven Trowbridge <br> Hamid Namdar <br> Richard Yuster <br> Mike Metaxas <br> Joann Sun <br> Vaughn Nystrom | Ph.D. EE 2009 CCNY <br> Ph.D. EE 1975 Cooper Union <br> MA Computer <br> Science, 2012 <br> MSCSci, 1994, NYIT <br> MSEE, 1967 NYU <br> MSEE, Polytechnic U. <br> of NY 1973 <br> MS Comp Sci, 1995, NYIT <br> MBA, St. John's University, 1976 | PE, State of NY <br> PE, State of NY <br> PE, State of NY <br> PE, State of NY |  |
| ET 570 <br> Creating <br> Smartphone <br> Apps | 3 | Nathan Chao <br> Robert Kueper <br> Mike Metaxas <br> Michael Lawrence <br> Vaughn Nystrom <br> Marvin Gayle | Ph.D. EE 1975 Cooper Union BSET, 1989 ESC MSEE, Polytechnic U. of NY 1973 USAF Acad. BS Eng. 1978 <br> MBA, St. John's University, 1976 <br> MSEE, 1997 CCNY | PE, State of NY <br> PE, State of NY <br> PE, State of NY |  |
| ET 580 Object Oriented Program | 3 | Merlinda Drini Steven Trowbridge Joann Sun <br> Michael Lawrence <br> Vaughn Nystrom <br> Omar Ellis | Ph.D. EE 2009 CCNY <br> MA Computer <br> Science, 2012 <br> MS Comp Sci, 1995, NYIT <br> USAF Acad. BS Eng. 1978 <br> MBA, St. John's University, 1976 <br> MS Manag. Info. Sys. Devry, 2009 |  |  |
| ET 585 <br> Computer Architecture | 3 | Merlinda Drini Steven Trowbridge <br> Belle Birchfield | Ph.D. EE 2009 CCNY MA Computer Science, 2012 PhD EE, Columbia 1995 MSEE, 1993, MIT |  |  |


| Course Title (a) | No. of Credits (b) | Faculty Member(s) <br> Assigned to Each Course. <br> (Use "D" to Specify <br> Program Director) (c) | Highest Earned Degree \& Discipline, College or University (d) | Relevant Occupational Experience (e) | Relevant other experience (suc as certification/ licensure) ( f ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Jeffrey Schwartz <br> Hamid Namdar <br> Richard Yuster <br> Mike Metaxas | MSCSci, 1994, NYIT MSEE, 1967 NYU MSEE, Polytechnic U. of NY 1973 | PE, State of NY <br> PE, State of NY <br> PE, State of NY <br> PE, State of NY |  |
| ET 704 <br> Network <br> Fundamentals | 4 | Merlinda Drini Danny Mangra <br> Andrei Szabo <br> Brian Toyota <br> Kimmon Stair | Ph.D. EE 2009 CCNY MSEE, Polytechnic U. of NY 2002 <br> MSEE, Polytechnic Inst. Bucharest 1977 MS Telecom Mgt., 2009, Stevens Inst. Of Tech. MBA, LIU 2010 | PE, State of NY |  |
| ET 725 <br> Computer <br> Network <br> Security | 3 | Merlinda Drini Marvin Gayle Michael Lawrence <br> Andrei Szabo | Ph.D. EE 2009 CCNY MSEE, 1997 CCNY USAF Acad. BS Eng. 1978 <br> MSEE, Polytechnic Inst. Bucharest 1977 | PE, State of NY |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## FACULTY TO BE HIRED

Not applicable

Appendix E New Resources
Appendix F Projected Revenue
Appendix G Supporting Materials for Projected Revenue Appendix H Five-year Financial Projections

## Appendix I

## STUDENT SURVEY

## Student Interest Survey

Queensborough Community College (QCC) is planning to offer an Associate in Science (A.S) degree in Computer Science and Information Security. Computer security, also known as cybersecurity or IT security, is the protection of information systems from theft or damage to the hardware or software. The proposed degree program will be a jointly registered, dual admission program, with John Jay College of Criminal Justice's Bachelor of Science in Computer Science and Information Security. On successful completion of the lower division at QCC, students will have a seamless transition to the upper division of the baccalaureate program at John Jay.

The following page lists the freshman and sophomore year course sequences at QCC (60 credits).

Circle Yes or No
Would you be interested in this program? Yes No

Appendix J
NEW COURSES

1. Department:

Engineering Technology
ET-580 Object Oriented Programing

- ET-575

Co-requisites (if any):
4. Hours (Class, recitation, laboratory, studio) \& Credits:

3 hours, 3 credits hrs.
5. Date Approved by Department:
6. Date Submitted to Curriculum Committee:

| Month | Day | Year |
| :---: | :---: | :---: |
| 3 | 16 | 2016 |
| 3 | 26 | 2016 |

7. In order to avoid unnecessary delays or difficulties, please state if the proposal was discussed with other department chair(s) with similar interests.

*If yes, which department(s): Math \& Business
8. Course Description for college catalog:

This course covers object-oriented programming principles and techniques using C++. Topics include pointers, classes, overloading, data abstraction, information hiding, encapsulation, inheritance, polymorphism, file processing, templates, exceptions, container classes, and low-level language features.

## 9. Rationale - why the course is needed or desired:

Object Oriented programming is a programming style that is associated with the concept of objects, having data fields and related member functions.
Objects are instances of classes and are used to interact amongst each other to create applications Instance means, the object of class on which we are currently working. C++ can be said to be as C language with classes. In C++ everything revolves around object of class, which have their methods \& data members.
This course will help students master all techniques of software development in the C++ Programming Language and demonstrate these techniques by the solution of a variety of problems spanning the breadth of the language.
10. Curricula into which the course would be incorporated and the requirements it will satisfy:

```
Computer Science and Information Security (Required)
Internet and Information Technology (Elective)
Electronic Engineering Technology (Elective)
Computer Engineering Technology (Elective)
Telecommunications Technology (Elective)
```

11. Curricular objectives addressed by this course:
A. Demonstrate proficiency in factual knowledge and conceptual understanding required for transfer to the junior year in computer science, information technology or a related discipline.

B: Engineering Competence: Graduates will be competent technicians with problem solving and design skills, and have the ability to apply mathematics, science and modern engineering software to solve computer science and computer engineering technology problems.

C: Demonstrate an understanding of professional and ethical responsibility
12. General Education Objectives: Check those that will be assessed:

1. Communicate effectively through reading, writing, listening and speaking
2. Use analytical reasoning to identify issues or problems and evaluate evidence in order to make informed decisions
3. Reason quantitatively and mathematically as required in their fields of interest and in everyday life
4. Use information management and technology skills effectively for academic research and lifelong learning
5. Integrate knowledge and skills in their program of study
6. Differentiate and make informed decisions about issues based on multiple value systems
7. Work collaboratively in diverse groups directed at accomplishing learning objectives
8. Use historical or social sciences perspectives to examine formation of ideas, human behavior, social institutions, or social processes
9. Employ concepts and methods of the natural and physical sciences to make informed judgments 10.Apply aesthetic and intellectual criteria in the evaluation or creation of works in the humanities or the arts

| General Education Objectives <br> addressed by this course: Select from <br> list. (There is no minimum required for <br> these objectives.) | Briefly describe activities in the course which help <br> students meet each of these General Education <br> Objectives. |
| :---: | :--- |
| - use analytical reasoning to |  |
| identify issues or problems and |  |
| evaluate evidence in order to |  |
| make informed decisions |  |$\quad$| Homework problems and exams with require them to solve |
| :--- |
| network engineering problems using calculations and |
| judgment. |

13. Course categories and attributes (for CUNYfirst):

14. Course objectives/expected student learning outcomes.

| Course objectives | Learning outcomes |
| :---: | :---: |


| - To understand object oriented programming and advanced C++ concepts | Students should: <br> - Be able to explain the difference between object oriented programming and procedural programming. <br> - Use C++ to build object-oriented programs that include objects in an inheritance hierarchy |
| :---: | :---: |
| - Take a problem and develop the structures to represent objects and the algorithms to perform operations. | Students should: <br> - Perform object oriented programming to develop solutions to problems demonstrating usage of control structures, modularity, I/O. and other standard language constructs. |
| - .Understand and demonstrate the concepts of objectoriented design, polymorphism, information hiding, and inheritance. | Students should: <br> - Demonstrate adeptness of object oriented programming in developing solutions to problems demonstrating usage of data abstraction, encapsulation, and inheritance. <br> - Demonstrate ability to implement one or more patterns involving realization of an abstract interface and utilization of polymorphism in the solution of problems which can take advantage of dynamic dispatching. |
| - Take a problem and develop the structures to represent objects and the algorithms to perform operations. | Students will be able to: <br> - Apply standards and principles to write truly readable code. <br> - Test a program and, if necessary, find mistakes in the program and correct them. |

15. Attach department course syllabus (see Recommended Syllabus template, Form 4):
16. Example texts/readings/bibliography/other materials required or recommended for the course (as applicable):
Object-Oriented Programming in C++ (4th Edition) 4th Edition
by Robert Lafore, ISBN-10: 0672323087, ISBN-13: 978-0672323089
17. Methods of Instruction (such as lecture, performance, web-enhanced, online, video, writing intensive, etc.):
This course will have $50 \%$ lecture and $50 \%$ laboratory. If the students are unable to finish the assigned lab work within the class time, they will need to visit the departmental open labs.
18. Methods by which student learning will be evaluated (describe the types of evaluation methods to be employed; note whether certain evaluation methods are required for all sections):

- One midterm examination
- One final cumulative examination
- Quizzes
- Projects
- Homework assignments

19. Transferability as an elective or course required by a major to senior colleges (with supporting documents if applicable). Include comparable courses at senior or other community colleges, if applicable:
This course is targeted to senior-level undergraduate students.
20. Faculty availability:

|  | Instructor 1 | Instructor 2 | Instructor 3 |
| ---: | :--- | :--- | :--- | :--- |
| Name <br> Degree: | Merlinda Drini | Steven Trowbridge | Joann Sun |
|  | Ph.D. EE CCNY | MA Comp Sci Queens Col | MS Comp Sci, NYIT |
| Years in Profession: | 15 |  |  |
| Years Teaching: | $\mathbf{7}$ | 15 | 15 |
|  |  | 5 | $\mathbf{1 0}$ |

21. Facilities and technology availability:

Existing ET facilities.
22. List of courses to be withdrawn, or replaced by this course, if any:

None
23. Enrollment limit and frequency the course is offered (each semester, once a year, or alternating years):
Each semester.
24. What changes in any programs will be necessitated or requested as a result of this course's additions/charges
None

## Glossary of Terms

Note: These definitions of terms are for the purposes of this assessment project only

| Entry-level course | A credit course with no pre-requisites other than passing placement <br> exams or required remediation; usually considered a first semester <br> course; this course may be a pre-requisite for mid-level courses |
| :--- | :--- |
| Mid-level course | A course which has at least one credit course as a pre-requisite; usually a <br> second or third semester course; this course may be a pre-requisite for <br> upper-level courses |
| Upper-level course | A course, usually taken in the third or fourth semester, which has several <br> credit course pre-requisites |
| (Student) Learning <br> objectives | An explicit statement of the skills and knowledge a student is expected to <br> learn and be able to demonstrate either in general education, in a <br> curriculum, or in a course |
| (Student) Learning <br> outcomes | Student behaviors, performance, or activities that demonstrate that <br> students are meeting or have met the learning objective(s) |
| General education | Desired student learning in general education skills and in the liberal arts <br> and sciences: communication, analytic reasoning and problem solving, |


| objectives | quantitative skills and mathematical reasoning, information management, <br> integration of knowledge, differentiation of values, development of <br> personal and collaborative skills, history, social sciences, mathematics <br> and sciences, the humanities and the arts |
| :--- | :--- |
| Curricular objectives | An explicit statement of the major points of learning that students must <br> achieve to complete a program of study; these include both general <br> education objectives and objectives specific to the curriculum |
| Course objectives | Major points of learning that students must achieve to complete a course; <br> course objectives include general education objectives, curricular <br> objectives, and objectives specific to the course |

1. A detailed course syllabi of pertinent courses [include a laboratory outline when applicable] [see Recommended Syllabus template, Attachment 7]:

| Week | Topics |
| :---: | :---: |
| 1 | Ch. 1 Introduction to Object Oriented Programming <br> - Characteristics of Object Oriented Language <br> - C++ and C <br> - The Unified Modelling Language (UML) |
| 2 | Ch. 2 Overview of C++ Programming <br> - Program Construction <br> - Output <br> - Directives <br> - Comments <br> - Variables <br> - Input <br> - Arithmetic Operations <br> - Library Functions |
| 3 | Ch. 3 Loops and Decisions <br> - Relational Operations <br> - Loops <br> - Decisions <br> - Logical Operations <br> - Precedence |
| 4 | Ch. 4 Structures <br> - Defining the Structure <br> - Accessing Structure Members <br> - Enumerations |
| 5 | Ch. 5 Functions <br> - Simple Functions <br> - Passing Arguments <br> - Returning Values <br> - Reference Arguments <br> - Overloaded Functions |


| 6 | Ch. 6 Objects and Classes <br> - A Simple Class <br> - C++ Objects as Physical Objects <br> - C++ Objects as Data Types <br> - Constructors <br> - Objects as Function Arguments <br> Exam 1 |
| :---: | :---: |
| 7 | Ch. 6 Objects and Classes cont. \& Ch. 7 Arrays and Strings <br> - Returning Objects from Classes <br> - Structures and Classes <br> - Classes, Objects, and Memory <br> - Introduction to Arrays <br> - Arrays as Class Member Data <br> - Arrays as Objects <br> - C-Strings <br> - The Standard C++ string Objects |
| 8 | Ch. 8 Operator Overloading <br> - Overloading Unary and Binary Operators <br> - Data Conversion <br> - UML Class Diagram |
| 9 | Ch. 9 Inheritance <br> - Derived Class and Base Class <br> - Derived Class Constructors <br> - Class Hierarchies <br> - Levels of Inheritance <br> - Multiple Inheritance |
| 10 | Ch. 10 Pointers <br> - Addresses and Pointers <br> - Pointers and Arrays <br> - Pointers and Functions <br> - Pointers and C-Type Strings <br> - Pointers to Objects <br> - Pointers to Pointers <br> - Memory Management |
| 11 | Ch. 12 Streams and Files <br> - Stream Classes <br> - Stream Errors |


|  | - Disk File I/O with Streams <br> - File Pointers <br> - Error Handling <br> - File I/O with Member Functions |
| :---: | :---: |
| 12 | Ch. 14 Templates and Exceptions <br> - Function Templates <br> - Class Templates <br> - Exceptions |
| 13 | Ch. 15 The Standard Template Library <br> - Introduction to the Standard Template Library STL <br> - Algorithms <br> - Sequence Containers <br> - Iterators <br> - Specialized Iterators <br> - Associative Containers |
| 14 | Ch. 16 Object Oriented Software Development <br> - Software Development Process <br> - Use Case Modeling <br> - The Programming Problem <br> - From Use Cases to Classes <br> - Writing the Code <br> - Interacting with the Program <br> - Final Thoughts |
| 15 | Final |

1. Department:

Engineering Technology
2. Course, prefix, number, \& title: ET-585 Computer Architecture
3. Pre-requisites (if any): - ET-575

Co-requisites (if any):
4. Hours (Class, recitation, laboratory, studio) \& Credits: 3 hours, 3 credits.
5. Date Approved by Department:
6. Date Submitted to Curriculum Committee:

| Month | Day | Year |
| :---: | :---: | :---: |
| 3 | 16 | 2016 |
| 3 | 26 | 2016 |

7. In order to avoid unnecessary delays or difficulties, please state if the proposal was discussed with other department chair(s) with similar interests.

*If yes, which department(s): Math \& Business
8. Course Description for college catalog:

The course covers the basic principles of computer organization, operation and performance. It also deals with embedded systems, peripheral devices, memory management, and processor family evolution patterns.
9. Rationale - why the course is needed or desired:

This course provides a strong foundation for students to understand modern computer system architecture and to apply these understandings and principles to future computer designs. It is structured around the three primary building blocks of general-purpose computing systems: processors, memories, and networks. It will prepare the students for jobs in the computer science and computer engineering industry and can act as a spring board to more advance level courses.
10. Curricula into which the course would be incorporated and the requirements it will satisfy:

Computer Science and Information Security (Required)
nternet and Information Technology (Elective)
Electronic Engineering Technology (Elective)
Computer Engineering Technology (Elective)
Telecommunications Technology (Elective)
11. Curricular objectives addressed by this course:
A. Demonstrate proficiency in factual knowledge and conceptual understanding required for transfer to the junior year in computer science, information technology or a related discipline.

B: Engineering Competence: Graduates will be competent technicians with problem solving and design skills, and have the ability to apply mathematics, science and modern engineering software to solve computer science and computer engineering technology problems.

C: Demonstrate an understanding of professional and ethical responsibility
12. General Education Objectives: Check those that will be assessed:

1. Communicate effectively through reading, writing, listening and speaking
2. Use analytical reasoning to identify issues or problems and evaluate evidence in order to make informed decisions

3. Reason quantitatively and mathematically as required in their fields of interest and in everyday life
4. Use information management and technology skills effectively for academic research and lifelong learning
5. Integrate knowledge and skills in their program of study
6. Differentiate and make informed decisions about issues based on multiple value systems
7. Work collaboratively in diverse groups directed at accomplishing learning objectives
8. Use historical or social sciences perspectives to examine formation of ideas, human behavior, social institutions, or social processes
9. Employ concepts and methods of the natural and physical sciences to make informed judgments 10.Apply aesthetic and intellectual criteria in the evaluation or creation of works in the humanities or the arts

| General Education Objectives <br> addressed by this course: Select from <br> list. (There is no minimum required for <br> these objectives.) | Briefly describe activities in the course which help <br> students meet each of these General Education <br> Objectives. |
| :---: | :--- |
| use analytical reasoning to <br> identify issues or problems and <br> evaluate evidence in order to <br> make informed decisions | Homework problems and exams with require them to solve <br> network engineering problems using calculations and <br> judgment. |
| reason quantitatively and <br> mathematically as required in <br> their fields of interest and in <br> everyday life | Throughout the semester students will be applying <br> mathematics to real world computer problems, including <br> design problems, which often require not only calculation <br> but judgment as well. |
| e integrate knowledge and skills in |  |
| their program of study |  |$\quad$| During the course period, students implement top down |
| :--- |
| design methodologies using a high-level hardware |
| description language, develop hierarchical design structures |
| and employ systematic debugging to solve problems. They |
| will also be asked to document their processes as they |
| develop their designs. |

13. Course categories and attributes (for CUNYfirst):

*If yes, submit Common Core Course Submission Form \& Syllabus to Dr. A. Corradetti
14. Course objectives/expected student learning outcomes.

| Course objectives | Learning outcomes |
| :--- | :--- |


| - To understand the structure and operation of modern computer systems | Students should: <br> - Understand and identify the components, and their interaction, in a typical modern day processor. <br> - Describe the components of computer systems and their interrelationships |
| :---: | :---: |
| - To understand how high level language constructs, such as C, are implemented in a machine assembly language | Students should: <br> - Understand and write assembly language programs. <br> - Understand how compiler generates machine code for simple C programs |
| - Understand basic hardware concepts (digital circuits -- gates, number representation, combinational and sequential circuits) | Students will: <br> - Explain and use different numbering systems, data representations, and arithmetic and logical operations <br> - Implement different computer instruction sets |

15. Attach department course syllabus (see Recommended Syllabus template, Form 4):
16. Example texts/readings/bibliography/other materials required or recommended for the course (as applicable):
Introduction to Computing Systems: From bits \& gates to C \& beyond 2nd Edition by Yale Patt, Sanjay Patel
ISBN-13: 978-0072467505
ISBN-10: 0072467509
17. Methods of Instruction (such as lecture, performance, web-enhanced, online, video, writing intensive, etc.):
This course will have $75 \%$ lecture and $25 \%$ laboratory. If the students are unable to finish the assigned lab work within the class time, they will need to visit the departmental open labs.
18. Methods by which student learning will be evaluated (describe the types of evaluation methods to be employed; note whether certain evaluation methods are required for all sections):

- One midterm examination
- One final cumulative examination
- Quizzes
- Homework assignments

19. Transferability as an elective or course required by a major to senior colleges (with supporting documents if applicable). Include comparable courses at senior or other community colleges, if applicable:
This course is targeted to senior-level undergraduate students.
20. Faculty availability:

|  | Instructor 1 |  | Instructor 2 | Instructor 3 |
| ---: | :--- | :--- | :--- | :--- |
| $\begin{array}{rl}\text { Name } \\ \text { Degree: }\end{array}$ | Merlinda Drini | Belle Birchfield |  |  |$)$ Jeffery Schwartz

21. Facilities and technology availability:

Existing ET facilities.

## 22. List of courses to be withdrawn, or replaced by this course, if any:

None
23. Enrollment limit and frequency the course is offered (each semester, once a year, or alternating years):
Each semester.
24. What changes in any programs will be necessitated or requested as a result of this course's additions/charges
None

## Glossary of Terms

Note: These definitions of terms are for the purposes of this assessment project only

| Entry-level course | A credit course with no pre-requisites other than passing placement <br> exams or required remediation; usually considered a first semester <br> course; this course may be a pre-requisite for mid-level courses |
| :--- | :--- |
| Mid-level course | A course which has at least one credit course as a pre-requisite; usually a <br> second or third semester course; this course may be a pre-requisite for <br> upper-level courses |
| Upper-level course | A course, usually taken in the third or fourth semester, which has several <br> credit course pre-requisites |
| (Student) Learning <br> objectives | An explicit statement of the skills and knowledge a student is expected to <br> learn and be able to demonstrate either in general education, in a <br> curriculum, or in a course |
| (Student) Learning <br> outcomes | Student behaviors, performance, or activities that demonstrate that <br> students are meeting or have met the learning objective(s) |
| General education <br> objectives | Desired student learning in general education skills and in the liberal arts <br> and sciences: communication, analytic reasoning and problem solving, <br> quantitative skills and mathematical reasoning, information management, <br> integration of knowledge, differentiation of values, development of <br> personal and collaborative skills, history, social sciences, mathematics <br> and sciences, the humanities and the arts |
| Curricular objectives | An explicit statement of the major points of learning that students must <br> achieve to complete a program of study; these include both general <br> education objectives and objectives specific to the curriculum |
| Course objectives | Major points of learning that students must achieve to complete a course; <br> course objectives include general education objectives, curricular <br> objectives, and objectives specific to the course |

2. A detailed course syllabi of pertinent courses [include a laboratory outline when applicable] [see Recommended Syllabus template, Attachment 7]:

| Week | Topics |
| :---: | :---: |
| 1 | Ch. 1 Introduction to Computer System <br> - Computers as universal computational devices <br> - How do we get the electrons to do the work? |
| 2 | Ch. 2 Bits, Data Types, and Operations <br> - Bits and data types <br> - Integer data types <br> - 2's Complement Integers <br> - Binary-Decimal conversion <br> - Decimal-Binary conversion |
| 3 | Ch. 2 Bits, Data Types, and Operations cont. <br> - Operation on bits (Arithmetic) <br> - Operation on bits (Logical Operations) <br> - Other data representation |
| 4 | Ch. 3 Digital Logic Structures <br> - The transistor <br> - Logic Gates <br> - Combinational Logic Circuits <br> - Basic Storage Elements <br> - The Concept of Memory <br> - Sequential Logic Circuits |
| 5 | Ch. 4 The von Neumann Model \& Ch5. LC3 <br> - Basic Components <br> - Instruction Processing <br> - Changing the Sequence of Execution <br> - Stopping the Computer <br> - Operate, Data Movement, Control Instructions |
| 6 | Ch. 6 Programming \& Ch. 7 Assembly Language Programming <br> - Problem Solving <br> - An Assembly Language Program <br> - The Assembly Process <br> - Beyond the Assembly of a Single Assembly Language Program <br> Exam 1 |
| 7 | Ch. 8 Overview of I/O |


|  | - I/O Basics <br> - Input from the Keyboard <br> - Output to the Monitor <br> - Interrupt Driven I/O <br> - Implementation of Memory-Mapped I/O |
| :---: | :---: |
| 8 | Ch. 9 TRAP Routines and Subroutines <br> - Introduction <br> - TRAP Mechanism, Instruction <br> - TRAP Routines <br> - Subroutines |
| 9 | Ch. 10 The Basic Structure of the Stack <br> - Introduction <br> - Interrupt-Driven I/O <br> - Arithmetic Using a Stack <br> - Data Type Conversion |
| 10 | Ch. 11 Program Execution in C <br> - Translating High-Level Language <br> - Interpretation <br> - Compilation <br> - The C Compiler |
| 11 | Ch. 15 Testing and Debugging <br> - Types of Errors <br> - Testing <br> - Debugging <br> - Programming for Correctness |
| 12 | Ch. 16 Pointers and Arrays \& Ch. 17 Recursion <br> - Pointers <br> - Arrays <br> - Recursion <br> - Fibonacci Numbers <br> - Binary Search <br> - Integer to ASCII |
| 13 | Ch. 18 I/O in C <br> - The C Library <br> - I/O, One Character at a Time <br> - Formatted I/O <br> - I/O from Files |


| 14 | Ch. 19 Data Structures <br> - Structures <br> - Arrays of Structures <br> - Dynamic Memory Allocation <br> - Linked Lists <br> - Summary |
| :---: | :---: |
| 15 | Final |

## 6. Discontinuation of a Concentration in a Program (Management - Real Estate-Insurance)

Concentration of the AAS in Management program
Program Code: 01525 Hegis Code: 5004
Departmental approval 11-04-2015
Effective Date for Discontinuation/Deletion: 08-25-2016

## 7. Attachment: General Education Task Force Report

The committee discussed the General Education Assessment Task Force Report to the Academic Senate. The committee unanimously issues the following statement:
"With regard to the Action Plan proposed for the General Education Task Force for the coming academic year 2016-2017, members of the Committee on Curriculum would like to express concerns regarding Part B, Item No. 5, 'Propose that discipline-specific outcomes, especially \#8 (social sciences and history), \#9 (science), and \#10 (arts and humanities) be dropped as general education outcomes; they can be better assessed as part of academic program review.' We believe that the elimination of discipline-specific outcomes would not be desirable, as discipline-specific learning outcomes constitute a valuable--indeed, critical-- component of general education."

## The following title changes are proposed in the

 QCC/Visual and Performing Arts A.S. Program:Program: Visual and Performing Arts - Associate in Science (A.S.) Degree - Concentrations in Art and Design, Dance, Music, Theatre Arts

Program Code: 81303
HEGIS: 5610
Effective: Fall 2016

## SUMMARY OF CHANGES

## FROM:

Associate of Science in Visual and Performing Arts (FAAS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts

## FROM:

Associate of Science in Visual and Performing Arts (FA AS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts

FROM:
Associate of Science in Visual and Performing Arts (FAAS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts

## FROM:

Associate of Science in Visual and Performing Arts (FAAS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts

TO: Associate in Science (A.S.) Degree in Art

TO: Associate in Science (A.S.) Degree in Dance

TO: Associate in Science Degree (A.S.) in Music

TO: Associate in Science (A.S.) Degree in Theatre

Changes in curricular requirements: None

Changes in General Education Core Requirements: None

FROM: Associate in Science in Visual and Performing Arts (FA-AS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts

## REQUIREMENTS FOR THE A.S. DEGREE

## COMMON CORE REQUIREMENTS

REQUIRED CORE 1A:
English Composition I, II Take EN101 \& 1026
REQUIRED CORE 1B: Mathematical \&
Quantitative Reasoning (select one from 1B) 3
REQUIRED CORE 1C: Life and Physical Sciences (select one from 1C)

3
FLEXIBLE CORE 2A: World Cultures \& Global Issues (select one from 2A)
FLEXIBLE CORE 2B: U.S. Experience \& Its Diversity (select one from 2B)3

FLEXIBLE CORE 2C ${ }^{1}$ : Creative Expression
(select one from $2 \mathrm{C}^{1}$ )
3
FLEXIBLE CORE 2D: Individual \& Society
(select one from 2D)
3
FLEXIBLE CORE 2E: Scientific World
(select one from 2E)
3
FLEXIBLE CORE 2A, 2B, 2C, 2D or 2E: (select one course ${ }^{2}$ )

## Sub-total

## MAJOR

All students in the Visual and Performing Arts A.S. Degree Program must complete one of the concentrations: Art \& Design, Art History, Dance, Music, or Theatre Arts (see details following pages) to complete the degree requirements.


degree requirements. Sections of the following courses denoted as "WI" may be taken to partially satisfy the Writing Intensive
Requirement: ARTH-100, ARTH-101, ARTH-120, ARTH-202; MU-110;
SP-142, SP-433, SP-275, SP-434, TH-111, TH-120, TH-221, DAN-
111, BI-140, BI-202, GE-101, GE-125, CH-101, CH-102, CH-110, CH-
111; MA-301, MA-321; ECON-101, ECON-102, SOCY-101, SOCY
230, SOCY-275, PLSC-101, PLSC-180, PSYC-101, PSYC-220, PHIL-

ARTH-126 History of Asian Art
ARTH-128 History of African Arts
ARTH-150 Art Administration
ARTH-251 Art Curating
ARTH-252 Art Institutions and the Business of Art
${ }_{1}$ One studio art course may be substituted for an art history course in consultation with a departmental advisor.

## Associate in Science (A.S.) Degree in Art

ART AND DESIGN CONCENTRATION - Students select 21-23 credits in consultation with a departmental adviser as follows:
Six (6) credits from:
ARTH-100 Introductory Survey of Art
ARTH-101 History of Art I
ARTH-115 Modern Art
ARTH-116 American Art
ARTH-117 History of Photography
ARTH-120 Contemporary Art
ARTH-126 History of Asian Art
ARTH-202 History of Art II

## 14-20 credits from:

ARTH-115 Modern Art
ARTH-116 American Art
ARTH-117 History of Photography
ARTH-120 Contemporary Art
ARTH-126 History of Asian Art
ARTH-128 History of African Arts
ARTH-150 Art Administration
ARTS-121 Two-Dimensional Design
ARTS-122 Three-Dimensional Design: Introduction to Sculpture
ARTS-130 Art for Teachers of Children I
ARTS-131 Art for Teachers of Children II
ARTS-132 Introduction to Art Therapy
ARTS-141 Introduction to Photography
ARTS-151 Drawing I
ARTS-161 Painting I
ARTS-182 Sculpture
ARTS-186 Ceramics I
ARTS-191 Introduction to Video Art
ARTS-192 Web-Animation
ARTH-225 History of Graphic Design
ARTH-251 Art Curating
ARTH-252 Art Institutions and the Business of Art
ARTS-221 Color Theory
ARTS-242 Advanced Photographic Skills
ARTS-243 Digital Photography
ARTS-252 Drawing II
ARTS-253 Illustration
ARTS-262 Painting II
ARTS-263 Painting III
ARTS-270 Printmaking: Relief and Stenci
ARTS-271 Printmaking: Intaglio
ARTS-286 Ceramics II
ARTS-290 Advertising Design and Layout
ARTS-291 Electronic Imaging
ARTS-292 Design for Desktop Publishing
ARTS-293 Design for Motion Graphics
ARTH-380 Gallery Internship I
ARTH-381 Gallery Internship II
ARTS-343 Large Format and Studio Photography
ARTS-344 Photography as Fine Art
ARTS-345 Creating The Documentary Image
ARTS-346 Color Photography
ARTS-348 Photographing People
ARTS-349 Illustration and Fashion Photography
ARTS-380 Artist Apprentice Internship I
ARTS-381 Artist Apprentice Internship II
ARTS-382 Special Problems in Studio Art I
ARTS-383 Special Problems in Studio Art II
ARTS-390 Portfolio Project in Studio Art

## Associate in Science (A.S.) Degree in Art

ART HISTORY CONCENTRATION - Students select $21-23$ credits in
consultation with a departmental adviser as follows:
The following courses are required (6 credits):
ARTH-101 History of Art I
ARTH-202 History of Art II

## 14-20 credits from ${ }_{1}$ :

ARTH-115 Modern Art
ARTH-116 American Art
ARTH-117 History of Photography
ARTH-120 Contemporary Art
ARTH-126 History of Asian Art
ARTH-128 History of African Arts
ARTH-150 Art Administration ARTH-251 Art Curating
ARTH-252 Art Institutions and the Business of Artı
${ }_{1}$ One studio art course may be substituted for an art history course in consultation with a departmental advisor.

Academic Senate Agenda-May 10, 2016—Attachment G
3 Students who have taken SP-211 in the Common Core are recommended to take a Foreign Language course; or $\mathrm{HI}-110, \mathrm{HI}-11$, HI-112; or a Social Sciences course.
4 Students who have taken a STEM Variant course in the Common Core 1C have fulfilled this requirement.
All students must successfully complete two (2) writing-intensive classes (designated "WI") to fulfill degree requirements. Sections of the following courses denoted as "Wl" may be taken to partially satisfy the Writing Intensive Requirement: ARTH-100, ARTH-101, ARTH-120, ARTH-202; MU-110; SP-142, SP-433, SP-275, SP-434, TH-111, TH120, TH-221, DAN-111, BI-140, BI-202, GE-101, GE-125, CH-101, CH-102, CH-110, CH-111; MA-301, MA-321; ECON-101, ECON-102, SOCY-101, SOCY-230, SOCY-275, PLSC-101, PLSC-180, PSYC101, PSYC-220, PHIL-101, PHIL-130, PHIL-140; HI-110, HI-111, HI112, HI-127, HI-128; LF-401, LG-401, LI-401, LS-402; HE-102; PH-110

FROM: Associate in Science in Visual and Performing Arts (FA-AS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts

## REQUIREMENTS FOR-THE A.S. DEGREE

## COMMON CORE REQUIREMENTS

REQUIRED CORE 1A:
English Composition I, II Take EN101 \& 1026
REQUIRED CORE 1B: Mathematical \&
Quantitative Reasoning (select one from 1B) 3
REQUIRED CORE 1C: Life and Physical Sciences
(select one from 1C)
3
FLEXIBLE CORE 2A: World Cultures \& Global Issues (select one from 2A)
FLEXIBLE CORE 2B: U.S. Experience \& Its Diversity (select one from 2B)
FLEXIBLE CORE 2C ${ }^{1}$ : Creative Expression
(select one from 2C ${ }^{1}$ )
FLEXIBLE CORE 2D: Individual \& Society
(select one from 2D)
FLEXIBLE CORE 2E: Scientific World
(select one from 2E) 3
FLEXIBLE CORE 2A, 2B, 2C, 2D or 2E:
(select one course ${ }^{2}$ )
Sub-total
30

## MAJOR

All students in the Visual and Performing Arts A.S. Degree Program must complete one of the concentrations: Art \& Design, Art History, Dance, Music, or Theatre Arts (see details following pages) to complete the degree requirements.

|  | Sub-total |
| :--- | :--- | 21-23



## CONCENTRATIONS

Courses may be selected from the following categories to fulfill the 21-23 credit concentration in the Fine and Performing Arts

DANCE CONCENTRATION - Students select 21-23 credits In consultation with a departmental adviser as follows:

DAN 110 Foundations of Dance Movement (3 cr)
Two courses in Modern Dance technique (4cr)
(level determined by placement class)
Select from DAN 124, 125, 126, 127, 220, 221 or 222
Two courses in Ballet technique (4cr)
(level determined by placement class)
Select from DAN 134, 135, 136, 137, 230, 231 or 232
DAN 249 Modern Dance Improvisation (2cr)
DAN 251 Choreography I(2cr)
Two courses in Repertory or Workshop (4-6 cr)
Select from DAN 160, 161 260, 261 or 262
(audition required for 260, 261, 262)
One course from Modern Dance or Ballet technique: (2cr)
Select from DAN 125, 126, 127, 220, 221, 222
$135,136,137,230,231$ or 232
Technique elective: (0-2cr)
Select from Modern Dance (DAN 125, 126, 127, 220, 221, 222),
Ballet (135, 136, 137, 230, 231, 232),
African/ Afro-Caribbean Dance DAN 103),
Advanced Beginning Jazz Dance (140),
Contact Improvisation (DAN 252)
or Special Topics in Modern Dance (DAN 270, 271, 272)

Note: Students are recommended to take DAN 111 as part of the Flexible Core (see note 2 above).

DANCE MAJOR - Students select 21-23 credits In consultation with a departmental adviser as follows:

DAN 110 Foundations of Dance Movement (3 cr)
Two courses in Modern Dance technique (4cr) (level determined by placement class) Select from DAN 124, 125, 126, 127, 220, 221 or 222

Two courses in Ballet technique (4cr)
(level determined by placement class)
Select from DAN 134, 135, 136, 137, 230, 231 or 232
DAN 249 Modern Dance Improvisation (2cr) DAN 251 Choreography I (2cr)

Two courses in Repertory or Workshop (4-6 cr)
Select from DAN 160, 161 260, 261 or 262
(audition required for 260, 261, 262)
One course from Modern Dance or Ballet technique: (2cr)
Select from DAN 125, 126, 127, 220, 221, 222
$135,136,137,230,231$ or 232
Technique elective: (0-2cr)
Select from Modern Dance (DAN 125, 126, 127, 220, 221, 222),
Ballet (135, 136, 137, 230, 231, 232),
African/ Afro-Caribbean Dance DAN 103),
Advanced Beginning Jazz Dance (140),
Contact Improvisation (DAN 252)
or Special Topics in Modern Dance (DAN 270, 271, 272)
Note: Students are recommended to take DAN 111 as part of the Flexible Core (see note 2 above).


| TO: The Associate in Science (A.S.) Degree in Theatre |  |
| :---: | :---: |
| REQUIREMENTS FOR THE Associate in Science (A.S.) Degree in Theatre |  |
| COMMON CORE REQUIREMENTS <br> REQUIRED CORE 1A: <br> English Composition I, II Take EN101 \& 102 <br>  <br> Quantitative Reasoning (select one from 1B) <br> REQUIRED CORE 1C: Life and Physical Sciences <br> (select one from 1C) <br> FLEXIBLE CORE 2A: World Cultures \& Global Issues <br> (select one from 2A) <br> FLEXIBLE CORE 2B: U.S. Experience \& Its Diversity (select one from 2B) <br> FLEXIBLE CORE 2C ${ }^{1}$ : Creative Expression (select one from 2C ${ }^{1}$ ) <br> FLEXIBLE CORE 2D: Individual \& Society (select one from 2D) <br> FLEXIBLE CORE 2E: Scientific World (select one from 2E) <br> FLEXIBLE CORE 2A, 2B, 2C, 2D or 2 E : <br> (select one course ${ }^{2}$ ) <br> Sub-total | 3 <br> 3 <br> 3 <br> 3 <br> 3 <br> 3 <br> 3 <br> $\frac{3}{30}$ |
| MAJOR <br> All students majoring in the Associate in Science (A.S.) De Theatre must complete 21-23 credits in Theatre requireme electives as outlined below. <br> Sub-total | ee in and $21-23$ |
| ADDITIONAL MAJOR REQUIREMENTS <br> SP-211 ${ }^{3}$ Speech Communication ${ }^{3}$ <br> HE-101 Intro. to Health Education or HE-102 Health Behavior \& Society One course in PE-400 or PE-500 series or DAN-100 series Laboratory Science ${ }^{4}$ BI-132, BI-171, CH-102, CH-111, CH-121 ET-842, PH-112 | $\begin{aligned} & 3 \\ & 1-2 \\ & 1 \\ & 0-1 \end{aligned}$ |

THEATRE ARTS CONCENTRATION - Students select $21-23$ credits in consultation with a departmental adviser as follows:
The following courses are required (12 credits):
TH-121 Introduction to Acting for the Major

> TH-151 Voice and Movement for the Actor
> TH-131 Stagecraft I
> TH-132 Practicum in Stagecraft I
> TH-111 Introduction to Theatre

One of the following courses (3 Credits):

## TH-221 Acting II

TH-231 Stagecraft II
TH-152 Standard Speech for Stage, Film, Television \& Digital Media
The remaining 6-8 credits may be selected from any courses in the Department of Speech Communication and Theatre Arts, including those above not already taken.

EN-302 Readings in Drama
SP-230 Video Production I
SP-321 Oral Performance for the Actor and Speaker
TH-134 Stage Makeup
TH-135 Costume Construction
TH-232 Practicum in Stagecraft II
TH-122 Actors Workshop I
TH-222 Actors Workshop II
TH-235 Stage Management
TH-133 Theatre Production and Design I
TH-233 Theatre Production and Design II
SP-274 Introduction to Electronic Media
SP-275 Media Criticism
SP-471 American Film History I
SP-472 American Film History II

THEATRE MAJOR - Students complete 21-23 credits in consultation with a departmental adviser as follows:
The following courses are required (12 credits):
TH-121 Introduction to Acting for the Major
TH-151 Voice and Movement for the Actor
TH-131 Stagecraft I
TH-132 Practicum in Stagecraft I
TH-111 Introduction to Theatre
One of the following courses (3 Credits):
TH-221 Acting II
TH-231 Stagecraft II
TH-152 Standard Speech for Stage, Film, Television \& Digital Media
The remaining 6-8 credits may be selected from any courses in the Department of Speech Communication and Theatre Arts, including those above not already taken.

EN-302 Readings in Drama
SP-230 Video Production I
SP-321 Oral Performance for the Actor and Speaker
TH-134 Stage Makeup
TH-135 Costume Construction
TH-232 Practicum in Stagecraft II
TH-122 Actors Workshop I
TH-222 Actors Workshop II
TH-235 Stage Management
TH-133 Theatre Production and Design I
TH-233 Theatre Production and Design II
SP-274 Introduction to Electronic Media
SP-275 Media Criticism
SP-471 American Film History I
SP-472 American Film History II

FROM: Associate in Science in Visual and Performing Arts (FA-AS) with Concentrations in: Art and Design, Art History, Dance, Music and Theatre Arts

## REQUIREMENTS FOR THE A.S. DEGREE

COMMON CORE REQUIREMENTSREQUIRED CORE 1A:English Composition I, II Take EN101 \& 1026REQUIRED CORE 1B: Mathematical \&Quantitative Reasoning (select one from 1B) 3REQUIRED CORE 1C: Life and Physical Sciences(select one from 1C)3
FLEXIBLE CORE 2A: World Cultures \& Global Issues (select one from 2A)3
FLEXIBLE CORE 2B: U.S. Experience \& Its Diversity (select one from 2B) ..... 3
FLEXIBLE CORE 2C ${ }^{1}$ : Creative Expression (select one from 2C ${ }^{1}$ ) ..... 3
FLEXIBLE CORE 2D: Individual \& Society (select one from 2D) ..... 3
FLEXIBLE CORE 2E: Scientific World(select one from 2E)3
FLEXIBLE CORE 2A, 2B, 2C, 2D or 2E: (select one course ${ }^{2}$ ) ..... 3
Sub-total ..... 30

## MAJOR

All students in the Visual and Performing Arts A.S. Degree Program must complete one of the concentrations: Art \& Design, Art History, Dance, Music, or Theatre Arts (see details following pages) to complete the degree requirements.


1 Recommended: select from area different from concentration (ARTH-100—ARTH-128, including ARTH-202 \& ARTH-225, or DAN-111, or MU-110, or MU-120, or SP-471, of SP-472, or TH-111).
2 Recommended: select course from 2C in concentration discipline. 3 Students who have taken SP-211 in the Common Core are recommended to take a Foreign Language course; or $\mathrm{HI}-110, \mathrm{HI}-11, \mathrm{HI}-$ 112; or a Social Sciences course.
4 Students who have taken a STEM Variant course in the Common Core 1C have fulfilled this requirement.
All students must successfully complete two (2) writing-intensive classes (designated "WI") to fulfill degree requirements. Sections of the following courses denoted as "WI" may be taken to partially satisfy the Writing Intensive Requirement: ARTH-100, ARTH-101, ARTH-120, ARTH-202; MU-110; SP-142, SP-433, SP-275, SP-434, TH-111, TH-120, TH-221, DAN-111, BI-140, BI-202, GE-101, GE-125, CH-101, CH-102, CH-110, CH-111; MA-301, MA-321; ECON-101, ECON-102, SOCY-101, SOCY230, SOCY-275, PLSC-101, PLSC-180, PSYC-101, PSYC-220, PHIL-


MUSIC CONCENTRATION - Students select 20-26 credits in
consultation with a departmental advisor as indicated below.
The following courses are required:
MU-110 Introduction to Music or
MU-120 Survey of Western Music
MU-241 Music Theory and Keyboard Harmony I and
MU-242 Music Theory and Keyboard Harmony II or
MU-231 Jazz Theory I and
MU-232 Jazz Theory II
MU-211 Sight Reading and Ear Training I
MU-212 Sight Reading and Ear Training II
MU-312 Piano II

## Two credits selected from the: MU-400 series

The remaining 6-12 credits may be selected from any courses in the Department of Music, including those above not already taken, with the exception of MU-208, 209, 210, and 261. Please note that MU-208 replaces MU-205 and MU-311, and MU-209 replaces MU-206 and MU207.

MUSIC MAJOR- Students select 20-26 credits in consultation with a departmental advisor as indicated below.
The following courses are required:
MU-110 Introduction to Music or
MU-120 Survey of Western Music
MU-241 Music Theory and Keyboard Harmony Iand
MU-242 Music Theory and Keyboard Harmony II or
MU-231 Jazz Theory Iand
MU-232 Jazz Theory II
MU-211 Sight Reading and Ear Training I
MU-212 Sight Reading and Ear Training II
MU-312 Piano II
Two credits selected from the: MU-400 series
The remaining 6-12 credits may be selected from any courses in the Department of Music, including those above not already taken, with the exception of MU-208, 209, 210, and 261. Please note that MU-208 replaces MU-205 and MU-311, and MU-209 replaces MU-206 and MU207.

## Academic Program Revision Proposal

## A.S. Degree in Visual and Performing Arts

Rationale: The National Association of Arts Accreditation, from which each of the four academic departments sponsoring the Visual and Performing Arts degree program seeks accreditation, has rigorous standards relative to curriculum and degree designation. The response from the National Association of Schools of Theatre to the report submitted by Speech Communication and Theatre Arts recommends that the degree title be changed. According to the agency's specific standards for degree title clarity, "Visual and Performing Arts" is considered ambiguous, suggesting two concentrations rather than four. In anticipation of the reports to be submitted by the other three departments seeking accreditation, all four departments have voted on and approved a curricular modification that will split off the four concentrations into separate degree programs. This is considered a curricular modification by NYSED and has already been discussed with CUNY OAA. The four academic departments are agreed that obtaining accreditation under four separate degree programs represents a major advancement of the "four arts" at the college, strengthening each program individually and providing students with educational opportunities considerably enhanced by nationally recognized accreditation.

Dates of Votes of approval for a title change by departmental faculty:
Dept. of Speech Communication and Theatre Arts 5/6/2015;
Dept. of Art and Design - 5/12/2015;
Dept. of Health Related Sciences -5/20/2015;
Dept. of Music - 5/21/2015.

# Queensborough Community College, CUNY <br> To: The Faculty Executive Committee <br> From: Committee on Environment, Quality of Life, and Disability Issues Amended Report on Parking, April 72016 

In response to emails from the FEC related to the on campus parking situation for faculty and staff the Environmental, Quality of Life Disability Issues Committee (EDQL) added this topic to the agenda for the March $23^{\text {rd }}$ meeting inviting Mr. Locke, Lt. Jack Black and William Faulkner, who are normally present at the EQDL meetings.

In the past 10 years there has been a marked increase in the student body and additional faculty and staff who drive to the campus. So there is an unavoidable overload at certain times of the day. Also currently because of construction some spots are not available.

## The FEC made the following three recommendations:

(1) Create a new TAG for autos to sell to students who are employed at the college part time so that they will not have access to the main lot but may park in the rear lot.
(2) Do not permit any vehicles without a QCC TAG to enter the main lot to drop off anyone. If people arrive at the main gate in need of transport closer to buildings, then security can provide a ride in one of the electric vehicles.
(3) Vigorous and vigilant enforcement of the parking regulations- vehicles found in the lots without the appropriate TAG need to be identified and their operators fined or denied future access and denied the right to purchase a TAG.

## Enforcement of rules against illegally parked cars and cars parked without faculty/staff tags

In response to recommendation 3, Ed Locke and Lt. Black explained multiple ways that the parking lots are currently monitored and restricted:

- Manned entry gate by security staff person at all times
- A security staff member roving in the lots checking on cars
- Security cameras
- Student drivers with parking fines are denied campus parking until they clear their fines
- Restricting faculty/staff drivers with parking fines is not a current practice

Some problems pointed out.

- Some faculty and staff show their tag and then do not put on dashboard.
- Security accommodates taxis and others who pick up and drop off students and faculty. Restricting these cars, per recommendation 2, would not likely increase parking spaces in the lot and would result in dangerous, increased traffic on the streets surrounding campus.

It was mentioned that occasionally cars are parked in the main faculty and staff lot without tags because guests visit our campus for job interviews and guest lectures. Security tries to accommodate those as well.

## The committee discussed these suggestions:

- Increased carpooling efforts
- parking on neighborhood streets
- leasing off campus lots from local businesses,
- providing shuttle buses to and from nearby LIRR Stations,
- looking into getting Citi Bikes stationed nearby campus and nearby LIRR stations
- charging more for parking passes as other CUNY campuses do [Queens College \$250]
- removing the on-campus bus stop to create more spots
- as per suggestion 1 above, restricting parking passes to full time employees only or different type passes for students to only park in rear lot.

Many ideas were brought forth including those mentioned above, but there were important problems or challenges discussed with many of them. For example: the on-campus bus stop took a lot of work to get and to disband it may not be the best solution. Citi-bikes may at any time have all bikes by QCC or at LIRR. Shuttle buses between campus and MTA stations, which are used by Queens College, added an additional fee to all students and those students who do not use this are complaining about the fee. The college is paying attention to the shuttle buses currently in use at Queens College to determine whether something similar would be feasible for QCC. Regarding the FEC's suggestion 1, as the committee understands it, students cannot park in the main lot except during evening times which are less busy. As far as restricting part time employees to the rear lot, the committee did not feel this was a good solution because it would create a division between full time and part time employees and would restrict part timers who may work during later hours to a lot farther away.

# Queensborough Community College Senate Committee on Environment, Disability, and Quality of Life Issues Report on Video Surveillance on Campus March 29, 2016 

Following an email request from Dr. Pecorino, the committee on Environment, Disability, and Quality of Life Issues has gathered information regarding cameras and video surveillance at QCC. Below are Dr. Pecorino's questions and the information received from Ed Locke and Lt. Black regarding cameras operated by Public Safety and from Bruce Naples regarding cameras operated by the Academic Computing Center.

## -How is the information recorded?

The vast majority of the cameras on campus are recording all the time, while some are motion activated. Some of them are static cameras, pointed in a specific direction (such as in classrooms with smart technology), and others pan over larger areas (such as the cameras in QCC parking lots). These cameras record in public places where there is not an expectation of privacy, places such as the student union, the library, outdoor spaces, parking lots, and hallways. There are not cameras in spaces where there is an expectation of privacy, spaces such as bathrooms, locker rooms, and faculty and staff offices.

## -Who has access?

Public Safety has access to data from all cameras in public places such as outside campus buildings and inside building hallways, open spaces such as in the library or the cafeteria, and building entryways. Cameras in classrooms that are equipped with smart podiums or computer labs are accessed only by the Academic Computing Center team. Public Safety does not have regular access to the data from these cameras, but in the event of a reported criminal or illicit incident, they can request the data from ACC. The approval process for access to ACC camera data is stringent. Some individual departments or offices also have access to the data recorded by cameras in their vicinity: the Art gallery staff has access to cameras in their spaces, Student Union staff has access to cameras in the student union, and Building and Grounds can access certain cameras on campus as needed.
-For how long is data held?
Data collected by Public Safety cameras is saved for between two weeks and three months. Footage possibly recorded by a camera related to an incident reported six months after it has taken place, for instance, would no longer be available. Due to size constraints, data collected by ACC cameras is saved on the ACC server for two weeks.

## -What sorts of incidents might result in looking at the data?

Formal incident reports of criminal or illicit activities would prompt Public Safety to review available surveillance footage on their cameras or to request access for ACC camera data. ACC staff may make use of cameras in podium classrooms to note that a projector has been left on and to remotely shut down the projector. Projector bulbs are very expensive, so this is a cost and energy saving effort.
-For exactly how long have the cameras been recording? What are the exact dates when cameras started operation for each different location?

The college has steadily increased the presence of surveillance cameras over the last ten years. Since there are now 200 individual cameras operated by Public Safety, there is no data on the exact installation dates for the location of all 200 different cameras. There are plans to install additional cameras in building hallways such as in the Humanities buildings.

ACC operates cameras in about 110 classrooms that are fitted with smart podiums and projectors.

## -Do the cameras work 24/7 or are they intermittent?

While a few cameras are motion activated, it should be assumed that they all operate 24/7. ACC cameras in classrooms with technology can be turned off by individual instructors during a class if the instructor desires (Dr. Pecorino shared instructions detailing how to do this in a previous series of emails). ACC cameras can be turned back on remotely by the ACC staff after a class has ended.
-Is there an opportunity for misuse of data recorded (or use other than what the cameras' stated intentions are)?

The primary purposes of the cameras are to serve as deterrents, and signs on campus indicating surveillance cameras are running alerts the community to their presence. They also function to make data available in the case of investigations of criminal or illicit activities. Public Safety representatives stressed that the footage for these cameras is only reviewed or formally accessed in the case of such a report. A member of the committee asked what might happen if, say, a supervisor requested access to footage from a particular camera in order to check up on an employee under him or her without there being a formal incident report attached to the request. Ed Locke indicated that in such a case, the supervisor would not be given the data and would instead be referred to Labor Relations.

Dr. Pecorino's email refers to a case where ACC camera data was apparently used for purposes unrelated to protecting classroom technology. Without knowing the specifics of the case in question, Mr. Locke and Lt. Black indicated that there is no guarantee that footage from cameras whose primary purpose is to protect technology won't be used for other purposes such as investigating a report of criminal or illicit activity. If for instance, a person were to attack another person in a smart classroom and that incident was recorded by an ACC camera whose primary purpose is to protect the technology, Public Safety would indeed request that footage in order to investigate the incident.

## -What would be the full range of "incidents" for which data would be used?

Ed Locke and Lt. Black reinforced the point that footage is only accessed in the case of investigating formally reported criminal or illicit activities on or around campus.

Resolution presented by the Steering Committee for consideration and disposition by the Academic Senate on Affirming the University of Chicago Report on Freedom of Expression on Campus

Whereas, freedom of expression on college campuses has become a contested national issue, and
whereas, the University Faculty Senate (UFS) on March 31, 2016 passed a resolution affirming the principles of the Chicago Statement on Freedom of Expression on Campus, and
whereas, the UFS Executive Committee has requested that all College Senates in CUNY express their support, and
whereas, Queensborough Community College has long been an advocate of academic freedom, and the Chicago Statement on Freedom of Expression on Campus is a balanced approach to the issue,
be it resolved, the Queensborough Community College Academic Senate supports the principles of the Chicago Statement on Freedom of Expression on Campus.

Rationale: It is hoped that two task forces created by Chancellor Milliken-one on expressive activities and another on civility - will take the UFS and individual College Senates' support of the Chicago Statement into account when crafting their policies.

For informational purposes: The Chicago Statement can be found here:
http://freeexpression.uchicago.edu/sites/freeexpression.uchicago.edu/files/FOECommitteeReport.pdf
An article about the UFS affirmation of the principles of the Chicago Statement can be found here: https://www.thefire.org/cuny-university-faculty-senate-affirms-principles-of-the-chicago-statement/

## GENERAL EDUCATION ASSESSMENT TASK FORCE

REPORT TO THE ACADEMIC SENATE, May 2016

## PART A: FINDINGS AND RECOMMENDATIONS

| QCC Outcomes 2007 | General Education Outcomes in Task Force survey | Status of rubric development | Findings |
| :---: | :---: | :---: | :---: |
| 1. Communicate effectively through reading, writing, listening, and speaking | 1.a. Communicate effectively (written) | Four rubrics written 2014-2015, used in spring 2015 assessment, including an alternate Writing rubric (3 dimensions) | One of two highest priority (importance and required for all) in survey and at each forum, for college-wide annual assessment; slightly less frequent assessment for oral |
|  | 1.b. Communicate effectively (oral) -speaking and listening |  |  |
| RECOMMENDATIONS |  |  |  |
| Outcome revision | Rubric | Assessment scope | Assessment frequency |
| Proposed revision: <br> Communicate effectively <br> (written and oral) | Continue to use both Writing rubrics; the listening rubric will be revised, per Speech and Theatre Dept.; speaking rubric is okay; reading could be used if desired. | Written: college-wide artifact collection from courses across disciplines; oral could be assessed college- wide or within academic program review | Annual assessment for written communication; oral biennially (or every three years) <br> Assessment should take into account the results from the previous year. |


| QCC Outcomes 2007 | General Education Outcomes in Task Force survey | Status of rubric development | Findings |
| :---: | :---: | :---: | :---: |
| 2. Use analytical reasoning to identify issues or problems and evaluate evidence in order to make informed decisions | 2. Use analytical reasoning to identify issues or problems and evaluate evidence in order to make informed decisions | Rubric written 2014 and used June 2014 and June 2015. | One of two highest priority (importance and required for all) in survey and at each forum, for college-wide annual assessment <br> - consider using "critical thinking or reasoning" instead of "analytical" <br> - could this outcome be an umbrella for others such as ethical reasoning or quantitative reasoning |
| RECOMMENDATIONS |  |  |  |
| Outcome revision | Rubric | Assessment scope | Assessment frequency |
| Consider revision to include or focus on critical thinking; to include other types of reasoning | The rubric works well, may need revision if outcome is revised | College-wide artifact collection from courses across disciplines | Annual assessment, taking into account the results from the previous year |
|  |  |  |  |


| $\begin{aligned} & \text { QCC Outcomes } \\ & 2007 \end{aligned}$ | General Education Outcomes in Task Force survey | Status of rubric development | Findings |
| :---: | :---: | :---: | :---: |
| 3. Reason quantitatively and mathematically as required in their fields of interest and in everyday life | 3. Reason quantitatively and mathematically as required in their fields of interest and in everyday life | Rubric written fall 2015 and will be used for spring 2016 assessment. | Third highest priority in survey and fora; most recommended college-wide assessment, annually or biennially; may need further elaboration (quantitative literacy); some discussion about whether to keep "and mathematically" in the rubric. |
| RECOMMENDATIONS |  |  |  |
| Outcome revision | Rubric | Assessment scope | Assessment frequency |
| Consider dropping "and mathematically" so the outcome is not disciplinespecific | The rubric will be tested with spring 2016 assessment | College-wide artifact collection from courses across disciplines (i.e., not just math courses) | Biennial assessment, taking into account the results from previous assessment |
|  |  |  |  |


| QCC Outcomes 2007 | General Education Outcomes in Task Force survey | Status of rubric development | Findings |
| :---: | :---: | :---: | :---: |
| 4. Use information management and technology skills effectively for academic research and lifelong learning | 4. a. Demonstrate information literacy/information management for academic research and life long learning | Rubric written fall 2015 and will be used for spring 2016 assessment; however, the rubric does not include technology | Survey: important but mid-range for requiring for all graduates. The current Information management rubric does not include technology |
|  | 4.b. Demonstrate technological literacy |  | Important on survey; mid-range for required for all students; important in forum, especially in context of using technology to access, organize, evaluate and present information <br> Due to program specific technologies technological skills would be best assessed at program level with rubrics specific to the program |
| RECOMMENDATIONS |  |  |  |
| Outcome revision | Rubric | Assessment scope | Assessment frequency |
| Consider revising outcome to emphasize technological literacy; consider specifying "digital" technology | - The information management rubric will be tested with spring 2016 gen. ed. assessment; <br> - Revise to include technological literacy survey faculty to determine what skills students need, what dimensions make sense for a rubric. | This outcome may be best assessed within academic program review, especially the technological literacy component. | Assess every 2-3 years, taking into account the results from previous assessment |
|  |  |  |  |


| QCC Outcomes 2007 | General Education Outcomes in Task Force survey | Status of rubric development | Findings |
| :---: | :---: | :---: | :---: |
| 5. Integrate knowledge and skills in their program of study | 5. Integrate and apply concepts, methods, knowledge, and skills in addressing significant problems and questions, both civic and global in context | Rubric not written | Important in survey but middle range as requirement for all graduates. Civic engagement and global literacy mentioned in forum. <br> - Integration of knowledge and skills may be better assessed as part of program review <br> - If civic responsibility is included in the revised Mission Statement, it will need to be assessed. |
| RECOMMENDATIONS |  |  |  |
| Outcome revision | Rubric | Assessment scope | Assessment frequency |
| Review outcome for two areas: integration of knowledge and civic responsibility. <br> The integration outcome as stated is most appropriate for academic program review. If the intention of the College is to assess students' Integrative Thinking, the outcome will need to be revised. <br> Civic responsibility needs separate discussion. | Rubric development depends on discussion of the outcome | - Integration of knowledge and skills in the program of study should be assessed within academic program review. <br> - If civic responsibility becomes a separate outcome, it will need separate consideration | As part of academic program review, the existing outcome should be assessed at least biennially, taking into account the results from previous assessment |


| QCC Outcomes 2007 | General Education Outcomes in Task Force survey | Status of rubric development | Findings |
| :---: | :---: | :---: | :---: |
| 6. Differentiate and make informed decisions about issues based on multiple value systems | 6. Reason and act ethically while recognizing multiple value systems | Rubric not written | Top highly important in survey, important but less frequent assessment in forum; this is challenging to assess, but could assess ethical reasoning (not action) as a skill; some proposed including this outcome within analytical reasoning |
| RECOMMENDATIONS |  |  |  |
| Outcome revision | Rubric | Assessment scope | Assessment frequency |
| Proposed revision: $\qquad$ ethically while recognizing multiple value systems | Develop rubric - could use the VALUE rubric for ethical reasoning as a start | May be assessed within academic program review. | As part of academic program review, should be assessed every 2-3 years, taking into account the results from previous assessment |
|  |  |  |  |


| QCC Outcomes 2007 | General Education Outcomes in Task Force survey | Status of rubric development | Findings |
| :---: | :---: | :---: | :---: |
| 7. Work collaboratively in diverse groups directed at accomplishing learning objectives | 7. Work and learn collaboratively | Rubric not written | Survey: mid-range importance and requirement for all; forum and task force: high importance <br> - one of top-rated importance for employers |
| RECOMMENDATIONS |  |  |  |
| Outcome revision | Rubric | Assessment scope | Assessment frequency |
| Proposed revision: Work collaboratively to accomplish learning objectives <br> - Note: the diversity aspect of the original outcome will be addressed in the civic responsibility outcome, if created. | Develop rubric - could use the VALUE rubric for teamwork as a start | May be assessed within academic program review. | As part of academic program review, should be assessed every 2-3 years, taking into account the results from the previous assessment |
|  |  |  |  |

Outcomes 8-10 are considered as a unit

| $\begin{aligned} & \text { QCC Outcomes } \\ & 2007 \end{aligned}$ | General Education Outcomes in Task Force survey | Status of rubric development |  | Findings |
| :---: | :---: | :---: | :---: | :---: |
| 8. Use historical or social sciences perspectives to examine formation of ideas, human behavior, social institutions, or social processes | 8. Demonstrate broad knowledge of the concepts and methodologies central to multiple fields including the humanities and social sciences | Rubric not written | Survey - low importance and requirement; third level importance at forum |  |
| 9. Employ concepts and methods of the natural and physical sciences to make informed judgments | 9. Demonstrate scientific literacy | Rubric not written | Survey - low importance and requirement; third level importance at forum; higher importance in task force, but note this outcome is built into required common core for all degree programs |  |
| 10. Apply aesthetic and intellectual criteria in the evaluation or creation of works in the humanities or the arts | 10. a. Appreciate or engage in creative work <br> 10. b. See above \#8 | Rubric not written | Survey - low importance and requirement; third level importance at forum |  |
| RECOMMENDATIONS |  |  |  |  |
| Outcome revision | Rubric | Assessment scope |  | Assessment frequency |
| Too discipline-specific for general education outcomes assessment and logistically difficult to assess on a collegewide basis. Consider incorporating into academic program outcomes (if not already there). | Rubrics would need to be developed with disciplinespecific dimensions | If consolidated within an umbrella outcome, assessment would need to be done by faculty in each disciplinary area (i.e., history and social sciences, science, humanities, arts) the general disciplines. Best assessed within academic program review. |  | As part of program review, should be assessed at least once every $3-5$ years, taking into account the results from previous year assessment |

## PART B: TASK FORCE ACTION PLAN FOR 2016-17

To complete its charge, the Task Force has outlined the following actions and considerations:

1. Consider revision of outcomes \#2 (analytical reasoning) and \#3 (quantitative reasoning); survey faculty for dimensions appropriate for digital technology literacy, for possible revision of outcome \#4 (information management).
2. Revise rubrics as needed for \#2, \#3, and \#4
3. Develop rubrics for \#6 (ethical reasoning) and \#7 (work collaboratively), allowing for adaptation by program faculty if these outcomes are assessed within academic program review
4. Determine if outcome \#5 should be a general education or program outcome; revise as needed.
5. Propose that discipline-specific outcomes, especially \#8 (social sciences and history), \#9 (science), and \#10 (arts and humanities) be dropped as general education outcomes; they can be better assessed as part of academic program review
6. If new general education outcomes are needed as a result of mission statement revision (such as civic responsibility), write the outcomes and develop a rubric.
7. Establish schedule for assessing the general education outcomes and select courses as appropriate; i.e., general education outcomes with college-wide artifact collection every one, two or three years; for general education outcomes to be assessed within program review, every 3-5 years (or more frequent depending on outcome and
program). Assessment frequency and sample size will be based on prior assessment results. Assessment data should be made available to faculty to inform and strengthen student learning.
8. Conduct faculty outreach for all considered changes/developments and bring changes to vote at Senate.
9. Recommend a structure (i.e. faculty committee or other format) for ongoing oversight of general education assessment

April 8, 2016, revised April 19, 2016

Resolution presented by the Steering Committee for consideration and disposition by the Academic Senate on the approval of the Queensborough Community College Mission Statement

Whereas, it has been over ten years since the implementation of the College's mission plan, and
whereas, periodic assessment of the College's mission and goals is an essential component of institutional development and improvement, and
whereas, the Special Committee For Mission Review has completed its work,
be it resolved, the Queensborough Community College Academic Senate approves the new 2016 Mission Statement as stated below:

Queensborough Community College is dedicated to academic excellence and rigor, and to providing an affordable high quality education to college, pre-college and lifelong learners. Our faculty and staff are committed to the holistic development of today's students in a nurturing and diverse environment that prepares them to be successful in a dynamic workforce. The College affirms its open admissions policy, and its strong support of intellectual inquiry, global awareness, civic responsibility, as well as cultural and artistic appreciation.

Rationale: The official mission statement is an integral and essential component of Queensborough Community College, and it is necessary that it periodically be reviewed and, if necessary, updated.

# Steering Committee of the Academic Senate <br> Special Subcommittee on Food Insecurity 

## Report Update, May 10, 2016

## Members of the Subcommittee:

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Emily S. Tai (History), Vice-Chair, Steering Committee of the Academic Senate
Leah Anderst (English)
Dorith Brodbar (Counselling)
Joanne Chang (Music)
Sharon Ellerton (Biological and Geological Sciences)
Olga Filkouris (NYPIRG Coordinator)
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Amawati Gonesh (Program Director, Single Stop)
Susan Jacobowitz (English)
Adam Luedtke (English; on behalf of the Committee on Student Activities)

Amos Z. Orlofsky (Biological and Geological Sciences)
Ricky Panayoty (President of the Student Association, Queensborough Community College, CUNY)

Amy Traver (Social Sciences)
Father Anthony Rosado (Newman Center)

## Newman Center "Soup and Study"

As of this writing, the Newman Center's availability as a food distribution point for nutritious food "on the go," has been promoted across campus with flyers, electronic signage, and a successful "Soup and Study" event, which was held on Wednesday, February 24, 2016, to promote the service, during Club Hours. A second such event is scheduled for Wednesday, May 11, and will also be co-sponsored by the Lambda Sigma Chapter of Phi Theta Kappa, the Chemistry Club, NYPIRG, and other student organizations, including Queensborough's Student

Association. Father Anthony Rosado reports that the food distribution service is being utilized daily.

## Lucille A. Bova Food Pantry

As of April, 2016, President Call has very generously allocated a dedicated space for Food Distribution. A brief "ribbon cutting" ceremony is planned for Tuesday, May 10, 2016, immediately after the final 2015-2016 meeting of the Academic Senate. The members of the Subcommittee on Food Insecurity have proposed to dedicate this Food Pantry space, located on the Fourth Floor of the Library Building, to President Call's late mother, Lucille A. Bova; a proposal to this effect has been submitted for the consideration of the Committee on Environment, Quality of Life, and Disability Matters. The Food Pantry will offer non-perishable foods, and be available during hours that will, for the most part, complement Newman Center hours.

As of this writing, a pilot opening for the Food Pantry will be in effect for the period of May 11May 25, 20016 Students and Staff interested in items from the Food Pantry should contact faculty in their department offices during the hours posted below. Each Faculty member will have a key to the Pantry:

## Monday, May 16 and May 23

Dr. Sharon Ellerton, 9 AM-9.50 (Medical Arts Room 422)
Dr. Emily Tai, 4-8 PM (Medical Arts 411)

## Tuesday, May 17

Dr. Susan Jacobowitz, 2-4 PM (Department of English)

## Wednesday, May 11, May 18, and May 25:

Dr. Sharon Ellerton, 9 AM-9.50 (Medical Arts Room 422)
Dr. Emily Tai 4-5.30 PM and 9-10.30 P.M. (Medical Arts 411)

## Thursday, May 12; May 19

Dr. Amy Traver: 9-11 AM (Medical Arts Room 400)
Friday, May 13 and May 20
Dr. Amy Traver, Noon-1 PM (Medical Arts 400)
Dr. Susan Jacobowitz, 2. 15-4. 15 PM (Department of English)
For other times, by appointment, please call 718-281-5792.

Faculty and Staff are very cordially invited to take notice of these hours. We also invite anyone who may be interested to consider donating to our food drive on behalf of the Lucille A. Bova Food Pantry, which is underway as of this writing. (A Flyer is attached to this report.)

Once again, the chair of this subcommittee would like to thank all the members of the Committee, who have given generously of their time and energy to move forward with our committee's charge. We also wish to thank Father Anthony Rosado and the members of his parish in College Point, who have been kind enough to donate freshly-cooked food for the Newman Center, and, finally, to express our deepest thanks to President Diane B. Call, whose strong support has critically facilitated our progress.

Respectfully submitted,
Emily S. Tai
Associate Professor of History
Chair, Subcommittee on Food Insecurity at Queensborough
Vice-Chair, Steering Committee of the Academic Senate

## Resolution presented by the Steering Committee for consideration and disposition by the Academic Senate on the approval of the QCC 2016-2020 Technology Plan

Whereas, the 2016-2020 Technology Plan was developed to frame the College vision of technology and its relationship to our mission and strategic plan, and
whereas, the plan reflects on technology advances since the 2011 Technology Plan, and includes a future view of the applications and challenges of technology, including the issues the college faces to sustain, grow and adapt the use of technology in and out of the classroom, and
whereas, this plan is intended to be dynamic and therefore to evolve as technological advancements occur, and
whereas, the Technology Plan Committee, through a consultative process that involved administrators, faculty, staff, students, and representatives from our campus governance bodies, has completed its work,
be it resolved, the Queensborough Community College Academic Senate receives and approves the 2016-2020 Technology Plan.

Rationale: The Technology Plan serves as a resource for the College, to inform the strategic plan and the annual resource planning and allocation process.


Dr. Diane B. Call President

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## Introduction

The 2016-2020 Technology Plan was developed to frame the College vision of technology and its relationship to our mission and strategic plan. Developed in this context, the plan reflects on technology advances since the 2011 Technology Plan, and includes a future view of the applications and challenges of technology, including the issues the college faces to sustain, grow and adapt the use of technology in and out of the classroom.

This Plan is intended to be dynamic and therefore to evolve as technological advancements occur. Technologies will continue to emerge during the next five years, and therefore this Plan must be reviewed annually both for progress and possible updates.

The Plan represents a vision for the next five years, but does not set forth what should be done in each year of those years. The Technology Plan serves as a resource for the College, to inform the strategic plan and the annual resource planning and allocation process.

Appointed by the President, Dr. Diane Call, The Technology Plan Committee members represent a variety of campus constituencies, includes:

Dr. Paul Marchese, Provost and Vice President for Academic Affairs<br>Mr. William V. Faulkner, Vice President for Finance and Administration<br>Mr. Michel Hodge, Vice President for Student Affairs<br>Dr. Sasan Karimi, Chemistry Department Chair<br>Professor Anthony Kolios, Faculty Executive Committee Representative<br>Professor Lucian Makalanda, Co-Chair Computer Resource Committee Representative<br>Dr. Jed Sharar, Co-Chair of the Academic Senate Committee on Computer Resources<br>Mr. Stephen Di Dio, Executive Director of Communications \& Marketing<br>Mr. Bruce Naples, Executive Director of Academic Computing and eLearning<br>Mr. George Sherman, Executive Director of Information Technology<br>Mr. Ricky Panayoty, President SGA<br>Ms. Jodi-Ann Grant, Executive Vice President SGA<br>Ms. Shriromani Sukhwa, Administrative Vice President SGA<br>Ms. Maryam Hira, Programming Vice President SGA<br>Mr. Isaac Ayisi, Treasurer SGA<br>Ms. Tulasha Thapa, Vice President for Evening Students SGA<br>Ms. Moohanie Balkaran, Vice President for Part-Time Students SGA<br>Mr. Asif Mobin, President Pro-Tempore SGA<br>Ms. Sophie (Stephanie) Guity, Secretary SGA<br>Ms. Shashi Ahmed, Parliamentarian SGA

This document was crafted and refined over the last year through a consultative process that involved faculty, staff, students, and representatives from our campus governance bodies. The committee membership was drawn to be inclusive and reflective of those involved with both infrastructure and applications of technology. Through broadcast emails to the campus community and to students, the draft Technology Plan document was available for review through an email to all faculty, students and staff. Finally, an open forum publicized through email to the College community was held to review the Plan, discuss its themes, and elicit comments from faculty and staff in attendance. Comments expressed to the Technology Plan Committee were considered in the last edit of the Technology Plan. The Academic Senate of Queensborough Community College received the final document in May 2016.

## Executive Summary

The 2016-2020 Technology Plan that follows describes in the words of our various departments what has been accomplished over the past years and what lies ahead for the College for the use and deployment of technology. The Plan recognizes the need to build on our past investment and successes, while also focusing on the completion of ongoing initiatives. More importantly, it provides the framework to shepherd us through the next five years as the College, through its strategic plan and annual resource allocation process, continues to implement the important goals and objectives herein identified. The Plan has four themes related to technology investment-expanding technology in instructional spaces; strengthening students' commitment through the use of innovative technology supporting our Academy model and high impact practices; developing faculty through training on instructional technology including opportunities to develop online curriculum; and, finally, maintaining a focus on improved infrastructure in the college facilities to support this Plan and all activities arising from it. The key objectives of the 2016-2020 are summarized below:

Instructional /Classroom technology - As of the preparation of this Plan in Spring 2016, 77\% of 103 classrooms have podia technology with an additional five classrooms currently being outfitted, effectively raising the total penetration to $82 \%$ for this academic year. The College goal is to install presentation hardware and software in an additional 10 rooms this summer \& fall 2016 to achieve a penetration rate of $91 \%$ and to complete the remaining classrooms by the summer of 2017.
Faculty, Staff, Student Development \& Services -

- The ACC will develop a one button studio for faculty and student use to support flipped classroom and other teaching pedagogies.
- The College will support faculty classroom and learning pedagogy and technology through workshops offerings, online support and E learning institutes.
- The College will explore opportunities to create additional common use smart rooms for ad hoc training for faculty students and staff.
- The College will develop capacity for production of operational videos to support departments, student and employee learning.
- In conjunction with CUNY, the ACC will continue to enhance the Blackboard environment for both students and faculty, including appropriate training opportunities.
- The College will continue to develop and promote a QCC webpage that will make the campus community more aware of existing educational technology resources, host Queensborough-developed educational applications and other downloadable digital content.


## Academy \& Student Support

- Expanded use of Starfish (the student learning-center / advisement referral \& tracking system)
- Technological support for the proliferation and continued success of High Impact Practices (HIPs)
- Continued expansion and development of communication and advisement technology tools to enable student persistence and success, such as Hobsons' Retain CRM (customer relationship management system for enrolled student).


## Assessment of Student Learning

- Implement software to facilitate assessment of student learning outcomes and generate reports for faculty use and for reporting achievement of the College's goals.


## Marketing \& Communications -

- Continue development of new website design to be fully responsive and mobile friendly.
- The College will continue to develop the mobile device application to support student success and departmental initiatives by expanding QCC Connect functions and audience.
- The College will explore opportunities and means to effectively market and communicate student co-curricular activities.
- Enhance use of social media to communicate with students and other constituents.


## Technology Infrastructure -

- The College will continue to explore the use of virtual desktop infrastructure (VDI) at QCC and will develop a task force to study benefits and challenges of VDI at QCC, including recommendations,, potentially in conjunction with CUNY Central's cloud VDI plan.
- Queensborough plans on maintaining the latest version of wireless technology available across the campus.
- Select \& implementation of new Voice over Internet Protocol (VoIP) phone system utilizing the college infrastructure.


## Recommendations for the management of the College's Technology Plan going forward:

1. Establish executive committee from Administration, ACC and IT to review the Plan annually and report progress annually and ensure appropriate coordination and integration with strategic planning process.
2. Conduct an annual survey of faculty, students and staff to inform each year's Technology Plan review and the allocation of resources. Develop distinct surveys for faculty, students and staff.
3. Update the Plan on an ongoing basis to account for survey results, changes in technology, availability of financial resources and changes to strategic plan.
4. Develop \& implement a QCC policy and process for data governance to ensure consistency and maximize use of available data and analytics.

## I. Background-History and Recent Technological Advances

## $\nabla$ 2011-2015 Technology Plan

The 2011-2015 Technology Plan has continued to be a valuable tool for guiding technology's growth at Queensborough and ensuring that scarce resources are allocated in the most efficient manner. The Plan called for action plans from departments college-wide and focused on continued improvements in the availability of instructional technology, training and development of faculty staff and students, resources to support key student services areas, marketing and to ensure robust growth capacity, the ongoing improvement of the College's infrastructure, including wireless networking. Many of the goals established in the Plan were supported by the Student Technology Fee, and various grants and were made possible by the dedication, teamwork and coordinated efforts of the Queensborough Community College Information Technology Department and the Academic Computing Center.

## II. Vision of the College as it Relates to Technology

## $\nabla \quad$ The Mission Statement and Technology

The College's Mission Statement offers a commitment to both academic excellence and rigor and to providing great opportunity for student success in an open admissions environment. The Mission statement recognizes that the College must provide bridges across this potential gap. The main attempts to do this are through: a close linking of academic and student support services; through a strong focus on community college pedagogy; and through our Academies. Technology comes into play in both areas. Student support services need to be tied closely to academic work, and technology can facilitate this. Primary examples would include continued deployment and upgrade of developmental labs and new initiatives called for by the Academic Departments based on their evolving needs.

## $\nabla$ Strategic Plan

The 2015-2016 Strategic Plan stated that the College plans implement the Technology Plan we develop this year. Included in the 2011-2015 Strategic Plan continues the goals of increasing the comfort and frequency of student computer technology use and student satisfaction with their access to computer technology. Technology continues to play a key role in our strategic planning as the College moves forward with our strategy of an Academy structure supported by advisement, high impact practices and technology support. Throughout this Plan, components of that strategy will be evident to the reader.

## Assessment of 2011-2015 Technology Plan Objectives

 Fully Implemented- The "Center for Excellence in Teaching and Learning (CETL) and the Academic Computing Center (ACC), under the direction of the Interim Vice President for Academic Affairs, will support faculty and
instructional staff development in pedagogy, using educational technology, while continuing to study its effectiveness." The need to continue and deepen that process will require certain types of technological and training decisions. During the last five years CETL developed and assessed several High Impact Practices (HIPs) designed to deepen and enhance student learning. Also from 2011-2015, the ACC developed and taught numerous faculty development workshops, introducing new and emerging pedagogies and technologies for teaching and learning. In addition, the ACC provided individual instruction and support for both students and faculty across all college disciplines, including support for HIPs, GenEd and HIP assessment.
- The Art Gallery website was redesigned and a web page will be created to present scholarship information and facilitate scholarship application.
- The campus will make timely progress on CUNYfirst implementation and rolled out all CUNY required modules successfully.
- Web-site meta tags were optimized to increase the ranking of Queensborough' academic programs in search engines.


## Looking Forward

The College's Strategic Plan for 2016 speaks to technology in several ways. "Broad long-term goal for the institution: use technology to support instruction and student support services and to promote institution and constituencies; Specific strategic objective for 2015-16: Continue planned expansion \& upgrade of instructional technology infrastructure, incl. minimum of 10 classrooms with advanced technology podia, fixed or mobile; Specific strategic objective for 2015-16: Continue planned expansion \& upgrade of instructional technology infrastructure, incl. minimum of 10 classrooms with advanced technology podia, fixed or mobile; Supporting institutional activities: Provide faculty development focusing on hybrid \& web-enhanced modalities \& expand infrastructure: 1) conduct eLearning Institute (cohort IX), 2) offer additional follow-up face-to-face eLearning workshops, and 3) develop \& host additional online (Blackboard Collaborate) faculty development workshops."

- The Center for Excellence in Teaching and Learning (CETL) and the Academic Computing Center (ACC), under the direction of the Provost, will support faculty and instructional staff development in pedagogy, using educational technology, while continuing to study its effectiveness. The need to continue and deepen that process will require various types of technological and training decisions.
- To keep abreast of emerging technologies, pilot projects will be conducted. Those pedagogies and technologies determined to be of value to teaching and learning will be implemented and supported. For example, on the immediate horizon are Experiential Learning, the Flipped Classroom, DigicationePortfolios, and Digital Badges.
- Technology will be used to bolster campus-wide, program and course assessment processes. In a current pilot project the Digication platform is being programmed to support campus-wide GenEd Assessment. If the pilot is successful, the use of the Digication Assessment tool will be expanded over the course of this Technology Plan.
- Expanded use of Starfish (the student learning-center / advisement referral \& tracking system)
- Implementation of the Technology Plan with goal to expand technology to all available instructional spaces.
- Reach goal of over 6\% FTEs attending online classes by 2018.
- Increase measured quality of online \& web-enhanced courses based on Quality Matters rubric
- Increase no. of online faculty development offerings focused on academic department disciplines
- Promote use of Digital Recording Studio
- Expand \& support faculty use of CUNY's Academic Works \& other open educational resources


## $\nabla \quad$ Technology - A Definition

Technology means different things to different departments and curricula. For example, Nursing, Chemistry, Physics, Electrical Technology, Mechanical Technology, and Biology might envision technology differently from the general population of the College. Technology can be defined as the tools and machines that help to solve problems. For the purpose of this Plan, we define technology to include all electronic devices and software that are used to teach our students and to run our administrative operations. This includes, but is not limited to, computing, measuring, and mechanized devices.

## $\nabla \quad$ Funding

Availability of funding is an essential component of any plan. Funding for the initiatives and projects of this Technology Plan is expected to come from various sources, including the Student Tech Fee, CUNY special project funding, City, State, Federal and institutional grants, and the College operating budget. While this Technology Plan establishes many goals and objectives, it is understood that successful outcomes are contingent upon the availability of appropriate funding and staffing levels.

## III. Incorporation of Technology

## $\nabla$ Students

## Where We Are Now

The workplace of today continues to demand employees who are fully conversant with the acquisition and presentation of information using technology. Not surprisingly, these advances have become widespread at Queensborough over the past few years. As such, it has become increasingly necessary for students to become adept at using the increased technological resources at the College.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- We will develop a comprehensive technology support system that includes: eTeam $\rightarrow$ Faculty Mentors $\rightarrow$ Students Mentors $\rightarrow$ Workshops $\rightarrow$ One-On-One Sessions $\rightarrow$ Online Support (Asynchronous \& Synchronous)
- There will be an implementation to CUNY's selected Synchronous technology. Blackboard Collaborate was implemented, and faculty attended numerous workshops, both face-to-face and online.
- CUNYfirst will become the familiar standard for running the College. CUNYfirst has become the campus’ major CRM system where students enroll in their courses, where faculty enter student grades, and where college-wide procurement takes place.


## Partly Implemented

- All Staff members will be brought up-to-date as to office software usage- this can be done partly online in Blackboard and partly face-to-face in workshops. To implement this change successfully, retraining / updating of skills will become a valued/regular part of every department's plan. Opportunities to participate in skills development workshops were provided. Many staff members attended, but not all.
- Every teacher will be using some form of technology while teaching - Online like Blackboard \& ePortfolio, Classroom Podiums, or Mobile technology. Blackboard is fully available to all students and instructors in all class sections. A little less than $50 \%$ of QCC instructors are actively using Blackboard. The company that provided our ePortfolio platform went out of business, and the introduction and use of our new system has been slow to develop. Great strides were made in providing classroom podiums, but more work needs to be done. There has been no concerted effort to increase the use of mobile technology for teaching and learning; the College did develop a smart-phone app that provides users with the ability to track schedules and retrieve CF data, events and other information.
- Every teacher will have an updated computer on his/her desk with a cadre of software needed to enhance teaching. Some instructor computers have recently been updated. A full complement of software used for teaching and research has been provided whenever requested.
- There will be a major effort to increase student engagement via Online Interaction and In-class response systems (clickers). Cabinets containing clickers have been installed in 35 podium rooms around the campus. In addition, the ACC loans mobile clicker suitcases to faculty who request them.


## Not Implemented

- There will be a major focus on bolstering the web-enhanced modality. The focus remained on the Blended / Hybrid modality during which seven cohorts of faculty ( 98 members) completed the eLearning Initiative.
- The College will provide a space for faculty to test and share the use of new technologies. Due to space and funding limitations this was not implemented.


## Looking Forward

Over the course of this Technology Plan (2016-2020) the College seeks to make major advances/enhancements to our technology culture. Objectives include:

- Widespread use of technology for current and emerging forms of teaching and learning
- Use of multimedia to address the different learning styles of our current and incoming students
- Technological support for the proliferation and continued success of High Impact Practices (HIPs)
- Expanded use of Starfish (the student learning-center / advisement referral \& tracking system)
- Focusing on online teaching pedagogies that serve our students best, including the Hybrid / Blended and web-enhanced modalities


## $\nabla$ Student Technology Fee Intern Program

## Where We Are Now

One very valuable component of the Tech Fee Plan at Queensborough is the provisioning for and the utilization of Tech Fee Student Interns. Since its inception in 2002, more than a thousand students have worked as paid interns in this program, and we anticipate the employment of approximately 100 in each year to come. They have been employed in a wide range of academic and administrative departments. Students earn money while attending Queensborough, gain valuable skills and resume enhancing work experience while they provide useful services to the campus.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- Continued training of new cohorts of Tech Fee Interns in the use of various educational technologies such as ePortfolios, Blackboard, Camtasia, \& SoftChalk
- Continued employment of Tech Fee Interns re-sizing the program according to budgetary constraints
- Continued deployment of Tech Fee Interns to perform myriad tasks across many departments - this will include their providing support during both student and faculty workshops, especially in the eLearning and ePortfolio programs
- Continued staffing of a technology center where students and faculty may drop in for technical help with the use of ePortfolios, Blackboard, Camtasia, SoftChalk and other educational technologies


## Looking Forward

- Student development will continue to be a priority for the College. Over the next five years our major objectives include:
- Continued training of new cohorts of Tech Fee Interns in the use of various educational technologies such as Digication-ePortfolios, Blackboard, Camtasia, \& SoftChalk
- Continued employment of Tech Fee Interns re-sizing the program according to needs and budgetary constraints
- Continued deployment of Tech Fee Interns to perform myriad tasks across many departments - this will include their providing support during both student and faculty workshops, especially in the eLearning and ePortfolio programs
- Continued staffing of a technology center where students and faculty may drop in for technical help with the use of Digication-ePortfolios, Blackboard, Camtasia, SoftChalk and other educational technologies
- Developing an online help system to handle technology relate issues. Staffing will include Tech Fee Interns trained in related technologies, and supervised by Academic Computing Center staff


## $\nabla \quad$ Library

## Where We Are Now

The importance of technology for the Library continues to grow exponentially. The Library continues to assess its efforts to maintain and upgrade hardware, software, wireless technologies, and emerging information technologies. Changing technologies have presented new opportunities and have made previous needs (such as an inventory of the collection) less important.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

## Collections

- About one third of the Library book collection and about $99 \%$ of the periodical collection is available online. The Emerging Technologies Librarian will establish off-campus reference and instruction services so the Library can share these resources with members of the Queensborough community who are not on campus. Assessment: All librarians promote use of library resources off-campus. All full time and most adjuncts participate in chat reference where they assist off-campus users in finding and using the library's online resources.


## Equipment

- Library faculty members will incorporate more interactive media into their information literacy classes. A multimedia podium with projector and screen is being installed in the Library classroom. Assessment: The multimedia podium has been extremely successful. We use media in our information literacy classes and we are able to take advantage of professional development opportunities, such as webinars offered by various professional groups.
- The Library plans to expand the popular circulating laptop program. Assessment: We had been unable to add more laptops because we lacked the space for the large storage/charging unit. With our recently completed new front desk we will have the space. The laptops and storage unit will be ordered.
- Photocopiers and printers
- The Council of Chief Librarians is exploring the feasibility of a university-wide contract for photocopying.
- The Library has recently purchased a book scanner, so rather than photocopying, students can scan books, articles and other documents. The documents can be saved on a flash drive or emailed. In addition to being "greener," this approach eliminates the staff labor involved in adding paper and un-jamming photocopiers. The Library will assess the use of this scanner.
- Additional printing resources will be provided in the Library, and the feasibility of limiting printing will be explored. Assessment: The College purchased the Pharos system. The Ricoh machines are more reliable than others that we have had. In general, our printing and copying services are very much improved with Pharos. A few problems have been noted and the Library chose not to use the scanning capability of the Ricoh machines. Although these machines could be used for copying, printing and scanning, our experience with dealing with large numbers of students convinced us that each machine should be dedicated to one purpose, copying or printing. We decided to keep standalone scanners so that we could control the amount of time a student could use the scanners and, therefore, insure greater copyright compliance. Other CUNY libraries have been satisfied to place signs over the scanners informing users of copyright restrictions, but they do nothing to enforce copyright. We replaced the original scanners with less expensive and more reliable scanners purchased from Brooklyn College.
- Renovations to the reserve desk are needed in order to expand the circulating laptop program. Assessment: The new reserve desk is in place. The Tech Fee committee has approved the new laptops and case. We expect them to be purchased this summer.


## Partly Implemented

- Under the leadership of the Emerging Technologies Librarian, Library faculty members will gain better skills to serve as embedded librarians for hybrid and fully online classes. An embedded librarian can assist the instructor, if needed, in identifying suitable online material for the course. Then the embedded librarian can offer online reference and instruction to students who are less likely to come into the library building. Assessment: We have had Embedded Librarians in online classes and we need to continue to improve our services. Enhancements to Blackboard will be valuable
- It is necessary that the Library be able to have a user-friendly homepage. Unlike other departmental homepages, which describe the work of the department, the library's homepage is the location where students and faculty are guided to use library materials. The Library will create subject pages by using a product called LibGuides. The homepage will link to the LibGuides created by our librarians. The result will be pages containing links to the library catalog, eBooks, databases and reliable websites for specific subjects. Assessment: we are using LibGuides and an additional faculty position, Web Services Librarian, was created and the position was filled during 2016. In addition, the position of Emerging Technologies was filled.


## Not Implemented

- The Library is presently using two iPads to allow librarians to walk around the library and provide a "roving reference" resource for students. If this initiative proves productive, the Library may request more iPads. Assessment: the Library's request for iPads (both for faculty and for students) was turned down in the budget process.
- The Library is testing Kindle eBook readers, and will assess the results of this test. Assessment: it appeared that loaning Kindles (which can hold many eBooks) would not be effective. The person who borrowed the device for one book would also have other eBooks, but those eBooks would not be available to other patrons unless we had purchased multiple copies.
- The Library would like to offer students a "presentation practice" room for students' collaborative projects. Students need a space with a computer with a large monitor or smartboard, a flip chart, microphones, and a camera to prepare and practice presentations. Assessment: the library has not secured a space for this muchneeded project.
- Efforts will continue to secure an additional, larger classroom. Assessment: the library has not secured a space for this much-needed project.
- The Library will explore the development of a "service center." The Service Center would house four photocopiers and a computer and printer dedicated to "quick print" jobs. Tech Fee students and/or College Assistants could staff the Service Center. A location for the Service Center is yet to be determined. Assessment: the library has not secured a space for this much-needed project.


## Looking Forward

In the library we realize that in five years we will be using technologies that do not yet exist. Five years ago we did not think about mobile printing, cloud computing mobile library apps, discovery services, or institutional repositories. Therefore, our first technology goal is to have the faculty in the department who will keep up with new technologies and be the driving force for implementation. Other goals include:

- Technology for students: We need to be responsive to the way our students use technology.
- Presentation practice room: Our students prepare multimedia presentations; they use a variety of mobile devices and they think all knowledge is accessible via Google. We need to continue to seek for space to create a presentation practice room and we need to use whatever is necessary to show them that everything is not accessible via Google.
- Laptops: Students need laptops and the availability for additional loaner machines is a constant demand.
- Wi-Fi: We were very fortunate last year when the College installed new Wi-Fi access points. As new technology develops we are likely to need more capacity to support student use of many devices.
- Technology for Instruction
- Space: The need for smart rooms has increased and the library needs regular and ongoing access to classroom space. The library offers about $30 \%$ more classes than five years ago, even though enrollment has not grown at a similar pace. We frequently have to seek space from other departments to meet the demand for course-related library instruction. Last semester we used L313 over 30 times and we borrowed smart rooms from ACC and other departments. In addition to our instruction program, we are using our smart room for faculty sessions covering a variety of topics, including academic publishing and open educational resources. We also notice a rise in training for our own library faculty. We have had workshops on new databases, Dropbox, the librarian's role in Blackboard, and a variety of other topics. Professional organizations and vendors often make valuable training available via webinars, a very cost-effective way to keep our faculty members aware of new trends.
- Tablet devices for instruction: The library needs tablet devices for instruction. First, we sometimes have large classes. When we do not have enough computers in L302 and L24 is not available, tablets would be helpful so that all of the students could participate in our classes. We also occasionally would like to offer workshops to teach students and faculty about the mobile versions of library software
- Guide on the Side: We recognize that some library software is not intuitive. In order to encourage students to use library resources several libraries have started to use Guide on the Side, a product developed at the University of Arizona. As the name indicates, Guide on the Side is software that enables faculty members to create simple instructions or tutorials that appear on the side of the computer screen to guide students through the use of library resources. The license for Guide on the Side has been made available by CUNY and the product may turn out to be useful for other
projects. We intend to have our new Emerging Technologies Librarian take the lead in promoting this service.
- Online instruction: Recognizing that faculty members sometimes feel stressed about trying to fit a substantial amount of content into their class hours, we need to develop more online library instructional modules. We have started, but we need to develop more online instruction for the topics that we may not be able to cover in a single library class
- Digital Preservation: We will create a digital preservation plan with sufficient funding to begin scanning unique resources e.g. archives. We need to seek grants funding or some other source of funding for digital preservation. We will be using Academic Works (the CUNY Digital Repository) to save and share a variety of content, including information from college programs, OERs created at QCC and faculty scholarly and creative work. We will start with work that already exists in digital form, but we will encounter work that needs to be digitized.
- Using technology to market library resources and promote appropriate use of the library:
- Social Media: Our students use social media and we need to develop ways to use these venues to communicate with our students. Some of our local professional organizations are offering workshops where our librarians can learn more about using social media to communicate with students.
- Patronchkr: We need to use technology to assist with library issues and to inform users about library resources and events. The library is frequently noisy and crowded and we are not convinced that all of the people using the library are CUNY students or other authorized users. We propose to have a "greeter" desk where ID cards could be checked by Patronckr (a CUNY app where active IDs can be identified by a scan or typing in the library barcode)
- Digital Signage: We need to make better use of the digital signage in the library. When we first got the digital signage we were informed that we could use only one quadrant on each sign. We should have access to more of the space on the digital signage in the library and we need to learn more about using digital signage for marketing our resources.


## - Personnel

We are in the process of hiring two faculty members with skills in library technology

- Emerging Technologies Librarian: this faculty member will take a leadership role in promoting new technologies in the library and in the library's relationship with other faculty members.
- Web Services Librarian: this faculty member will be responsible for creating a web page that serves as the entrance to the library for those who use our resources from outside the library building. This faculty member will need web programming and web analytics skills so that we can maintain and asses a website that works for faculty and students.
- Staff: The Library continues to have the goal of providing technical support services during all hours of Library operation


## $\nabla$ Campus Writing Center (CWC)

## Where We Are Now

The Campus Writing Center is committed to the vision that the innovative use of technology is integral to excellence in community college pedagogy and student service delivery. Educational technology is seamlessly woven into every aspect of the CWC experience for students, tutors, e-tutors, staff and faculty alike.

[^3]- The CC swipe database presented to OAA and learning Centers its facility for portability. It can be installed and utilized by other programs to integrate a swipe auto-population of data, schedule appointments and create reports, using an Oracle environment. The program easily fits on an 8 GB flash for installation.
- CWC website underwent a "facelift" so that content now aligns with the design of the college's template for front end users.
- An audit of the Writing Center's asynchronous online e-tutoring system - iPASS - for content and functionality was conducted, targeting the business rules of back-end functions and navigation, as well as updating the content of Resource Links, and e-Tutor Certification and Training, for relevance and ease-ofuse by students and e-tutors.
- iPASS e-Tutor certification modules have been updated for content relevance and streamlining completion.
- iPASS has been adopted for use by entire departments such as Nursing, and by certain P.net and F.net courses to avail academic support services to students whose course content delivery is partially or fully online.
- The use of laptops is fully integrated into one-to-one tutoring sessions, as well as all In-Center Visits, where Instructors bring an entire section of students to the Writing Center to work collectively/collaboratively on a writing assignment.
- The use of laptops is fully integrated into select EN101 Workshops, i.e., Constructing Research Papers, to facilitate information literacy with students.


## Partly Implemented

- Building augmentative learning materials for CATW prep workshops, and general Writing Center support online has begun, with refurbished links to web-based resources vetted and posted. Eventually, an online prep experience which mirrors the hard-copy CATW prep materials - integrating audio and video - will be considered.
- Scripting, video-taping, and editing - using Camtasia and other campus-based software programs - a series of video vignettes for students, CWC staff, and faculty has begun, with 3 vignettes completed and uploaded to the CWC webpage. These vignettes will enhance training for CWC staff, help facilitate the processes of making/scheduling/checking appointments for students, and disseminating information to faculty, such as what an In-Center Visit is, and how it works to benefit students.


## Not Implemented

- Exploring the use and relevance of handheld technologies, i.e., iPad and/or other computer tablets and smartphones as educational tools and change agents for student learning. This is something that was deemed better saved for the following cycle. It is in its infant stages now.
- The use of wiki technologies more often and effectively was not begun, and is unlikely to get much attention from the Writing Center at this point.
- We are in the process of updating content and upgrading the technical infrastructure of iPASS. It was never able to be unleashed upon the full enrollment scope of student volume which, load tested, it is capable of managing, simply because there has always been insufficient budget and staff loading to support 2,500 etutoring submissions a week and having them responded to within 48 hours.
- Exploring the use and relevance of handheld technologies, i.e., tablets and smartphones as educational tools and change agents for student learning. This is something that was deemed better saved for the following cycle. It is in its infant stages now.


## Looking Forward

## Technology Goals

- Improving the content and scope of iPASS e-tutoring. Thus far, the use of iPASS is restricted by the campus' allocation from its operating budget from being able to realize its fuller potential to handle up to 2,500 e-tutoring submissions a week, and having sufficient capacity to allow each of 15,000 students a reasonable amount of personal storage for text, pictures and video. The cost of maintaining a permanent cadre of e-tutors is not currently sustainable, and so advertisement of the system and its resources has been kept to a minimum, to reflect what the current budget can sustain. Unrestricted, iPASS could be transformed back to its more systemic origins as a 5-pronger e-learning System, with e-tutors trained to respond to specific student learning styles and preferences, and even being able to deliver intelligent tutoring and distributed learning beyond the confines of the campus. This would require support from external funding; but more importantly, a commitment from the college to institutionalize the sustainability of the system once a grant funding has been completed.
- Exploiting the use and relevance of handheld technologies in educational and learning center pedagogy, i.e., computer tablets and smartphones as educational tools for student learning.
- Writing Center would like to explore means for to providing synchronous tutoring to large groups of students, off-site, from on-site at the Writing Center, combining the use of real time chat and video, a whiteboard, a dropbox or other text receptacle, and a means to archive a session. If it works with tablet, the ideal evolution would be to migrate to having it work with student mobile devices.
- The Writing Center is also experimenting with developing a CWC Facebook page, with a Twitter feed, to announce upcoming events, take comments and suggestions, and develop means to "push" messages to students. This too has potential for migration to students' hand-held devices.


#### Abstract

Student Learning Center (SLC) Where We Are Now Offering a variety of research and educational resources, including technology, as well as support services, the Student Learning Center (SLC) is a tutoring center that facilitates collaboration and exchange of information and functions to support current and life-long learning for all members of our diverse community. The SLC provides academic tutoring and support services to Queensborough students completing credit-bearing courses. Tutors attend orientation sessions at the beginning of each semester and are required to complete a minimum of 10 hours of in-service training throughout the academic year. The faculty members serving in a role of an academic facilitator also serve as liaisons between the center and academic departments. In addition to facilitating communication among college parties, the Academic Facilitators offer content-specific training to tutors and complete evaluations regarding tutor knowledge and facilitation of learning. Committed to the College's Mission, the SLC consistently aims to tie its services to academic work through ease of access and integrity.


## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- SLC Webpage- new tutors will be able to complete some level of training and complete initial assessment of knowledge online. The Learning staff developed, designed and delivered an online tutor training course, SLC 001 ( 0 credits) in Fall 2012. New tutors are required to complete this course along with the in-service training hours at the center. The course is available on the CUNY/QCC BlackBoard website.
- SLC Online Tutoring - further research regarding online support options including utilization of established and credible online support programs, "in-house" programs, Blackboard and Eportfolio. The tutors help students with courses that comprise Blackboard, E-portfolio and/or other online components, such as the use of Wiley Publishing for accounting and foreign language courses. In addition, the Student Learning Center maintains its own website at the college and provides information regarding the courses/disciplines tutored, additional services, schedules, and contact information. The center has also been in discussion with and attended an interactive online demonstration of Net Tutor, an online tutoring program that also provides software targeted for students with reading challenges. Although the goal is "Fully Implemented," it is ongoing and continuous as the center tries to stay up-to- date and knowledgeable regarding various modes of support that could be beneficial to students.
- Work with faculty offering online courses in order to establish and incorporate an agreed-upon and appropriate "entry route" and communication forum to students completing online courses. One Business faculty member offered an online Accounting course and worked with the Student Learning Center to develop and incorporate online tutoring into the course. The center guaranteed and successfully fulfilled that agreement to respond to questions, concerns, etc. within 24 hours of online requests. The experience offered an opportunity to consider and resolve some issues that can crop up regarding support of online learning. The center has not received any inquiries regarding online support since that initial time.
Partly Implemented
- SLC Webpage - additional resources for tutors regarding facilitation of learning and content-specific areas will be available. Additional resources are available at the SLC 001 website but are not yet available on the Student Learning Center website.
- SLC Student and Tutor Tracking System: Development and utilization of a swipe card system to sign in student. Any swipe device used with the Starfish swipe system requires that an employee must first sign on to the Starfish swipe system before the swipe device will work. Once that occurs, that same person is
automatically assigned or "anchored" to all subsequent students who check in at that station. This means that a tutor log cannot be created or entered for the appropriate tutor and student because the student was "assigned" to the front desk person. After researching and testing several times, we have determined that the current setup is not functional for our operations.
- Further research regarding the possibility of leveraging the appoint-scheduling system currently used by the Advisement and Financial Aid offices so the system might be tailored for SLC usage. The 2011-2015 Technology Plan was created in 2011. In 2013, the college purchased the Starfish Early Alert System including the company's tutor tracking system for use by the learning centers. Therefore, the above plan was no longer relevant. The appointment-scheduling portion of the system was and is not functional for the Student Learning Center's operations so the center continues to process appointments on a manual basis. The center has continued to research and explore other possible options regarding online appointments.


## Not Implemented:

- SLC Webpage: A "chat" area will be provided for Academic Facilitators and tutors to engage in discussions or communication updates in an online forum. The challenges faced by the Student Learning Center regarding the unsuccessful attempts to hire Academic Facilitator positions or frequent turnovers of facilitators contributed to a temporary halt regarding ongoing work to create a chat area.


## Looking Forward

- Complete the update and enhancement of the Student Learning Center website including two items below which were planned in the last technology plan: (1) Additional resources for tutors regarding facilitation of learning and content-specific areas will be available; (2) A "chat" area will be provided for Academic Facilitators and tutors to engage in discussions or communication updates in an online forum. Along with these items, updating of staff, faculty, list of services, etc. will be completed. We also need to organize and clarify the procedures to be followed when adding or updating information especially the tutoring schedule each semester
- Purchase/Install a Tutor Tracking System. The center has grown in volume of activity, types of services, number of courses supported and number of tutors. The center was also awarded additional space to accommodate the increased number of students. However, tracking student and tutor activity, grades, completion rates, etc. was still largely done on a manual basis and obtaining needed information for reports in a timely manner relied heavily on other departments. One of our main goals is to purchase tutor-tracking software for the Student Learning Center in order to facilitate online scheduling and tracking of students and tutors. Transitioning from manual to online scheduling will bring fundamental improvement to our delivery of services in a number of ways from enabling staff to more easily and efficiently schedule appointments to improving how we track both quality and quantity of the services provided. Implementation of this software would also help with generating all necessary reports in a much more timely and accurate manner.
- Develop an Access Database for Tutor/Front Desk Information. The center employs more than 80 individuals who work as tutors and/or front desk roles. Many tutors provide academic support in more than one subject and even more than one discipline. Some are "senior" tutors meaning that they assist in training, observations and other activities beyond direct tutoring. Many of them also work as front desk staff assisting students, faculty, performing clerical and administrative duties including database entry into the Starfish system. The organization, monitoring and retrieval of all of this information has primarily been manual; that is, tutors' contact information is added and kept in an Excel file; the daily, weekly, semester schedules for the tutors and front desk are also in an Excel file; the list of courses with names of tutors who can tutor them are kept in an Excel file; the hire/termination dates, etc. are kept in individual files in the director's office. Our goal is to develop an Access database in which all of the information just discussed could be entered one time, and modified, stored, deleted and/or retrieved as needed. This will not only reduce the time currently needed to input information but create the ability to retrieve information and create reports. Obvious benefits include ease of data management and elimination of multiple updates across multiple files that is currently time consuming and could create data inconsistencies.
- Implement a Messaging System. The current operations system at the Student Learning Center is primarily a manual one; appointments are made in binders, which are stored at one specific front desk, and the telephone with intercom is located there. The area around that desk becomes very crowded and noisy which makes it very difficult to hear what the student is saying in person or on the telephone; the front desk staff often has to repeat things several times before an appointment can be completed. Staff members at the front desks of the center often need to contact each other to confirm the location of tutors, students or administrators while all of this is going on communication among staff and administrative members at the front desks of the three sections could be helpful if an online messaging system is implemented.
- Create Videos for Operational Procedures Training/Referral The center created manuals for operational procedures including information for tutors, front desk staff and supervisors. These procedures are presented and reviewed at orientations and trainings throughout each semester. We would like to transfer some of this information to video format (hosted by YouTube or QCC equivalent) for training or review of procedures.


## $\nabla$ Math Learning Center (MLC) Where We Are Now

The Mathematics Learning Center is committed to providing high quality mathematics one-to-one tutoring and small group learning for all students. Innovative pedagogical techniques, including educational technology are employed. In order to insure the highest quality of service to students, the Mathematics Learning Center engages in on-going assessment using CUNY-wide and college-specific indicators. The Mathematics Learning Center is a tutoring and self-study facility accessible to all students. It is open year round and provides assistance for all mathematics courses, from developmental to advanced level. Highly qualified tutors and faculty are trained to work with students on a one-to-one basis and in small group workshops. The Mathematics Learning Center provides course-integrated workshops and review sessions to help students exit from remediation in an expeditious manner. The Center provides review sessions to help students succeed in credited math courses to increase retention and graduation rates. The Mathematics Learning Center offers a wide variety of services that include the use of technology. The Center has integrated the Starfish system for recording tutoring appointments and referrals. The Center is continuously training tutors to enter student visits using Chromebook mobile technology. Currently, the Math Center is providing additional support services for on-line HW and tutoring for computer science courses. The Center has used Lenovo laptops during tutoring sessions to support students with various computer software programs assigned by instructors i.e. MathXL, Maple, Minitab, Excel, WebAssign, and WeBWork, an on line homework management system developed by QCC math faculty.

## Assessment of 2011-2015 Technology Plan Objectives <br> The Math Center was not included in the previous Plan.

## Looking Forward

Due to curriculum changes, the number of statistic courses offered by the math department has at least doubled. Math courses requiring students to use an on-line HW component continues to expand, as these types of courses have been shown to increase student learning and progression. This has led to a greater number of students that are required to use statistical and on-line HW software. For example, students are expected to prepare statistical reports in which they incorporate one of the technology tools they use during the class. Often times, they need guidance with organization of the gathered data using the technology. The Math Center sees the need to expand the support for these computer software programs assigned to the students by math faculty, such as the new on-line HW module the department is developing for use with the college algebra course. The Center plans to expand its current operations with the added functionality. The Center will provide additional support services that will include computer assisted learning, as well as tutoring computer science courses.

## $\nabla \quad$ ADA - Services for Student with Disabilities (SSD)

## Where We Are Now

Queensborough continues to be proactive in addressing the issue of technology and disability services. The College approach has been twofold, which includes 1) Americans with Disabilities Act (ADA) compliant workstations in all labs for student use, and 2) a centralized Services for Students with Disabilities (SSD) Lab which provides
individualized tutoring, a study lab, assistive technology and a testing center that administers exams with reasonable accommodations.

## Assessment of 2010-2015 Technology Plan Objectives

## Fully Implemented

- In addition, a text-only (ADA compliant) version of major portions of the College current website is in place and will be continually enhanced by providing accessibility tools such as the BROWSE ALOUD screen reader web browser ad on.
- The College is committed to exploring ways of providing services to reasonably accommodate students with disabilities. These technologies, if implemented as part of the College's infrastructure, would provide access to a greater number of students, including students with disabilities.
- It stands to reason to anticipate that technology will continue to provide an increasing role in the educational process as well as in providing accommodations to students with disabilities in the college community. These technologies will continue to need to be upgraded and maintained.
- To further the awareness and use of adaptive instructional technology, the Offices of Academic Affairs and Services for Students with Disabilities will conduct outreach and educational activities to inform faculty, staff, and students of the availability of adaptive instructional technology for use by those with documented disabilities.


## Partly Implemented

- As an objective of this Technology Plan, the College will provide classroom-based closed captioning with voice-recognition, live streaming, alternate media i.e. video / audio recording, and web based archiving of actual courses. These types of improvements will increase accessibility for all students. It is anticipated that these objectives, if met, will increase not only the College's number and quality of education of students with disabilities, but also provide access to online education to other populations. - This was partially implemented through archiving courses on Tiger Media


## Looking Forward

- Incorporate reading and writing assistive technology tools throughout the campus.
- Improve general accessibility, particularly with regard to the College website, Video Captioning and Online courses.
- Work alongside the IT taskforce to improve accessibility on campus websites in regards to ADA compliance.
- QCC Connect app: expand use of application.
- Update the accessibility of QCC campus labs and library resource


## $\nabla \quad$ Academic Computing Center (ACC)

## Where We Are Now

In support of all academic curricula, The Academic Computing Center (ACC) was established in March of 2000. The ACC provides both educational technology facilities and services. Facilities include: student computer lab and multimedia classrooms with instructional presentation technology. Services provided include educational technology workshops; individualized training and support to both students and faculty; consulting for academic computer related purchases.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

## Facilities:

- In an effort to eliminate the long waiting lines that students must endure to use a computer, the ACC has been given primary responsibility for scheduling a new computer lab in LB-24. While we will make every effort to use the room as efficiently as possible, LB-24's primary purpose will be to serve as an expansion area during ACC peak periods (typically 10:30-2:30) each day. We will monitor room use and adjust the schedule as needed
- Additional podiums will be installed in classrooms throughout the campus, on an average of 10 each year. The ACC will monitor and maintain them as best we can, but given current staffing levels it will become increasingly more difficult to make timely updates and repairs.


## Services:

- A new Content Management System (CMS) is being installed, and all current web pages are being ported over to this new system. It is expected that a major portion of the College website will become available towards the end of the spring 2011 semester.
- An eLearning Institute will be conducted twice a year (once in the summer and once in the winter). Out of the institutes will come additional quality online courses, mostly taught in the Blended modality (partly online). Faculty participants are expected to take one semester to complete the course development, and then teach their newly developed courses at least twice in subsequent semesters. After initially conducting the Institute twice a year a decision was made to offer the eLearning Institute only once a year in the summer. To date eight cohorts with over 100 faculty members have completed the Summer Institute.
- Digital Signage creation will be maintained at the current level
- Workshops will continue to be offered covering technologies in use by students, faculty, office staff and CLTs. Especially covered will be: ePortfolio, Blackboard, Camtasia, SoftChalk, and Office applications.
- Online Support Services will continue to be offered, especially covering technologies such as Blackboard and ePortfolio. However, as more teachers begin using ePortfolios and developing their online courses, it will be difficult to maintain the current level of support. Additional support personnel have been hired to bolster our ability to support online activities.
- Digital Media Services will be maintained at current levels


## Partly Implemented

## Facilities:

- A podium spare-parts closet will be established and maintained to make repairs more efficient. It was determined that maintaining a complete parts closet was too costly, and the idea was abandoned. We do maintain some spare key components.


## Looking Forward

## Facilities:

- During the timeframe of this Five Year Technology Plan additional podiums will be installed, with the goal of installing presentation hardware and software in all campus classrooms appropriate and available for instructional technology.
- As funding and space allows, additional computer classrooms will be constructed or converted to meet growing demand; some of these classrooms will use virtualized desktop infrastructure (VDI).
- In support of flipped classroom and other teaching pedagogies the ACC will design, build, schedule, and support a One-Button-Studio for faculty use, and a new Tiger Media Recording Studio (TiMR). These studios will support lecture-capture, the burgeoning Video Editing curriculum being developed by the Speech and Theater Department, video recording projects taking place within various HIPs, and Marketing Department projects.
- To meet increased demand, and to better serve multimedia teaching pedagogies, a video storage solution will be adopted with the following capabilities: ADA compliance for transcripts and closed captioning; Media streaming capability; Assignment of an immediate URL and embed code; Categorizing / Tagging; Analytics - usage statistics; access control / privacy setting capability


## Services:

- The ACC will continue to support all manner of classroom teaching and learning pedagogy and technology.
- Workshops will continue to be offered covering technologies in use by students, faculty, office staff and CLTs. Especially covered will be: ePortfolio, Blackboard, Camtasia, SoftChalk, VoiceThread, and Office applications.
- Online Support Services will continue to be offered, especially covering technologies such as Blackboard and ePortfolio
- A new eLearning Institute will be planned and established with the purpose of continuing the tradition of building and supporting quality online courses; focus will remain on Hybrid / Blended modality with the additional goal of enhancing and increasing the number of web-enhanced courses;
- Media Services equipment will increase to meet increased complexity and demand for its services Staff:
- Technical staff will be added to support the increase in podiums and additional computerized classrooms;
- Technical staff will be added to support the increased demand for, and complexity of, Media Services
- The Campus Event Tracking System will be augmented to insure that equipment and technical-service needs are clearly communicated for every event


## $\nabla$ Website

## Where We Are Now

The College website is a primary means of communication and dissemination of information and services. The Communications \& Marketing department has primary responsibility for the design and day-to-day update of the website and the Office of Information Technology is responsible for administrative website applications and infrastructure.

## Assessment of 2011-2015 Technology Plan Objectives <br> Fully Implemented

- The Hannon Hill Cascade Content Management System (CMS) was fully implemented during the spring 2011 semester.
- Workshops for web coordinators were offered beginning in summer 2011 and have continued to be offered to various end-users.
- Workshops for faculty users were offered during the fall 2011 semester and have continued to be offered, in smaller group settings including 1 -on- 1 sessions.
- Web applications were modified to use data from the CUNYfirst ERP system. Many of those applications were rewritten or replaced for newer, integrated, systems.
- Analytic data from the Cascade Content Management System (CMS) has been used and continues to be used to identify and archive old data.
- A mobile application was purchased and implemented. IT, in conjunction with Marketing, handles the data and usage of the mobile application.
- A mobile application was purchased, developed, and implemented. IT, in conjunction with Marketing, handles the data and usage of the mobile application
- An Asynchronous Video Conference / Lecture Recording system was implemented by CUNY at Queensborough. The system never worked as promised and was eventually decommissioned.


## Partly Implemented

- The Office of Marketing and Communications engaged with Monaco Lange, a web design firm, on the redesign of the College website.
- Monaco Lange developed wireframes for the new website which were reviewed and approved by the Office of Marketing and Communications. We continue to work with them on the design process and implementation of the College website.
- The web team began implementing responsive web designs into selected existing pages including Admissions, Communications, and Athletics in an effort to advance the user experience and make the website mobile friendly.


## Not Implemented

- An online visitor's center was not created. The web team, with consultation from Marketing, moved forward with other areas to strengthen content and the user experience


## Looking Forward

- Implementation of a new web site design that will be fully responsive (i.e. mobile friendly).
- Investigate the feasibility of moving to a different content management system platform (i.e. WordPress) using task analysis and user-feedback.
- Workshops will continued to be offered to Department Web Coordinators so they can effectively use the current and potential new CMS.
- Workshops will continued to be offered to faculty and staff so they can effectively use the CMS
- Use Google Analytics to improve the user experience / user-interface based on behavior and data flow.
- Use social media to recruit and retain students.


## Marketing

## Where We Are Now

The Queensborough Community College homepage is a portal of knowledge designed to:

- Build student enrollment
- Increase student retention and graduation rates
- Attract prospective faculty
- Promote Degree, Certificate and Continuing Education programs
- Showcase the College's cultural resources such as the Queensborough Art Gallery, Kupferberg Holocaust Center and Archives and Queensborough Performing Arts Center, as well as its unique academic initiatives, specifically the Academies
- Highlight "News \& Events"
- Spotlight remarkable faculty and student achievements under "Success Happens Here"
- Announce "Important Dates"
- Inspire Queensborough Alumni involvement and growth in fundraising activities


## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- Buttons for Twitter, Facebook, Instagram, LinkedIn and YouTube have been incorporated on all pages of the College website.
- The Marketing Office has partnered with CUNY central on CUNY-wide social media campaigns and shared CUNY messaging.
- Twitter posting (along with all social media) has increased and includes Queensborough stories, achievements, alumni news, events that should be of interest to alumni.
- We've been in the conversation more than ever before with engagement and retweets from the CUNY Chancellor, White House, NPR, Muscular Dystrophy Association, local politicians, etc.
- Implemented social media engagement in an effort to respond to requests for information from prospective, current, and former students.
- Contracted with Reach Local to improve and grow advertising and recruitment efforts across print, digital, and social media avenues.
- The role of Student Affairs in social media is important especially in helping to create content and identifying students to profile and highlight. Need more college human resource(s) devoted to this burgeoning area.


## Partly Implemented

- Institutional Advancement/Alumni Affairs has been engaged in helping to develop the online space in an effort to promote their giving/donation strategy for alumni.


## Not Implemented

- A button for Apple iTunes was removed from the website as we no longer utilize the product and stopped updating content in 2014.


## Looking Forward

Social Media
The Marketing Office will continue to expand its partnership with the Academic Computing Center and establish social media opportunities on the homepage. Buttons for Twitter, Facebook, and DIGG should link from the College's press releases, articles, photos, newsletters, events, etc. An iTunesU icon will appear on the homepage linking to the College's uploaded videos. Expand outreach to alumni by establishing Linked-in and Twitter accounts.

## Branding

All publications, news releases, video feed, websites, social media sites and announcements must carry the current common branding (logo and design formatting) developed and mandated by The City University of New York (CUNY), as well as the QUEENSBOROUGH Campaign logo and signature for the CUNY Campaign up to 2015, provide Queensborough students with the Edge for Success.

## Additional Goals:

- Communicate to departmental website coordinators that academic homepages must be current
- Provide a multi-level platform for fundraising initiatives
- Develop a team to manage, support and refresh the social network sites
- Explore opportunities to effectively market and communicate student co-curricular activities.


## Publications

Within next three years:

- Complete software upgrade to latest Apple Mac OS and Adobe Creative Suite.
- Upgrade color printer with print server and/or memory upgrades

Within next five years:

- New Apple Mac hardware upgrade


## $\nabla$ Pre-College, Continuing Education, and Workforce Development (PC-CE-WD)

## Where We Are Now

Queensborough's PC-CE-WD programs provide a wide variety of noncredit, developmental, vocational and professional development, certificate programs, online courses and recreational offerings. In addition, this division leads the BTECH early college initiative. PC-CE-WD facilities and services include:

- One on-campus lab with 24 computer stations and one shared laboratory in Flushing, which holds 20 computer stations, and one recently vacated facility in need of equipment and rewiring for 25 stations;
- Programs and services in Pre-college programming include: CUNY Start, CLIP, College Now, College Focus, Connect2College, 21st Century Community Learning Center grant, Liberty Partnership grant, Port of Entry ESL program, Kids and Teens College, the Chinese Academy, and HSE (GED). Continuing Education courses number approximately 80 each semester including computer literacy, Auto-Cad, and digital photography. And Workforce Development programs include finance bookkeeping, medical billing, medical office assistant, hemodialysis technician, and grants and contracts such as with the SBS NYC, the Workforce Development Initiative, Perkins Major Effort, Con Edison grant and the Career Direct program providing career and job placement services.. Lastly BTECH, QCC's Early College Initiative, offers students degree programs in Internet and Information Technology or Computer Information Systems. The ET and Business Departments need to support the incoming students with labs for their courses.


## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- Website: One small upgrade to the CE website but in the process of redesigning it with Marketing
- High Tech Certification: Will be offering one ET course in the fall of 2015 - as a precursor to the building of a Cybersecurity Program - that will include A++ certification
- Offered Patient Care Technician program for existing CNA's through SBS contract.


## Not Implemented

- Website that reflects the expanded services of the PC-CE-WD division with new branding.
- Blackboard: University provided access to Blackboard for CE users - for a cost. We analyzed the cost of using it and it would not support our financial model.
- Flushing Computers
- Reuse of Apple Macs


## Looking Forward

During the 2016-2020 Technology Plan, PC_CE_WD will complete the following:

- Assess new CE University Wide CE Enrollment, financial and reporting system anticipated during this period to replace CERS.
- Work with QCC and CUNY to update 20 shared Computer Stations at the Flushing site
- At the Flushing Center: install 25 computer stations and wiring as well as 6 faculty workstations.
- Work with the QCC Administration to identify additional on-campus Computer Labs to support both expanding CUNY Start, CLIP, Connect2College, POE and BTECH programs, CE programs, and Workforce Development tuition based and grant/contract programs.


## $\nabla \quad$ Development and Alumni Relations

## Where We Are Now

Development and Alumni Relations works in conjunction with the Queensborough Community College Fund Inc., a separate 501(c) 3 private non-profit organization established in 1975 to secure and manage charitable contributions to the College. Funds are raised to guarantee scholarships to future generations of students and to enrich the learning experiences of Queensborough students. The Queensborough Community College Alumni Association hosts an annual calendar of activities and events for its members.

## Assessment of 2005-2009 Technology Plan Objectives

## Fully Implemented

- As Development and Alumni Relations continues to move from hard copy (paper) to web-based transmissions staff, as planned, has acquired the necessary basic technical skills for writing and presenting information/solicitations online. Currently, alumni communications now go out thru email blasts using Constant Contact.
- Opportunities for raising funds through online giving and social media will continue to present themselves, which will require additional staff or training for existing staff. Managing social sites can be extremely time consuming and will require time management skills, based on projected return on investment. We have purchased and implemented the following:
- A product that is mobile to take credit card donations while walking around at events.
- Services have been purchased from 'Linked In' to track alumni career changes/advancement
- Established a Facebook presence
- Increased donors' use of online giving now that fundraising website has been updated
- Pursuing cell numbers from prospects and donors.
- All website material/content, including donation pages, will continue to be formatted for access by mobile marketing applications.
- Obtaining corrected cell phone numbers of alums needs to be prioritized over land lines or email addresses


## Partially Implemented

- Staff are NOT fully trained in incorporating photos etc. into online solicitation materials
- We have a Facebook site for Alumni but otherwise we are not on other platforms such as Twitter or Instagram.


## Looking Forward

- Fundraising staff needs training to access CUNYfirst information about scholarship/award recipients and future alumni.
- QCC will support the CUNY Advancement Council, which is currently looking at how we could cut costs for Raiser's Edge by having a CUNY contract for these services rather than each college having to negotiate on its own.
- Plan to move over to Raiser Edge Nxt. which is the next evolution in the RE system. It is totally web based and accessible through IOS and or Android Apps. This would allow development and alumni relations to access information on the fly and from anywhere. We would also have the ability to update information on the fly as well through more cloud reporting tools from Blackbaud. It would require discussion with the Finance office if they are willing to go over to Finance Edge NXT to maintain connection.
- Expand our social media presence to Instagram and Snapchat to reach a younger audience.
- Identify opportunities for a paperless check in process at annual the Partners Gala.
- The KHRCA is about to embark on a multi-year project to digitize its holdings to make them fully available to students and instructors through an online database drive site. We plan to have an internal view that could be accessed from campus computers that would offer unfettered access to all of the digitized holdings and an external (web facing) version that would include only those pieces to which we have clear IP rights. Our process is to assess our storage, server and user experience needs with Marketing, IT, and other stakeholders; to invest in a software, server, and storage solution; to begin the digitization process; and, finally to launch the new site within 2 years of receiving the full funding the project will require. We also plan to convert space in the KHRCA library to computer workstations, to allow the campus
community to access the material from the Holocaust Center. In order to fund the project, we are looking at all of our revenue streams including private donors and foundations, elected officials, and tax levy.


## $\nabla$ Faculty

## Where We Are Now

The College continues to offer opportunities and encourage faculty members to learn and use of technology for teaching. Every full-time faculty member now has a computer on his or her desk, every classroom has both wired and wireless Internet access, and more and more of our classrooms have permanent or portable presentation technologies and faculty making use of them. There are also better computer services for adjuncts with computers available for their use wherever space is available within departments.

## Assessment of 2011-2015 Technology Plan Objectives <br> Fully Implemented

- Continued faculty development under the auspices of the ACC and CETL
- Better tech support for full-time and part-time faculty while they are on campus
- Greater mobile computing support. The ACC provides loaner laptops to faculty who are attending conferences, and for those who complete the eLearning Institute; also supported are iPads and iPad apps for faculty who use them in their classrooms.


## Looking Forward

Regarding support for faculty and their uses of technology, the major objectives of this Plan are:

- The ACC and CETL will continue to provide faculty development workshops covering classroom pedagogy and the use of instructional technology
- The ACC will provide technical support for the High Impact Practices (HIPs)
- A new eLearning Initiative covering Hybrid / Blended and web-enhanced modalities will be offered once a year to assist faculty to develop quality online courses
- Working with Digication, the ACC will establish a system that provides faculty with the tools to give assignments and collect student artifacts, consequently supporting their participation in GenEd assessment projects


## $\nabla \quad$ Classroom Technology

## Where We Are Now

As of the preparation of this Plan in Spring 2016, $77 \%$ of 103 classrooms have podia technology with an additional five classrooms currently being outfitted, effectively raising the total penetration to $82 \%$ for this academic year (2016). The College goal will be to install presentation hardware and software in an additional 10 rooms this summer \& fall to achieve a penetration rate of $91 \%$ and, finally, to complete the remaining classrooms by the Fall 2017 semester. Additional, and also through the implementation of the College's annual Tech-Fee plan, all laboratory computers are replaced with state-of-the-art systems every four years. Software is updated as required by curricular needs and is generally updated annually. Other hardware such as printers, servers, projectors, smart boards, scanners, etc. are replaced on an as-needed basis. The Tech Fee also supports the upgrade of all network switches supporting student labs which have been updated continuously.

## Assessment of 2011-2015 Technology Plan Objectives <br> Fully Implemented

- It is an objective of this Plan to outfit the campus classrooms as fast as possible. In spring 2011, 10 additional instructional podiums were installed and from 2011 thru 2016, (57) new classroom podiums were installed.
- Student Response Systems (clickers) will be installed in classrooms that contain instructional podiums
- Once CUNY has selected a vendor, lecture capture capability, as well as synchronous communications, will be available in classrooms that contain instructional podiums. Blackboard Collaborate was implemented and workshops taught as soon as Collaborate became available in Spring 2013.


## Looking Forward

- Increase the number of classroom podiums, with the goal of installing presentation hardware and software in every campus classroom.
- Continue to provide software needed by faculty to teach their curriculum
- Create additional Computer and Tech Flex classrooms to meet the increased demand for fullycomputerized teaching spaces
- Student Response systems will be made available to enhance the student learning experience. A variety of tools will be available including: iClickers, Poll Everywhere,


## $\nabla$ Wireless Environment

## Where We Are Now

Queensborough students and faculty need access to online resources, services and utilities at times when they are not at a desktop or a hard-wired connection of some kind. Wireless provides ubiquity on top of utility. Queensborough has provided both wired (for fixed work stations and connections) and wireless (for notebook, tablet and other kinds of devices) access, coexisting and ultimately saturating the entire campus so one can have both anywhere. More and more students are coming to campus with an ever expanding complement of hand-held wireless devices expecting to find a state-of-the-art wireless network here, and they do.

## Assessment of 2010-2015 Technology Plan Objectives <br> Fully Implemented

IT has moved the wireless network forward by first migrating to N standard and currently in process of moving to the latest AC standard. Coverage in high use areas such as the Library has increased to the maximum level.

## Looking Forward

Given CUNY's upgraded network speed \& the pace of change in wireless technology, we establish these broad objectives:

- Queensborough plans on maintaining the latest version of wireless technology seamlessly available across the campus.
- Queensborough will endeavor to advance its wireless network as new technologies become standardized, useful, and stable.
- Queensborough will add access points to areas of high usage as necessary
- Installation of wireless network management software.
- Complete conversion from " N " standard to current/ faster "AC" standard wireless access points.


## $\nabla$ Online Instruction <br> Where We Are Now

Queensborough Community College has consistently been offering online / eLearning classes in web-enhanced, partly online, and fully online modalities. Both the College and CUNY have provided the infrastructure, hardware, software and training for online offerings.

## Assessment of 2005-2009 Technology Plan Objectives

## Fully Implemented

- Implementing the notion of the Embedded Librarian - a librarian added to an online course to assist teachers in developing research-based assignments and to assist students in navigating library databases and locating the best resources for class projects.
- Assessing the results of the Faculty's eLearning Institute.
- Upgrading support for students. This effort will consider:
- Enhancing the Student eLearning Readiness Program.
- Providing support and tutorials for students taking eLearning classes
- Providing online tutoring


## Not Implemented

- Developing learning outcomes assessment tools for eLearning classes. A new College assessment division has been created and this is now on their radar
- Assessing whether investing college resources in fully online degree and certificate programs is a sensible way of providing access to education for our community. Such an effort may be conducted solely at Queensborough Community College or as part of a consortium of CUNY community colleges. This was never addressed.


## Looking Forward

In the future, the college will further enhance its support for eLearning as results warrant and funding allows.
Targeted will be:

- Provide alternative teaching and learning technologies to support Hybrid / Blended and web-enhanced instruction
- Expand the use of the Embedded Librarian - a librarian added to an online course to assist teachers in developing research-based assignments and to assist students in navigating library databases and locating the best resources for class projects.
- Instructional choices and support:
- Make additional Hybrid / Blended and web- courses available for students
- Enhance the Student eLearning Readiness Program.
- Provide support and tutorials for students taking eLearning classes
- Provide online training \& support


## $\nabla$ Center for Excellence in Teaching and Learning (CETL)

## Where We Are Now

The mission of CETL is to foster instructional innovation and effectiveness. By promoting evidence-based teaching strategies, as well as the systematic investigation of best practices through the Scholarship of Teaching and Learning (SoTL), CETL facilitates not just faculty excellence, but also student success. CETL uses a collaborative approach to build on faculty strengths, focus on strategies for teaching and learning, and brings faculty into contact with innovative instructional practices and technology. In so doing, CETL supports a campus culture that recognizes and values the rich contributions of faculty to student success. Through a variety of activities, programs, and services, CETL provides an environment in which faculty can come together to share teaching experiences and expertise. Through its promotion of a collaborative, problem solving approach to the art and science of teaching, CETL supports faculty and staff who apply student-centered learning approaches.

## Assessment of 2011-2015 Technology Plan Objectives <br> Fully Implemented

- In fall 2011, CETL worked with faculty from multiple departments to develop instructional materials that demonstrated the use of technology for the achievement of general education goals. CETL offered a technology symposium that will feature presentations by involved faculty and discussions of issues of pedagogy \& technology.
- CETL offered pedagogy-focused sessions at the eLearning Institute for Queensborough's eLearning development cohorts.
- Several workshops were coordinated to support faculty use of:
- SoftChalk (including its interactive features)
- Camtasia
- Collaborative, web-based tools, including: wikis, blogs, discussion forums
- Conducted sessions on using wikis, blogs, and discussion forums as pedagogical tools in Blackboard.


## Partly Implemented

- While several workshops on Camtasia were offered, the College has since explored several webcasting applications.


## Looking Forward

- Coordinate with Chief Operating Officer, IT, and High-Impact Practices (HIPs) Faculty Coordinators to create of a streamlined, college-wide data environment with reporting capabilities for:
- Faculty development participation
- HIPs participation
- HIPs assessment
- Related budget activity (stipends for HIP and HIP assessment activity)
- Collaborate with IT to redesign the CETL-related pages on the QCC web page to improve the following facets of the web visitor's experience:
- Calendar navigation
- Event response (RSVP) submission


## Assessment

## Where We Are Now

Assessment is now a defined and recognized part of a culture of collaboration at Queensborough. Faculty members in the departments work on course assessment and with faculty from other departments in program review. Faculty across campus collaborate developing and using general education rubrics in their classrooms. Administrative offices also participate in assessment activities; in some cases, their assessment work supplements program review. In all cases, assessment informs the overall strategic planning process.

The principal role of technology in assessment involves documentation and dissemination of assessment results. Following the previous self-study, a much-expanded Assessment website was developed. Web-driven applications allow designees from academic and administrative departments to upload assessment reports. Course assessment includes information about the general education objectives satisfied. Once posted to the Assessment website, any employee of the College has access to the course assessment reports, as models for their own assessment or to inform program reviews or other assessment reports. Program reviews, year-end planning reports, and Academy assessment reports are also posted to the Assessment website.

Technology also plays an important disseminating role in articulation. A web-driven database populates basic information faculty, staff, and students may use to see which degree programs articulate with programs within and outside CUNY. Effective transfer is an important part of the assessment of the student undergraduate experience, and an expanded database displaying clearer and expanded information can be a valuable tool to the campus.

## Assessment of 2011-2016 Technology Plan Objectives

## Fully Implemented...

- Expand the capability of the Assessment website to archive older course assessment reports rather than just replacing them with the latest assessment report
- Modify and expand the articulation database on the OAA website to allow for a much wider display of college-to-college articulation criteria
Partially Implemented or Revised Objective:
- Develop an interactive version of the Assessment Handbook, featuring short video explanations by faculty and administrators - REVISED OBJECTIVE: website modified instead
- Working with the eLearning cohorts, develop prospective models for course-level assessment of the instructional technology and its impact on student learning - REVISED OBJECTIVE: assessment of eLearning Institute impact on faculty assessed instead; survey indicates lasting impact on faculty practice in the classroom


## Not Completed

- In a collaboration between eLearning faculty and the learning centers, develop prospective models for the assessment of e-tutoring


## Looking Forward

Strategic objectives for the use of technology for assessment or other initiatives or for the assessment of technology use include:

- Institute Digication \& Taskstream as platform for general education outcomes assessment; expand faculty development and training for students to support effort
- Develop 2.0 version of Academies/CareerTraq website
- Update entire Strategic Planning website to new design, including interactive features


## $\nabla$ Office Staff \& College Laboratory Technicians (CLTs)

## Where we are now

The productive use of technology requires training of the office, administrative \& CLT staff in many departments and the College has made strides in offering opportunities for training.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

It is most important that we continue to improve the skill-level and efficiency of both office and technical staff. To achieve this going forward, the College will:

- Continue to invite both office and technical staff to attend faculty development workshops
- Make available training opportunities that develop CLT skills in the support/maintenance/security of technology in their department facilities
- Install a new swipe lock technology that centralizes the assignment of room access permissions
- Develop an application to make classroom technology problem-notification more formal and accurate. Using the Fusion Room-View system, the ACC monitors podiums across the campus.


## Partly Implemented

- Establish a parts closet that contains two full sets of podium technology to make repairs more efficient. It was determined that maintaining a complete parts closet was too costly, and the idea was abandoned. We do maintain some spare key components.


## Looking Forward

- Continue to invite both office and technical staff to attend faculty development workshops
- Make available training opportunities that develop CLT skills in the support/maintenance/security of technology in their department facilities


## Information Technology

## Where We Are Now

The Office of Information Technology (IT) is responsible for Administrative Computing, email systems, office PCs, and Wired and Wireless Networks at Queensborough. IT also develops and supports systems that meet the specific needs of departments at Queensborough like the Faculty and Staff Adjunct Payroll system. In addition, IT manages the PC Help Desk, CUNY Portal Help, CUNYfirst Help and all aspects of Network Security, and supports the Faculty and Staff Email and Student Email systems.

## Assessment of 2011-2015 Technology Plan Objectives <br> Fully Implemented

- Authentication is now required for logging into the wireless network. Several security appliances have been updated/added to the network including:
- A Palo Alto Application Firewall - The current appliance will soon be upgraded to a 10 Gbps appliance
- FireEye EX mail appliance - This appliance detects and blocks malicious file attachments and email links with malicious downloads.
- FireEye NX gateway appliance - This appliance protects users accessing the Internet from malicious downloads via a web browser. In the last 5 years, the appliance was upgraded to handle 1 Gbps capacity.
- Linux Student Lab and DMZ Firewalls - Allow the security administrator to implement security policies which can block malicious activity on the network. The campus has a total of eight firewalls that have been upgraded to 10 Gbps .
- Online Backup Network Attached Storage - This solution provides a method of recovering from a Ransomware attacks on our campus users. Initially this was done locally by providing users with their own USB storage device. However, it has now been automated so that there is now user interaction required.
- Internet connection s speed has been increased to 1.2 Gbps and then recently to 2 Gbps . The connections are load balanced.
- Intrusion vulnerability tests are run every semester
- The network has grown to 160 switches of all sizes providing 6,000 ports. All network edge switches are running at 1 Gbps speed and now capable of power over LAN. The level of service redundancy has been increased.
- CUNYfirst was implemented on time and is now the system of record for the College. IT will support new modules as they are introduced.
- The HELP desk is the resource for first level support for CUNYfirst. Cases are escalated to Central Office with incident ticketing.
- All edge switches operating at 1 Gbps speed.
- We have been moving toward standardizing on Oracle Application Express for development
- Implemented CUNY Alert for the college community.


## Partly Implemented

- Network backbone speed was increased from 4 to 40 Gbps . Many expensive hardware pieces for the move to 80 Gbps were purchased and installed. Several key components are yet to be purchased. Also positioning network for increased redundancy and future 100 Mbps speed.
- Piloted a Virtual lab in English. It has evolved to virtual English faculty desktops.
- We are implementing NetWrix log management software.


## Looking Forward

The IT department:

- Is fully committed to supplying the campus with robust, reliable, and secure wired and wireless networks.
- Will constantly monitor for security threats and develop strategies to minimize them
- Will (if appropriate funding is available) continue to advance Queensborough's technology infrastructure as demand grows
- Is committed to making CUNYfirst successful, assisting in the implementation of new modules as they become available.
- Upgrade network edge switches to power new VoIP phone system
- Increase network backbone speed to 100 Gbps
- Finish evaluating the Virtual Desktop environment installed in English Department
- Will explore the practicality of Oracle Discovery, Application Express for report generation
- Will finish implanting Log Management software to automate security monitoring
- Will plan the conversion to IP V6 internet architecture
- Migrate Faculty/staff to MS Exchange 2013 email in 2016 and then to MS Exchange 2016 in 2018
- Migrate Tigermail to Live @CUNY by 2017
- Upgrade faculty staff desktops to a quad core processor standard
- Increase fiber optic cable runs between campus buildings
- Increase campus internet speed 5 x to 10 Gbps with CUNY fiber loop
- Develop a CUNYfirst Security Definition Description database (if it is not provided by CUNY Central Office)
- Expand UPS capacity for main network switches
- Create a separate network for security and video surveillance devices.


## $\nabla$ Business and Financial Services

## Where We Are Now

The City University of New York continues the complete replacement of its key student, human resources and financial systems in a project known as CUNYfirst. This long-term project will eventually replace and modernize all the systems and data that the University relies on-in an integrated and comprehensive database environment. At this time, the University has completed the system-wide implementation the following key business components of the CUNYfirst project: budget, financial ledger and human resources, student center, student financial aid and fixed assets. The final module, Admissions, is underway and will be fully implemented by 2017.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- The payroll, accounts payable and procurement module planned for 2012 was fully integrated.
- The use if the ID card for security access to classrooms, as well as the new exterior door security system project, together with other access and service needs, have been upgraded and service levels improved by integrating the system and managing it in the OneCard Office for all staff and students.


## Partly Implemented

- Queensborough has leveraged this CF systems technology to revamp administrative tasks and the delivery of services to students, faculty and staff although this task will continue for several years.
- The CollegeNet 25 -Series space management system to improve resource allocation is has been partially implemented by CUNYY and QCC will be optimizing for our campus when appropriate resources are available.


## $\nabla \quad$ Enrollment Services and Management

## Where We Are Now

Queensborough Community College has been investing to improve enrollment services offered to both new and continuing students through the addition of advisor services and personnel and the technology to support these efforts. This includes the expansion of the Freshmen Academies to a comprehensive Academy services and support model for all enrolled students.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- COLLEGE 101 represents the first part of the College's two-part required orientation program for incoming freshmen. It includes a 60 to 75 minute Technology Workshop that introduces newly registered freshmen to the tools they need to be informed and successful, including Tiger Mail, CUNYfirst, an overview of the QCC website, CUNY Alert and E-Porfolio. Status: This orientation program has been incorporated into the College's current onboarding processes (Welcome Sessions and Orientation).


## Partly Implemented

- "My QCC," encompasses the MAP ("My Action Plan") described in the 2005-2009 Technology Plan. The goal is to provide students with an integrated platform that tracks their progress through the enrollment stage: testing, health service requirements, CUNY commitment deposit, financial aid, advisement, registration, residency requirements, bill payment, and attendance at Freshmen Orientation programs. Once students begin their first semester, this personalized platform will coordinate their progress and incorporate existing advisement and retention services, including "early alert," "academic alert," and outreach for advisement, financial aid and registration for upcoming semesters. Initial transfer and career planning would be included, and tie together existing technology tools such as FOCUS and e-portfolio. Currently, the College has many key tools geared toward improved advisement and retention activity, including the newly launched CUNYfirst, the Early Alert project now being piloted through the STEM Academy, TIGER TRACKS, and - in use by Admissions for prospective students, Hobsons, a CRM system purchased by CUNY for all admissions offices. Working with New Student Enrollment and the Freshman Academies, the Admissions is expanding and personalizing its use of the HOBSON system to improve service to incoming students and more effectively increase our conversion of applicants into registrants. The initial stage, therefore, for this project will be the examination and analysis of current tools, potential expansion of CUNYfirst, other services including RETAIN, a retention system offered by Hobsons. This investigative period would also allow the College, beyond Enrollment Services and the Freshman Academies, to identify/incorporate other stated goals such as those defined in the current Title V grant. Another potential outcome of this ambitious project is improved communication among students and members of the College community, and the promise of considerable savings in print and mailing costs to prospective and incoming students. Status: Some of the deliverables for this item have been delivered via the QCC App and Starfish, specifically the Early Alert and availability of information for students to access via mobile device. Some items were not developed such as an integrated platform that tracks their progress through the enrollment stage. Hobsons use was evaluated and a plan was put together to more efficiency service communication to prospective students.


## Looking Forward

Working with the College administration, the information technology department and the enrollment management team, the expansion and development of communication and advisement technology tools to enable student
persistence and success will be explored and implemented. This will include outside products such as Hobsons' Retain CRM (customer relationship management system for enrolled student) and expanded use of existing Degreeworks and CUNYfirst capabilities.

## $\nabla \quad$ College Initiatives

## Where We Are Now

The College is immersed in the replacement of all of the major systems that support its administrative functions with the new CUNYfirst ERP system. This initiative continues to consume the College's technology resources as we deliver CUNY and campus-specific services and support.

## Assessment of 2011-2015 Technology Plan Objectives Fully Implemented

- Queensborough-specific shadow support systems will be eliminated whenever complementary functions are discovered or activated in CUNYfirst
- Shadow system functions not found in CUNYfirst have been re-engineered to the extent possible to minimize duplicative effort.
- VOIP (Voice Over Internet Protocol) telephone system has been selected and planned to be purchased and deployed during 2016-2017.
- An enhanced Queensborough ID Card system has been purchased and deployed, adding features such as: printing and copying food purchasing and vending payments.


## Looking Forward

Queensborough will continue to find opportunities to deploy technology to improve services and reduce costs. This will include, but not be limited to the enhancement of student advisement, tracking, communications and support technologies such as Starfish and Hobsons. In addition, the College will continue to deploy and enhance CUNYfirst modules, the use of RFID (radio frequency identification technology to track and account for assets, full deployment of a new VoIP telephone system, enhanced wireless access and the introduction of new technology to improve efficiency and effectiveness of all college functions as they becomes available and appropriate.

## $\nabla \quad$ University Initiatives

## Where We Are Now

In the Fall of 2015, the University has again raised the Student Technology Fee charged to full-time, part-time students and this still remains the major source of funding upgrades of existing instructional technology facilities such as laboratories, tutorial centers, and multimedia classrooms rooms. CUNY has made a strong commitment to incorporating the use of information and educational technologies in support of its mission and philosophy of an integrated University. CUNY is utilizing a variety of University-wide groups with institutional representatives selected by the President of the College. In consultation with the College chief information officers (CIO's), the University spearheads projects that affect Queensborough's technology resources and how we operate. These projects include the development and deployment of infrastructure improvements such as high speed fiber connections, "Big Buy" negotiations such as system wide CISCO licenses designed to take advantage of the scale of the University to save the colleges money on major purchases of both hardware and an increasing library of software. The University also uses a portion of the Tech Fee budget to develop new services on a exploratory basis such as the use of virtual desk top deployment. However, in support of University initiatives, an ever-increasing percentage of Tech Fee funding has been devoted to centrally negotiated purchases. As part of an integrated University, technology policies and systems are established for all colleges. CUNY initiatives in technology systems (infrastructure, operating and software), continue to influence if not drive changes in the way we develop technologically. Queensborough is an active CUNYfirst partner, providing leadership and support for personnel as its various components are implemented. Queensborough is represented on University committees, and we have a crucial role in the decision-making, effective communication, organization, and implementation processes on campus

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- A standard technology platform will be established for Synchronous Communication / Video Conferencing. It will include the ability to record and archive lectures and meetings both inside and outside of the Blackboard Learning Management System.
- Existing University-wide software licensing will be maintained
- Additional University-wide software licensing will be negotiated
- Work is progressing on Disaster Recovery facilities, which will then be implemented
- The CUNY Academic Commons will become a major force in promoting collegiality at the University
- A document management system will be available to and implemented at each campus
- We will implement Blackboard upgrades including mobile services when CUNY makes them available


## Looking Forward

- Work with CUNY to install building block add-ons into the Blackboard environment, making third-party applications available to both students and faculty
- Expand the use of the Blackboard's Content Management System, and the Embedded Librarian initiative. For example, CUNY Library resources are now available in the Blackboard LMS
- Queensborough representatives will engage the University in all initiatives and ensure that our College's needs and priorities are appropriately communicated in the development of new projects.
- Queensborough will support all approved technology initiatives to ensure system wide success to the best of its ability and available resources.


## IV. Security and Maintenance

## $\nabla$ Security

## Where We Are Now

The Office of Information Technology (IT) provides network security. Network and data security evolves continually as new threats of phishing, hacking and other attacks increase every year. Queensborough has a Internet Security Officer (ISO) dedicated to maintaining and maximizing desktop and server defenses to keep network problems to a minimum. The entire IT team keeps data and network security at the forefront of all activities and is incorporated into all new initiatives.

## Assessment of 2011-2015 Technology Plan Objectives

Fully Implemented

- Security Awareness for all Faculty, Staff and Students is an ongoing goal for Queensborough's IT department.
- During the past five years the IT security Awareness class has been updated and is offered at least once a month. This training will continue to evolve and will consistently be offered to all faculty and staff.


## Partially Implemented

- IT assisted in piloting an English department VDI lab. The ongoing evaluations of pilot results will determine when and if virtual desktop technology is an appropriate and timely investment in our infrastructure.


## Looking Forward

Security Awareness for all Faculty, Staff and Students is an ongoing goal for Queensborough's IT department. Desktop Virtualization could eliminate the need to image PCs due to slowness or malware infections and lower the risk of data theft.

- SECURITY WORKSHOPS: It is IT's goal to educate all Faculty, Staff and Students. The lessons learned in class are focused on the security policies developed at CUNY Central Office. This includes but is not limited to generating strong passwords, learning about email spam, phishing and pharming, data backup, encryption, viruses, worms and botnets. The class material is periodically reviewed and updated
- The workshop instructs Queensborough Faculty and Staff on the basics of non-public University data and how it should be guarded against potential theft; it also provides general knowledge on how to protect themselves from internet threats.
- Maintain network security appliances that check all incoming traffic for the latest mail ware and block botnets, worms and viruses
- Investigate software agents that will block users from sending non-public university data off campus
- Prepare all security appliances for the change IPV6 internet protocol (and the QCC change from NATED approach)
- Prepare for 'The internet of Things" security risks.
- DESKTOP VIRTUALIZATION: This technology is the basis of cloud computing. Desktop Virtualization Interface (VDI) technology is available that can eliminate the need to re-image PCs as well as malware infections. This will lower QUEENSBOROUGH's helpdesk calls and lower the risk of hackers controlling an employee's desktop. VDI technology has additional security benefits which can lower the risk of data theft. In a virtualized environment, the user's desktop PC and all its data exist in a centralized server in IT. If the client PC is stolen, it does not contain any user data. Due to the characteristics of VDI, the client PC may never need to be upgraded as the Operating System is running on a server in IT. There are several security and TCO advantages to VDI. The pilot should be expanded from the current 5 English Dept. faculty to 15 for a more representative evaluation.


## $\nabla$ Maintenance

## Where We Are Now

As new technology is adopted maintenance is an increasing but necessary burden on resources. The ever-increasing base of installed equipment carries an increasing maintenance cost as the equipment comes off warranty. As this inventory ages, software updates become an expanding task and expense. Most new equipment is connected to the network and this infrastructure continues to grow this expanding infrastructure must be maintained and kept up to current standards. The maintenance of our large and complex system has become a central point of discussions regarding support staff, whether staff persons are assigned to specific departments or staff persons are part of a central support services facility. Beyond the technology infrastructure is the need for maintenance support for technology in instructional facilities associated with individual departments. Currently, courses offered through Blackboard and facilities established through the Tech Fee are supported through the ACC. Email, website hosting, the College network, and a host of other applications are supported through the Information Technology Department (IT) seven days a week. As the installation and use of instructional technology grows, the question of how to provide ongoing technical support must be addressed by the College community.

## Assessment of 2005-2009 Technology Plan Objectives

## Fully Implemented

- Crucial equipment requires $24 \mathrm{X7}$ support agreements while QCC can function with other equipment on 5 X 7 service. Equipment must be constantly evaluated for required necessary coverage at least cost. In this regard, our CISCO maintenance is now covered by University wide contract.


## Looking Forward

Network equipment is now covered by a University wide maintenance agreement. With this agreement comes a service that plots the projected life for this equipment. This report should be used as the basis for planning/budgeting equipment replacement.

## V. The Future of Technology @ Queensborough

Where We Are Now
Queensborough has a track record for successfully evaluating, implementing and maintaining new technologies in both academic and administrative settings. Queensborough will continue to keep abreast of developments in Information Technology and in Educational Technologies to fulfill our commitment to develop and support excellence in teaching and learning.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- The ACC installed a Cascade Content Management system
- CUNYfirst has a CRM component
- Text messaging has been superseded by the QCC mobile App QCC Connect. It can send targeted messages to a student's smart phone.
- IT has developed a CUNYfirst historical database from all extract data (805) files.
- Wireless access now requires authentication.
- The kiosks have been eliminated and replaced by digital signage
- Printer control has been introduced. Wireless device printing has become available.


## Partly Implemented

- CUNY Central Office is attempting a second try on video conferencing. Blackboard Collaborate addresses some of this need.
- The Writing Center has an iTutor system implemented by IT
- The ACC has a share a ride link on QCC website
- We are actively scanning Registrar records and Office of Faculty and Staff student surveys


## Looking Forward

Queensborough will continue to evaluate new technologies and implement them in ways that enhance the teaching and learning environment, as well as ways that make the administration of the College more efficient. While the future of technology is impossible to accurately predict, the following are technologies that we will be evaluating, exploring and in some cases implementing in the near term:

- Online technology support for students and faculty including how-to, processes, technology and opportunity availability, proper contact information, problem reporting, etc.
- Migrate to a modern VoIP phone system
- Expand indoor wireless door lock system to the majority of classrooms
- Implement a Line Management (Q) software application
- Expand the scanning initiative beyond Registrar/Faculty Staff Relations
- Expand QCC Connect functions and audience to other groups (prospective students, guests, alumni)
- Utilize iBecons with QCC Connect
- Introduce Predictive Analytics for student success and course section offerings
- Develop a graphical executive Dashboard application
- Explore the practicality of RF ID Technology for asset tracking
- Implement a user friendly/intuitive interface for CUNYfirst
- Develop a cancelled class notification methodology
- Expand printer control to labs and office spaces
- Expand Auto PC Backup environment to accommodate more than the current 100 desktops.


## $\nabla$ Promoting awareness and use of Technology

## Where We Are Now

Queensborough continues to provide for and further develop presentations, workshops and training programs for faculty, staff and students, so that participants become more aware of the value as they learn to use technologies within the educational program.

## Assessment of 2011-2015 Technology Plan Objectives

Fully Implemented

- Develop and promote a Queensborough webpage which will: make the campus community more aware of existing educational technology resources; and host Queensborough-developed educational applications and other downloadable digital content.
- Promote faculty use of the CUNY's Academic Commons to: facilitate campus-based group projects so that CUNY can become more aware of what Queensborough is doing and so that Queensborough faculty can become more aware of what others in CUNY are doing with regard to educational technology.
- Create online technology support websites for both students and faculty including how-to, processes, technology and opportunity availability, proper contact information, problem reporting, etc.


## Partly Implemented

- Host a "Technology Day" for the campus where successful and experimental uses of educational technology can be demonstrated, and materials can be distributed to facilitate exploration and possible replication. A "Technology Day" was never addressed, but the Office of Academic Affairs sponsored several technology-related Campus Conversations. In addition, each year a New Faculty Orientation and New Faculty Institute are conducted where participants are introduced to all manner of technology available to them.


## Looking Forward

- Continue to develop and promote a Queensborough webpage that will: make the campus community more aware of existing educational technology resources; and host Queensborough-developed educational applications and other downloadable digital content.
- Continue to promote faculty use of the CUNY's Academic Commons to: facilitate campus-based group projects so that CUNY can become more aware of what Queensborough is doing and so that Queensborough faculty can become more aware of what others in CUNY are doing with regard to educational technology.
- Continue to create online technology support websites for both students and faculty including how-to, processes, technology and opportunity availability, proper contact information, problem reporting, etc.


## $\nabla$ Implications for policy, practices, and facilities <br> \section*{Where We Are Now}

The Queensborough Technology Plan is under continuing review in the light of many factors, including the development of new policies, practices and facilities at the College and within the University. As the Academic Senate Standing Committees on Computer Resources review college practice and resources and consider the mission of the College there may be actions recommended by the Academic Senate with regard to policies that may relate to the technology resources of the College. Such policies will be taken into consideration by the process that reviews this Technology Plan.

## Assessment of 2011-2015 Technology Plan Objectives

## Fully Implemented

- With input from the appropriate campus constituents, Queensborough will develop a policy statement regarding the procurement and use of technologies which support the University's sustainability efforts. The Academic Senate Sustainability Committee was established during this Tech Plan's timeframe (2011 2015), and it provides input to the Tech Fee Committee for the purpose of supporting the University's sustainability efforts
- Queensborough will work in concert with the CUNY CAT R\&D Sub-Committee to establish itself in a leadership role in researching, implementing, evaluating and publishing on advancements in educational technology. The College has two representatives on the CUNY Committee on Academic Technology (CAT) and they are members of the CUNY CAT R\&D Sub-Committee. This committee researches and evaluates emerging educational technologies, and results are brought back to the campus for testing and possible implementation.


## Not Implemented

- Queensborough's website Committee will continue to monitor and update the College Website Policy in an effort to keep it current with regard to technological advances and the needs of the campus community


## Looking Forward

- With input from the appropriate campus constituents, Queensborough will continue to develop policy statements as required regarding the procurement and use of technologies that support the University's sustainability efforts.
- Queensborough's website Committee will continue to monitor and update the College Web Site Policy in an effort to keep it current with regard to technological advances and the needs of the campus community


## $\nabla$ Support

## Where We Are Now

The College has developed programs and sources of support for students, staff and faculty. The College continues to increase the amount and variety of educational technology as well as support for it and encouragement of its use. The IT Help Desk operates daily including evening hours on Tuesdays and Wednesdays until 7:00 PM and weekend coverage

## Assessment of 2011-2015 Technology Plan Objectives

Fully Implemented

- As information and educational technologies have become part of the infrastructure, the College will continue to assess their effectiveness and make plans to address particular needs as well as the continuing growth of use, and demand for further use. As new technologies emerge and are adapted and adopted for use with the instructional program, the College will continue its tradition of developing the resources to support their use and assess their effectiveness.
- Support services provided by student mentors will continue and grow as funding allows
- Additional online support will be developed for both students and faculty


## Looking Forward

As new technologies emerge for use with the instructional and administrative program, the College will continue its tradition of developing the resources to support their use and assess their effectiveness.

| Number of: | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Internet connection speed | 1.5 Mbps | 20 Mbps | $>300 \mathrm{Mbps}$ |  | 2000 Mbps |
| Wired network nodes | 1,200 | 3,000 | 4,300 |  | 9,312 |
| Switches - wired network access <br> *new large capacity switches | 100 | 160 | 150 |  | 173 |
| Wireless access points | 0 | $95(11$ <br> $\mathrm{Mbps})$ | $135(300$ <br> $\mathrm{Mbps})$ | $236(900$ <br> Mbps) |  |
| Classrooms with wired Internet <br> connections | 0 | $175(\mathrm{All})$ | $175(\mathrm{All})$ |  | 175 (All) |
| Fixed smart rooms (college) | 0 | 11 | 54 |  | 99 |
| Fixed smart rooms (departmental) | 2 | 35 | 40 |  | 70 |
| Mobile teaching podiums | 0 | 12 | 12 |  | 12 |
| Bb Courses | 0 | 350 | 1,141 | 2463 |  |
| Students using Bb | 0 | 4,700 | 23,826 | 29144 |  |
| Faculty Members using Bb | 0 | 85 | 563 | 1002 |  |
| Fully online courses | 0 | 14 | 33 | 20 |  |
| Partly online courses | 0 | 30 | 34 | 178 |  |
| Faculty/Staff/Adjunct email accounts | 725 | 1,100 | 2,500 |  | 3,500 |
| Student email accounts | 0 | 12,000 | 14,500 |  | 16,000 |

## Appendix II - Glossary of Terms

The following are definitions for some special terms encountered in this Technology Plan:

- eTeam: a group of faculty members and administrators spearheading and providing direct support for the campus’ eLearning initiatives via the Office of Academic Affairs
- Wireless-N: the latest wireless internet standard providing 300 Mbps speed - a.k.a. Wi-Fi for use by mobile devices
- CUNYfirst: CUNY's brand name for its PeopleSoft ERP implementation (Fully Integrated Resource \& Service Tool)
- ERP: Enterprise Resource Planning - a set of integrated software components to manage the college.
- Student Mentors: a group of technology-savvy students, hired under the Tech Fee Intern Program, who provide support for the various technology initiatives around the campus including ePortfolio, eLearning, Service Learning, College 101, and the virtual learning communities known as the Student Wiki Interdisciplinary Group (SWIG).
- Faculty Mentors: a group of online-experienced faculty members providing direct support as they each guide a small group of inexperienced faculty members through the process of creating quality, standards-based online courses.
- PNET: Partly Online course designation - a.k.a. Blended or Hybrid courses
- FNET: Fully Online course designation - a.k.a. Asynchronous courses
- CETL: Center for Excellence in Teaching and Learning
- ACC: Academic Computing Center


[^0]:    ${ }^{1}$ According to the U.S. Bureau of Labor Statistics, growth in information security jobs is projected at $37 \%$ from 2012-2022, a rate two and one-half times faster than the average for all occupations: http://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm.
    ${ }^{2}$ See http://www.labor.ny.gov/stats/Isproj.shtm for 2012-2022 growth projections and http://burning-glass.com/wpcontent/uploads/Cybersecurity_Jobs_Report_2015.pdf for industry-specific cybersecurity employment increases over the last 5 years. Cybersecurity workers earn 2-3 times more than the national average for similarly educated employees.
    ${ }^{3}$ http://www.washingtonpost.com/news/capital-business/wp/2014/03/05/evidence-that-the-d-c-area-really-is-a-hotbed-for-cybersecurity-jobs/and http://www.burning-glass.com/research/cybersecurity/; cybersecurity postings have grown 74\% from 2007-2013 nationally.

[^1]:    ${ }^{4}$ John Jay students are among the poorest of senior college students at CUNY according to the most recent IPEDS' Pell eligibility reporting data. CJA community college students rank in the bottom half of all CUNY college students, with one exception, using the same criterion.

[^2]:    *Students are required to take particular courses in some areas of the Common Core that fulfill both general education and major requirements. If students do not take the required courses in the Common Core, they will have to take additional credits to complete their degree requirements.
    All students must complete two (2) WI designated classes to fulfill degree requirements.
    **Elective: ET 725 Computer Network Security strongly recommended.

[^3]:    Assessment of 2011-2015 Technology Plan Objectives
    Fully Implemented

    - Fully integrated data entry and use of Starfish as repository for all student appointments rendered and services delivered.
    - Seamless interface with CUNY First enables the auto-population of student data - triggered by means of a student ID card swipe - against CWC database back-end tables which populate appropriate fields of the CWC database. This eliminates any human error inputting data.
    - Insurance against data loss in Starfish by means of verification audits of duplicate data capture between the CWC swipe database system, and Starfish.

