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BROOKLYN COLLEGE

OF

THE CITY UNIVERSITY OF NEW YORK

FACULTY COUNCIL

Meeting of 12 December 2017

The Committee on Graduate Curriculum and Degree Requirements herewith submits its recommendations in Curriculum Document 243.

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Respectfully submitted,

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MJ Robinson	Television and Radio
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Members of the Graduate Curriculum Committee gratefully acknowledge the guidance and assistance of Lea Honigwachs, Special Assistant to the Provost.

Members of Faculty Council with any questions are urged to contact Jocelyn Wills at jwills@brooklyn.cuny.edu prior to the meeting.

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SECTION A-III: CHANGES IN DEGREE PROGRAMS

Conservatory of Music

Advanced certificate program in music performance HEGIS code 1004; SED program code: 36848 (158 cr.); 36849 (306 credits)

Matriculation requirements:

Applicants for the program must a) have completed a bachelor's degree in music or music performance at a U.S. institution or professional equivalent, or a non-U.S. equivalent institutional degree and b) pass a live audition before Conservatory faculty at an advanced level that demonstrates clear promise as a performer. A request for an audition appointment may be made by telephone to the Conservatory office.

International applicants for whom English is a second language are required to take the Test of English as a Foreign Language (TOEFL) and must have a minimum score of 500 on the paper examination (or TOEFL Computer 173; TOEFL iBT 60).

Students who hold an accredited bachelor's degree with at least 36 credits in music courses, including courses in analysis, counterpoint, harmony, and history, may also apply. Consideration is also given to applicants who do not meet course requirements but have unusual talent or experience equivalent to course work. Such applicants should consult the deputy chairperson.

A diagnostic placement examination is given to all admitted students. The test includes writing skills (harmonic and contrapuntal techniques), analysis, history, and literature. Further information about the examination may be obtained from the deputy chairperson.

General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements

Fifteen Eighteen (or thirty-six) credits over one year (or two years) are required for the advanced certificate in music performance. The duration of study depends on a student's level of ability and performance career goals. The program of study must be approved by the Conservatory.

Students must complete requirements for the program as follows. Any remaining credits required for the degree must be in music courses chosen in consultation with the deputy chairperson. Any course substitutions must be approved in writing prior to registration. Required ensembles are assigned by the Conservatory based on the entrance audition.

First Year (158 credits):

Music 6791 and 6792 (Adv. Performance I & II); 6813 (Repertory Study for Major Instrument or Voice, taken both semesters); two courses from Music 7700 (Opera Workshop), 7760 (Orchestra), or 7770 (Wind Ensemble); two courses chosen from Music 7740 or 7741 (Chamber Music or Contemporary Music Ensemble); two courses chosen from Music 7441 (Intro. Music

Business & Marketing), 7840 (Sem. in Performance Practices) or a department-approved 7000level Music course.;and 3 department-approved elective credits in 7000-level Music courses.

Second Year (158 credits):

Music 6793 and 6794 (Adv. Performance III & IV); 6813 (Repertory Study for Major Instrument or Voice, taken both semesters); two courses from Music 7700 (Opera Workshop), 7760 (Orchestra), or 7770 (Wind Ensemble); two courses chosen from Music 7740 or 7741 (Chamber Music or Contemporary Music Ensemble); two courses chosen from Music 7441 (Intro. Music Business & Marketing), 7840 (Sem. in Performance Practices) or a department-approved 7000-level Music courses.

Students must perform a graded jury examination at the end of their first and third terms of study (i.e. for Music 6791 and 6793). A faculty-approved, graded recital must be presented at the conclusion of the second and fourth terms of study in this program (i.e. for Music 6792 and 6794).

The list of the music performance faculty is available online at http://www.brooklyn.cuny.edu/web/academics/schools/mediaarts/departments/music/faculty.php

RATIONALE:

Students will benefit from the additional credits (3 for the one year option and 6 for the two-year option) in the following ways: The additional course offerings will enhance the curriculum since they are aimed specifically towards helping the student meet the demands of being a professional musician in today's competitive field. These additional course offerings will provide the student an opportunity to develop entrepreneurial skills as well as enhancing their development as performers. Furthermore, the additional credits and content will bring the program into alignment with other comparable performance programs offered elsewhere.

Date of department approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-III: CHANGES IN DEGREE PROGRAMS

Conservatory of Music

Advanced diploma in music performance

HEGIS code 1004; SED program code: 36846 (158 credits); 36847 (306 credits)

Matriculation requirements

Applicants for the program must have completed a Master's degree in music performance at a U.S. institution or professional equivalent, or a non-U.S. equivalent institutional degree. Applicants for the program must pass an audition at the time of application. A request for an audition appointment may be made by telephone to the Conservatory office.

International applicants for whom English is a second language are required to take the Test of English as a Foreign Language (TOEFL) and must have a minimum score of 500 on the paper examination (or TOEFL Computer 173; TOEFL iBT 60).

General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements

Fifteen<u>Eighteen</u> (or thirty-six) credits over one year (or two years) are required for the advanced diploma in music performance. The duration of study depends on a student's technical level and performance career goals. The program of study must be approved by the conservatory.

Students must complete requirements for the program as follows. Any remaining credits required for the degree must be in music courses chosen in consultation with the deputy chairperson. Any course substitutions must be approved in writing prior to registration. Required ensembles are assigned by the conservatory, based on the entrance audition.

First Year (158 credits):

Music 7795 and 7796 (Distinguished Performance I & II); 7813 (Repertory Study for Major Instrument or Voice, taken both semesters); two courses from Music 7700 (Opera Workshop), 7760 (Orchestra), or 7770 (Wind Ensemble); two courses chosen from Music 7740 <u>or 7741</u> (Chamber Music or Contemporary Music Ensemble); <u>two courses chosen from Music 7441</u> (Intro. Music Business & Marketing), 7840 (Sem. in Performance Practices) or a departmentapproved 7000-level Music course.;and 3 department-approved elective credits in 7000-level Music courses.

Second Year (158 credits):

Music 7797 and 7798 (Distinguished Performance III & IV); 7813 (Repertory Study for Major Instrument or Voice, taken both semesters); two courses from Music 7700 (Opera Workshop), 7760 (Orchestra), or 7770 (Wind Ensemble); two courses chosen from Music 7740 or 7741 (Chamber Music or Contemporary Music Ensemble); two courses chosen from Music 7441 (Intro. Music Business & Marketing), 7840 (Sem. in Performance Practices) or a department-approved 7000-level Music course.;and 3 department-approved elective credits in 7000-level Music courses.

Students must perform a graded jury examination at the end of their first and third terms of study (i.e. for Music 7795 and 7797). A faculty-approved, graded recital must be presented at the conclusion of the second and fourth terms of study in this program (i.e. for Music 7796 and 7798).

The list of the music performance faculty is available online at http://www.brooklyn.cuny.edu/web/academics/schools/mediaarts/departments/music/faculty.php

Rationale:

Students will benefit from the additional credits (3 for the one year option and 6 for the two-year option) in the following ways: The additional course offerings will enhance the curriculum since they are aimed specifically towards helping the student meet the demands of being a professional musician in today's competitive field. These additional course offerings will provide the student an opportunity to develop entrepreneurial skills as well as enhancing their development as performers. Furthermore, the additional credits and content will bring the program into alignment with other comparable performance programs offered elsewhere.

Date of department approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-III: CHANGES IN DEGREE PROGRAMS

Conservatory of Music

M.F.A. degree program in media scoring

HEGIS code 1004.10; SED program code: 37733

The 60-credit master of fine arts in Media Scoring is for the composer who seeks<u>combines</u> advanced knowledge and<u>with</u> practical experience in the composition and production of music <u>and sound scores</u> for media, including <u>filmcinema</u>, television, video games, animation, and other commercial applications. <u>Areas of study include music composition, conducting, orchestration, music supervision, music business, music editing, sound design, and recording. Media Scoring students take classes at Feirstein Graduate School of Cinema and collaborate directly on The three-year program trains historically and theoretically informed, technically skilled composers who are working in collaborative contexts with visual media projects as part of their curriculum., and who are pursuing careers in the arts and commercial media industry. The program focuses on Students have the opportunity to work one-on-one with faculty as well as in small group classes, developing the knowledge and skills to master directly related to the process of scoring process as it exists today., providing matriculated students with an understanding of the art and business of visual media and with experience in the technologies commercially used for this field. The curriculum includes two semesters of weekly private composition lessons and two semesters of private capstone project lessons with a member of our faculty.</u>

Admissions requirements:

Applicants for this M.F.A. program in Media Scoring must who have completed a bachelor's degree satisfy the undergraduate requirements of this program. General matriculation and admissions requirements of the Division of Graduate Studies are in the section "Admission." in music, or have a completed bachelor's degree with at least 36 credits in music courses (including courses in analysis, counterpoint, harmony, and history). Applicants must have experience as composers and an existing portfolio of works.

Media Scoring M.F.A. Curriculum

Sixty credits are required for the master of fine arts degree in Media Scoring.

Courses in the Conservatory of Music offered toward the degree must be 7000-level courses. The program of study must be approved by the Conservatory.

Courses required include (a-c):

a) All of the following sixteen Music courses (39 credits): Music 7203X, 7341X taken and completed four times, Music-7342X, 7343X, 7352X, 7353X, 7354X, 7378X, 7385X, 7440X, 7663X, 7871X, 7872X.

b) <u>At least</u><u>The following</u> 12 credits of <u>graduate cinema</u><u>Film M.F.A.</u> courses <u>approved by the</u> <u>program Director. Recommended courses include</u>: Film <u>7011G</u>, <u>7012G</u>, 7013G-<u>World Cinema</u> to 1960, <u>7014G</u>, <u>7021G</u>, <u>7022G</u>, <u>Film</u> 7023G-<u>World Cinema</u> <u>1960-Present</u>, <u>Film</u> <u>7202G</u> <u>Cinema</u> <u>Aesthetics</u>, Film 7811G, and <u>7953G</u>. <u>Production</u> <u>Workshop II: Post-Production</u>

c) At least 9 additional credits of electives in graduate courses approved by the program Director. Recommended courses include <u>Music</u>MUSC 7015X, 7016X, <u>7225X</u>, <u>7226X</u>, <u>7344X</u>,

<u>7345X, 7370X, 7386X</u>7664X, 7371G, 7372G, <u>7606G, 7664X, 7636X, 7646X,</u> 7873X, 7874X, 7386X, 7606G, and 7642X, <u>7881X, 7882X, 7883X, U7911X, U7912X, and U7913X.</u> One or two additional semesters of Music 7341X may also be taken for credit as an elective.

Additional requirements for a M.F.A. degree

A placement assessment will be given to entering students to assess their level of skill and understanding of digital media skills and essential music skills. Students who do not demonstrate adequate skills will be asked to complete remedial coursework.

All students in this program must meet with faculty for a formal progress evaluation. This will occur for full-time students near the end of their second semester in the program. For part-time students, it will happen after they have completed twelve credits of coursework in the program.

All candidates for this degree must complete a capstone project. This project will be researched and created in close consultation with a faculty member during the Media Scoring Capstone Seminar I and II courses. It must be a new creative or research work deemed of substantial significance and approved by the Media Scoring faculty.

Rationale:

In consultation with film faculty, more film classes are being offered to satisfy the degree requirements of Media Scoring. Music students will now be able to take a wider range of Film courses that will inform their practice as it relates to creating music for picture. One course, Film 7202G Cinema Aesthetics, has been eliminated as a requirement, as the nature of the course has been designed primarily for cinematographers, not composers. Additionally, the following music courses have been added as possible electives toward the degree: independent study, internships, advanced keyboard workshop, special topics, additional scoring lessons, and a seminar in advanced topics in music for media. Program description has been amended to better reflect the content of study. Changed the admissions requirement to the exact language of all other MFA degrees at Feirstein Graduate School of Cinema (bachelor's degree required). Removed the placement test requirement, since that is not required for the MFA in Media Scoring.

Date of department approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-III: CHANGES IN DEGREE PROGRAMS

Department of Business Management

M.S. degree program in business administration

HEGIS code 0517; SED program code 01895

A business administration degree can provide students with a variety of career paths ranging from public policy to international finance to banking. The Accounting, Business Management, Finance, and Economics Departments offer a 33-credit master of science degree in business administration with five options for specialization: economic analysis, global business, accounting, general business, business intelligence and data analysis.

Option one is more flexible and allows students to explore different areas of economics including health economics, public finance and public policy, and international trade. Option two is more focused and is expressly for students with an interest in global business. It includes courses in global finance and management, international economics and finance, bargaining and conflict resolution, global business environment, and international human resource management.

Option three is for students with an interest in accounting. An undergraduate degree in accounting is not required. However, this option is only open to students who have taken Accounting 2001, 3001, 3011, 3021, and 3101(introductory accounting, managerial accounting, financial accounting, and income taxation) or the equivalent.

Option four is a more flexible major for those interested in general business. It is of interest to those who may have had previous undergraduate or graduate coursework in business and want to obtain a general business degree and also to those who never previously had such coursework and want to obtain a business degree. It can be customized by the student to the student's interest in a broad range of business topics.

Option five is for students interested in a career in applied statistical analysis or business analytics

The Master of Science in Business Administration at Brooklyn College provides students with the knowledge and skills to successfully pursue a wide range of careers in management, marketing, business analytics, international business, and economic analysis.

All applicants must have undergraduate courses in macroeconomics, microeconomics, statistics, and calculus.

Degree Requirements (<u>30 – 33 credits)</u>

A minimum of thirty-three credits is required for the degree. Students must complete at least 24 credits in <u>courses offered by</u> the Business Management, Accounting, Finance, and <u>or</u> Economics Departments. <u>Consistent with college policy, transfer credits for graduate courses</u> taken at other institutions may be accepted for some of these courses at the discretion of the <u>chairperson or deputy chairperson</u>. The following courses are required: Economics 7000X, 7020X, 7021X, 7025X. Option 1 students who have taken Mathematics 2101 or equivalent may, with permission of the graduate deputy, waive Economics 7025X, and substitute an appropriate course in Economics or another department. Option 1 students who

have taken Mathematics 2501 or Mathematics 3501 or equivalent may, with permission of the graduate deputy, waive Economics 7020X, and substitute an appropriate course in Economics or another department. Students selecting Option 2 or Option 3 (below) may take either Economics 7000X or Business 7206X. They also take either Economics 7020X or Business 7276X: Economics 7021X or Business 7204X or Business 7279X: Economics 7010X or Economics 7215X or [Business 7215X] or Finance 7215X; and either Economics 7025X or Business 7278X. Option 3 students who have taken an undergraduate course in calculus may, with the permission of the graduate deputy, waive Economics 7025X and substitute a course from the Option 3 requirements listed below. With permission of the graduate deputy chairperson, up to nine credits may be taken in appropriate courses in other departments. With permission of the graduate deputy chairperson, up to 12 credits may be accepted for work done at other institutions. Option 4 students with permission of the graduate deputy may substitute any or all courses from the graduate core of Economics 7000X or Business 7206X, Economics 7010X or Economics 7215X or Finance 7215X or [Business 7215X]. Economics 7020X. Economics 7021X or Business 7204X or Business 7279X. Economics 7025X or Business 7278X with any Business course. This will typically be allowed for those with previous undergraduate or graduate coursework in these course topics. Option five students take the courses described below. Students select one of the following options to complete the remaining credits:

Option 1: Economic Analysis (<u>33 credits)</u>

Required: 15 credits (5 courses): Economics 7000X, Economics 7010X, Economics 7020X, Economics 7021X, and Economics 7025X.

<u>Major Specific:</u> A minimum of 18 credits (6 courses) from the following: Economics 7215X or Finance 7215X or [Business 7215X], Finance 7216X, Economics 7230X or Business 7230X, Economics 7309X, Economics 7027X, Economics 7028X, Economics 7030X, Economics 7040X, Economics 7045X, Economics 7050X, Economics 7055X, Economics 7060X or Health and Nutrition Sciences 7144X, Economics 7090X, Economics 7091G, and Economics 7095G.

<u>Substitutions:</u> With the permission of the graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the 18 credit <u>Major Specific requirement: in</u> Option 1. <u>Students who have taken Mathematics 2101 or equivalent may, with permission of the graduate deputy, waive Economics 7025X, and substitute an appropriate course in Economics or another department. Students who have taken Mathematics 2501 or Mathematics 3501 or equivalent may, with permission of the graduate deputy, waive Economics 7020X, and substitute an appropriate course in Economics or another department. (Students that have taken <u>Finance Business</u> 7215X may not register for <u>Economics ECON-7215X.</u>)</u>

Option 2: Global Business <u>(30 credits)</u>

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major Specific requirement: 12 credits (4 courses) from the following: Business 7210X, Business 7220X, Business 7257X, and Business 7260X.and a minimum of 15 credits (5 courses) from the following: Business 7131X, Business 7200X, Business 7202X, Business 7204X, Business 7208X, Business 7210X, Business 7212X, [Business 7216X] or Finance 7216X, [Business 7240] or Finance 7240X, Business 7250X or Psychology 7246G, Business 7255X or Psychology 7247G, Business 7257X, 7260X, 7265X, 7276X, 7278X, 7279X, 7290X, 7203X or Television and Radio 7727X, Economics 7215X or [Business 7215X] or Finance 7215X, Economics or Business 7230X, Economics 7027X, Economics 7028X, Economics 7030X, Economics 7060X or Health and Nutrition Sciences 7144X, and Economics 7095G.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Courses cross listed with Business courses such as Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television and Radio 7727X may also be used to satisfy this requirement.

<u>Substitutions:</u> With the permission of the graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the <u>Electives 18 credit</u> requirement in Option 2.

Option 3: Accounting (30 credits)

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

<u>Major Specific requirement: 12 credits (4 courses) from the following: A minimum of 18 credits</u> (6 courses). The required courses are: Accounting 7108X, Accounting 7109X, and at least two additional courses with an Accounting prefix (ACCT). (Courses cross listed with Accounting <u>courses</u> such as Business 7131X may also be used to satisfy this requirement). Students also choose another two courses from the following: Business 7131X or Accounting 7131X, [Business 7215X] or Finance 7215X or Economics 7215X, [Business 7216X] or Finance 7216X, Business 7230X, [Business 7240X] or Finance 7240X, Business 7260X, Business 7265X, Business 7276X, Business 7278X, and Business 7290X.

<u>Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement.</u> <u>Courses cross listed with Business courses such as Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television and Radio 7727X may also be used to satisfy this requirement.</u>

<u>Substitutions:</u> With the permission of the graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the <u>Electives</u> 18 credit requirement in Option 3.

Option 4: General Business (<u>30 credits)</u>

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major Specific requirement: 18 credits (6 courses) from the following: Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Courses cross listed with Business courses such as Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television and Radio 7727X may also be used to satisfy this requirement. A total of 33 credits with a minimum of 18 credits (6 courses) from any Business graduate course. As noted above, the 5 graduate program core classes may be substituted by additional Business courses with permission of the graduate deputy.

<u>Substitutions:</u> With the permission of the graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Major Specific_requirement.

Option 5: Business Intelligence and Data Analysis (30 credits)

Required: 12 credits (4 courses) from the following: A total of 33 credits. The required courses for this option are: Economics 7000X or Business 7206X; Economics 7010X or Economics 7215X or Finance 7215X; Economics 7025X for students who have not taken at least one year of calculus; Business 7276X, Business 7278X, Business 7279X or Business 7290X, Business 7230X or Economics 7230X, Economics 7020X; and Economics 7021X or Business 7204X or Business 7208X or Business 7279X; and Economics 7025X. With the permission of the graduate deputy chairperson, students will be advised which additional courses to take to complete the 33 credits.

Major Specific requirement: 12 credits (4 courses) from the following: Business 7230X or Economics 7230X; Business 7276 X; Business 7278X; and Business 7279X.

<u>Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement.</u> <u>Courses cross listed with Business courses such as Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television and Radio 7727X may also be used to satisfy this requirement.</u>

Substitutions: Those who completed one year of calculus can substitute Economics 7025X with an additional third Elective class. With the permission of the graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Electives requirement.

Rationale: A) There are five options for the degree and students often take courses from one option and think that it can qualify as a substitution for a course in another option. Students are then angry and frustrated when they are told that the course they took is not applicable toward the option that they chose for their degree. The revised bulletin approach replaces the potentially confusing previous general introduction content with a brief and focused general

introduction and then specifically provides by each option very clear and specific information that indicates the requirements, major-specific courses, electives, and substitutions for each option. Almost all of the underlined content is not truly "new" content but rather content from elsewhere that is shown in strikethrough as "deleted." Please note that the term used is Required and not Core. For many of the options, there are similar Required courses for each option. Some flexibility is provided to allow the student with different learning interests to choose from certain Required courses.

B) More than 90% of the Option 2, 3, 4 and 5 students are part-time students. The Business Management department is seeking the prestigious AACSB accreditation. For accreditation purposes, we would like students to complete their degree in a shorter time period. We believe that a 30-credit master degree will achieve this goal. Furthermore, many other business master degrees at other colleges are 30 credits and not 33 credits. At this time, Economics is retaining for option 1 (the Economics-focused option) the requirement of 33 credits. This approach of a different number of credits for different options is consistent with the approach shown in the current Brooklyn College graduate bulletin where there are master degrees that have the same HEGIS Code and SED Program Code and where different options have different number of credit requirements. There are at least 8 different departments that have such an approach in the current Brooklyn College graduate bulletin. Below are some specific examples from these 8 departments. Childhood, Bilingual and Special Education has the degree of M.S. in Education degree program: childhood education teacher (grades 1-6) liberal arts HEGIS code 0802.00; SED program code 26826. Option A requires 30 credits, Option B requires 33 credits, and Option C requires 45 credits. Early Childhood Education/Art Education has the degree of M.S. in Education degree program: early childhood education teacher (birth through grade 2) HEGIS code 0823; SED program code 26736. Option A requires 30 credits, Option B requires 33 credits, and Option C requires 45 credits. Health and Nutrition Science has the degree of M.A. degree program in community health HEGIS code 1214; SED program code 78495. Community Health Education requires 36 credits while Thanatology requires 33 credits. Mathematics has the M.A. degree program in education: mathematics teacher (7-12) HEGIS code 1701.01; SED program code 26734. Option A requires 30 credits, Option B requires 30-45 credits, and Option C requires 30-39 credits. Modern Languages and Literatures has the M.A. degree program in education: French teacher (7-12) HEGIS code 1102.01; SED program code 26797. Option A requires 30 credits while Option B requires 30-46 credits. Physics has the M.A. degree program in education: physics teacher (7-12) HEGIS code 1902.01; SED program code 26762. Option A requires 30 credits while Option B requires 30-40 credits. Political Science has the M.A. degree program in political science HEGIS code 2207; SED program code 02108. Concentration I of International Affairs and Global Justice requires 30 credits while Concentration II of Urban Policy and Administration requires 33 credits. Secondary Education has the M.A. degree program in education: biology teacher (7-12) HEGIS code 0401.01; SED program code 26742 (options A and B). Option A requires 34 credits while Option B requires 34-50 credits.

C) A student currently taking the Global Business (option 2) can potentially take just one major-specific course related to Global Business and graduate with a master degree. We want students to take at least 4 major specific courses. We also ensured that this Major Specific approach of 4 required courses will occur for all the options.

D) Students have different learning interests. In the Required courses for options 2, 3, 4 and 5, we offer a number of choices of Business 7204X or Business 7279X or Economics 7021X. We believe that it is important to recognize that some students value learning about marketing. We add and offer as an additional choice the course of Business 7208X. E) We added the opportunity for students to explore Electives from any Business course. We believe

that students may want to explore an additional area while pursuing and focusing on a particular option for their major area of study.

- 1. These changes and improvements to the graduate degree are relevant to the college mission to "provide an outstanding educational experience for our students." and is also relevant to the college mission "to offer outstanding academic majorsin business with effective pathways to graduate education, professional education, and career opportunities." These changes and improvements to the graduate degree are relevant to the Business Management programmatic mission by ensuring that students obtain sufficient knowledge in the courses taken related to their area of business academic studies.
- 2. The context for the changes and improvements to the graduate degree is that the new approach will be clearer to students about what courses to take, ensuring that students take courses very relevant to their area of study, and will improve more timely graduate rates.
- 3. The course objectives support the program goals as the major-specific courses are very relevant to the area of study in each option.
- 4. The electives added offer students the opportunity to explore other areas of business not related to their area of study.
- 5. The courses added as Required, Major Specific, or Electives strengthen and support the rigor of the options for obtaining a degree.
- 6. Three programmatic goals: a) assess student interest for each option of the degree, and b) assess gender distribution for each option of the degree, c) obtain time to completion for each option of the degree
- A) Goals to be assessed: Year 1: number of students choosing to major in each option, Year 2: gender distribution of number of students choosing to major in each option, Year 3: Number of months taken to complete each option of the degree.

B) The process to obtain the information is that the college will be contacted to provide the necessary data for our goals.

C) The college Institutional Research department provided on September 6, 2017 the part-time percentages for each of the 5 options for US resident students and international students. Data for US resident students are: Option 1 (100.00%), Option 2 (93.90%), Option 3 (96.67%), Option 4 (86.81%), and option 5 (85.07%). Data for international students are: Option 1 (100.00%), Option 2 (86.67%), Option 3 (100.00%), Option 4 (100.00%), and option 5 (100.00%).

D) Close the loop process. Faculty will review the obtained data to decide if they are satisfied with the performance on each of these three goals. If all is well, we will continue with the current curriculum approach. If it is determined that it is not going well, faculty will meet to discuss revising the curriculum.

Date of departmental approval: 17 October 2017

Effective date of the change: Fall, 2018

Department of Computer and Information Science

M.A. degree program in computer science

HEGIS code 0701; SED program code 77202

Matriculation requirements

Applicants are expected to have the equivalent of at least 15 credits in computer and information science and related areas, including all of the following: knowledge of a high-level computer language (preferably C++ or Java), knowledge of assembly language and computer architecture, a course in discrete structures, a course in data structures, and a course in calculus. Students who do not have all of these requirements can be accepted with the condition that they complete these courses at the undergraduate level.

General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission."

Degree requirements

Thirty credits are required for the degree. Students must maintain at least a B (3.00) average. Students must complete 30 credits in courses numbered 7000 and above, including at least three courses labeled with an asterisk (*) and at least one course from each of the following five groups:

- 1. Computer and Information Science 7310X, 7312X, 7100X, 7110X, 7120X, 7124X, 7132X;
- 2. Computer and Information Science 7200X, 7210X, 7212X, 7214X;

3. Computer and Information Science 7410X, 7412X, 7510X, 7512X, 7610X, <u>7700X</u>, 7414X, <u>7440X</u>, 7620X, 7500X;

- 4. Computer and Information Science 7422X, 7220X, 7221X, 7224X, 7226X, 7228X;
- 5. Computer and Information Science 7302X, 7320X, 7330X, 7360X, 7332X, 7334X.

Up to 10 credits in courses in other departments may be substituted, with the permission of the graduate deputy chairperson.

Graphics/Multimedia concentration: Students who wish to have a concentration in graphics/multimedia should take any three of the following courses as part of their program in satisfying the degree requirements: Computer and Information Science 7610X, 7620X, 7622X, 7630X, 7640X, 7642G, 7650X.

Students must complete one of the following: (a) Computer and Information Science 7990G and a thesis acceptable to the department; no more than 6 credits in thesis research may be counted toward the degree; or (b) pass a written comprehensive examination.

As an exception to the general college rule, the comprehensive examination in the Department of Computer and Information Science may be taken in the term preceding the one in which the student will complete all course requirements for the degree. However, all other college regulations concerning the comprehensive examination still apply. Students are strongly advised to take advantage of this exception and to take the comprehensive examination in the earlier semester.

Rationale:

The elective courses for the M.A. in Computer Science are being updated to reflect courses that students should be taking to prepare themselves either for positions as algorithmic developers or to enter Ph.D. programs in Computer Science. The changes were guided by the assessment of the graduate program that was undertaken in the past two years.

CISC 7100 is added to group 1, Operating Systems and Language courses because it introduces students to programming at the level of the operating systems. CISC 7110, Compiler Construction, is being removed because much of its content is now in CISC 7120. The courses CISC 7132 has been withdrawn.

In the group 3, Software Application courses, CISC 7700X, Introduction to Data Science is being added to allow students to study the important area of data mining. CISC 7440, Pattern Recognition and Neural Networks, is another important course in modern big data analysis. CISC 7500, Introduction to Management Information Systems, is being removed because it does not deal with data analysis as all the other courses do.

CISC 7226X, Information and Computation, had been inadvertently left off the list of courses in Theoretical Computer Science, the group 4 courses. It is a regularly offered course that covers important areas of theoretical computer science.

CISC 7320X, Computer Security, is an important topic which every master's level student should take. It is being added to the group 5, Architecture and Networking courses. The course CISC 7360X is being removed since it has not been offered in many years and will be withdrawn.

Assessment of the M.A. in Computer Science involves comparisons with the master's level requirements with other institutions offering master's degrees, surveying student needs and ensuring that students who graduate from our program satisfy entrance requirements into Ph.D. programs. After the changes have been available for at least a full academic year, assessment of the new course, CISC 7700, will be performed.

Date of departmental approval: 11 November 2017

Effective Date of the Change: Fall, 2018

Department of Computer and Information Science

M.S. degree program in information systems HEGIS code 0702; SED program code 89058

The M.S. in information systems is designed for students who elect to focus on the use of computer systems to manage business and administrative operations and issues.

The program provides preparation for a wide variety of positions within the constantly expanding fields of information systems and technology, including computer systems software engineer, computer applications software engineer, computer systems analyst, database administrator, and network systems and data communication analyst. All of these positions appear in the ten top salaried jobs in the Bureau of Labor Statistics list of the thirty fastest growing jobs, projected through 2014. The program also prepares students for doctoral studies or research work in the field.

A student whose first degree was in an area other than computer science area can take undergraduate prerequisite courses at Brooklyn College <u>at the undergraduate level</u> to prepare for the master's program. All graduate courses are offered in the evening, making it convenient to combine work with study. A wide variety of courses are available in such fields as information systems, artificial intelligence, networks, multimedia, database systems, algorithms and problem solving, and many others. Our faculty members have published widely in all of these fields, and many are recognized experts in their areas.

Matriculation requirements

Applicants are expected to have the equivalent of at least 18 credits in computer and information science and related areas, including all of the following: knowledge, <u>equivalent to at least a year of study</u>, of a high-level computer language (preferably C++ or Java), knowledge of assembly language and a course in computer architecture <u>or organization</u>, a course in discrete structures, a course in data structures, a course in calculus, and a course in probability and statistics. Students who do not have all of these requirements <u>lack at most three of the prerequisite courses</u> can be accepted with the condition that they complete these courses at the undergraduate level.

General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission."

Degree requirements

Thirty-six credits are required for the degree. Students must maintain at least a B (3.00) average.

Students must complete all of the following: (a) Computer and Information Science 7300X or 7310X, 7500X <u>or 7522X</u>, 7510X, <u>7520X</u>, 7530X, <u>7520X</u>, and 7540X.

Students who have completed an undergraduate course in the area of one or more of these courses may, with the permission of the department, substitute another 7000-level course in the

department for each such course.

(b) Two courses chosen from among Computer and Information Science 7100X, <u>7120X</u>, 7124X, 7132X, 7354X, 7410X, 7412X, 7414X, 7512X, and 7610X <u>and 7700X</u>.

Students who take the thesis option (see "f" below) may, with permission of the department, present a maximum of 3 credits in the courses 7990G, <u>and/or</u> 7992G, <u>and/or</u> 7994G as a substitute for one of these courses.

(c) One of Computer and Information Science 7330X, 7332X or 7334X.

(d) Two courses chosen from among Computer and Information Science <u>7320X</u>, 7522X, 7532X, 7534X.

(e) Three additional credits in courses numbered 7000 or above in the department; with the permission of the department; these credits may be in other departments<u>: two recommended</u> courses are BUSN 7230X and BUSN 7276 (e.g., economics, mathematics, or psychology). (f) Students must do one of the following:

(1) complete Computer and Information Science 7990G, Thesis Research, and a thesis acceptable to the department; or

(2) pass a written comprehensive examination.

As an exception to the general college rule, the comprehensive examination in the Department of Computer and Information Science may be taken in the term preceding the one in which the student will complete all course requirements for the degree. However, all other college regulations concerning the comprehensive examination still apply. Students are strongly advised to take advantage of this exception and to take the comprehensive examination in the earlier semester.

Rationale:

The proposed changes are based upon the assessment of the M.S. in Information Systems that was conducted during the two previous academic years.

The previous wording in the introduction and under Matriculation Requirements did not make it clear to applicants whose undergraduate degrees were in other disciplines that the required prerequisites must be taken at the undergraduate level. The new wording is an attempt to to clarify the prerequisite requirements. Additional changes in the Matriculation requirements are trying to make what the prerequisite courses are more understandable.

The course CISC 7522, Systems Analysis and Design, is being moved from the group (d) list to the group (a) because it is an introductory-level course and is currently alternating with CISC 7500, Introduction to MIS, each semester for new students. Also, many entering students in this degree program already have taken an introductory course to Management Information systems. CISC 7520 was not in the correct location in the group (a) list.

Group (b) courses involve software applications. CISC 7120, Programming Languages and Compilers, is a course that is regularly being offered in the Fall semester. The course CISC 7132 has been withdrawn. CISC 7354, Topics in Systems Simulation, will be withdrawn. A new course, CISC 7700, Introduction to Data Science, is being added to allow students to study the important area of data mining. The course, CISC 7994, will be withdrawn.

In group (d), additional courses in Information Systems, CISC 7522 is moved to group (a). A very important course, CISC 7320, Computer Security, is added to the list.

The changes to the group (e) requirements reflect current practice in the master's program. Many students wish to take courses in the Business Management graduate program; the courses that are suggested to them are BUSN 7230, Operations Research and Decision Sciences, and BUSN 7276, Business Analytics.

Assessment of the M.S. in Information Systems has involved surveying students upon graduation and talking with colleagues in the IT world. Our assessment activities have motivated the current changes and the success of the changes will be assessed once they have been in place for at least a year.

Date of departmental approval: 11 November 2017

Effective Date of the Change: Fall, 2018

Department of Earth and Environmental Science

M.A. degree program in earth and environmental sciences HEGIS code 1914; SED program code 02091

The M.A. program in earth and environmental sciences offers advanced instruction and research experience in a wide array of subjects in earth and environmental sciences. Depending on the interests of the student, the degree program can include lectures, laboratory work, field work, and seminars, and teaching. The M.A. degree prepares students for employment in university-based laboratories, in environmental and geological consulting companies, in such governmental regulatory agencies as the EPA, NYDOE, and NPS, in state and federal survey departments, and in urban planning agencies. It also provides masters-level research training for earth science teachers.

Matriculation requirements

Applicants must offer an undergraduate major in geology, environmental science, or a related field, completed with a grade point average of 3.00 (B) or higher. General matriculation and admission requirements of the Division of Graduate Studies are in the Bulletin section "Admission."

Degree requirements

Thirty credits in courses in Earth and Environmental Sciences are required for the M.A. degree, including the required courses EESC <u>7151G</u>, 7155<u>X</u>, 7521, <u>one course numbered 7521G or</u> <u>7522G</u>, and 7771<u>G</u>, <u>7902G</u>, <u>and the capstone course 7910G</u>. Pertinent courses in other science departments may be included in the 30 credits with permission of the Graduate Deputy.

Students must maintain a professional portfolio, and submit the complete document for approval by the Earth and Environmental Sciences Department prior to graduation.

Courses in the Earth and Environmental Sciences Department offered toward the degree must be numbered 7100 or above.

The program of study must be approved by the deputy chairperson.

Rationale:

Many students come into the program with an introductory course in geographic information systems. The substitution of "one course numbered 7521G or 7522G" for_7521G allows students to take a course in the application of geographic information systems at an appropriate level.

The addition of 7902G (Seminar) as a requirement allows for greater community building between faculty and students across the breadth of the subdisciplines within Earth and environmental science

The addition of 7521G or 7522G also addresses the programmatic goal of developing effective professional communication skills

The addition of 7910G provides an opportunity to help students integrate the breadth of content taught within the program, and provides a means by which the outcomes of the MA program can be assessed while still providing student broad choice in selection of content courses in the program. Previously the outcomes were assessed by examination of final professional portfolios but this was found to be insufficient for assessing the depth and breadth of the acquired content.

Date of departmental approval: 3 October 2017

Effective date: Fall 2018

Department of Earth and Environmental Science

M.S. degree program in earth and environmental sciences HEGIS code 1914; SED program code 36028

The M.S. degree in Earth and Environmental Sciences is a thesis-based degree emphasizing research and independent work. Thesis research may be conducted in such areas as classical geology, including petrology, sedimentology, geochemistry, and paleontology; geotechnology, including GIS and remote sensing; and environmental science, including groundwater hydrology, environmental chemistry, and aquatic pollution. Our M.S. degree prepares students to pursue a doctoral degree at the Graduate Center of the City University of New York or at another university of their choice, and to teach and conduct research at the college and university level, or in industrial, governmental and survey agencies.

Matriculation requirements

Applicants must offer an undergraduate major in geology, environmental science or a related field, completed with a grade point average of 3.00 (B) or higher, and have completed EESC <u>7150G</u> with a grade of B+ or higher, and have successfully defended their thesis proposal. Prior to enrolling in EESC 7150G, the student must assemble a Thesis Committee consisting of three members, the thesis advisor and one other faculty member from the Department of Earth and environmental Science, and a third PhD-holding member of open affiliation. The membership of the Thesis Committee must be approved by the Graduate Deputy.

General matriculation and admission requirements of the Division of Graduate Studies are in the Bulletin section "Admission."

Degree requirements

Thirty credits in courses in Earth and Environmental Sciences are required for the M.S. degree, including the following required courses: EESC <u>7150G</u>, 7151<u>G</u>, 7155<u>X</u>, 7521, <u>one course</u> <u>numbered 7521G or 7522G</u>, <u>7902G</u>, and 7771<u>G</u>. Pertinent courses in other science departments may be included in the 30 credits with permission of the Graduate Deputy.

Students must register for <u>1 to <u>3</u> <u>3 to 6</u> credits of Thesis Research (EESC 7951<u>G</u>, 7952<u>G</u>, or 7953<u>G</u>). Prior to enrolling in a Thesis Research Course, the student must assemble a Thesis Committee consisting of the thesis advisor and one other faculty member. Students must maintain a professional portfolio and submit the complete document for approval by the Earth and Environmental Science Department prior to graduation. In addition, students must defend a thesis acceptable to the Thesis defense Committee appointed by the Graduate Deputy.</u>

Information about requirements for the thesis is in the Bulletin section "Academic Regulations and Procedures."

Courses in the Earth and Environmental Sciences Department offered toward the M.S. degree must be numbered 7100 or above.

The program of study must be approved by the deputy chairperson.

Rationale:

EESC 7150 was a hidden requirement and so was added to the list of required courses

Many students come into the program with an introductory course in geographic information systems. The substitution of "one course numbered 7521G to 7522G" for 7521, allows students to take a course in the application of geographic information systems at an appropriate level.

The addition of 7902G (Seminar) as a requirement allows for greater community building between faculty and students across the breadth of the subdisciplines within Earth and environmental science.

The increase in the maximum number of credits allowed for thesis research (from 3 to 6) reflects the increased rigor and expectations that the department has for an acceptable thesis, and the amount of time/work required to meet those expectations

Text was included to clarify the procedures for transferring into the MS program from the MA, and the procedures associated with thesis completion and defense

Date of departmental approval: 3 October 2017

Effective date: Fall 2018

Department of Kinesiology

M.S. degree program in exercise and Sport science <u>and rehabilitation</u> HEGIS code 1299.30; SED program code 89178

This Master of Science degree program is designed to teach students about human movement, exercise physiology, cardiopulmonary rehabilitation, sport psychology, and biomechanics. It is designed for students who want to work in these fields, advance their knowledge beyond their undergraduate education, perhaps to prepare for study at the doctoral level.

Tracks

* Exercise Science and Rehabilitation

* Sport Science -

Matriculation requirements

Applicants must offer at least one undergraduate course in each of the following: human physiology, human anatomy, physiology of exercise, and biomechanics <u>or applied musculo-skeletal anatomy</u>. A course in physics and a course in chemistry are recommended. Competitive applicants typically have undergraduate degrees in Exercise Science or Physical Education. Other degrees may also provide appropriate educational background (i.e. Physical Therapy, Athletic Training, etc). Students must also demonstrate proficiency in <u>basic advanced</u> techniques of weightlifting and body conditioning. This may be done by completion of an <u>advanced</u> course in the subject, appropriate certification by a nationally recognized organization (e.g., NSCA), or proof of at least one year of practical experience in the field.

Applicants who meet the general matriculation requirements of the college may be accepted for matriculation conditionally. A graduate student may meet such matriculation conditions by completing appropriate courses in the Brooklyn College undergraduate division.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Degree requirements

Thirty-six credits are required for the degree.

All students must complete the following foundational courses:

Kinesiology <u>7000X</u> Research Methods and Design Kinesiology <u>7059X</u> Advanced Physiology of Exercise Kinesiology <u>7154X</u> Sport and Exercise Psychology

Kinesiology 7263X Biomechanics

All newly admitted graduate sStudents in any program should ensure that take Kinesiology 7000X Research Methods and Design is taken in their first semester of enrollment.

Exercise Science and Rehabilitation

Students selecting the track in Exercise Science and Rehabilitation are required to complete the following-plus 2 additional 7000-level courses in the Department provided they have met the appropriate prerequisites (other courses may be taken with the approval of the Graduate Deputy or Chairperson):

Kinesiology <u>7250X</u> Fitness Assessment and Exercise Prescription Kinesiology 7260X Exercise Prescription for Special Populations Kinesiology <u>7262X</u> Electrocardiography # Kinesiology <u>7267X</u> Cardiopulmonary Rehabilitation @ Kinesiology <u>7279X</u> Nutrition and Exercise Kinesiology 7290X <u>PracticumInternship</u> in Exercise Science and Rehabilitation

Kinesiology <u>7262X</u> should be taken in first semester of matriculation
@ Kinesiology <u>7267X</u> should be taken in second semester of matriculation

Students who have successfully completed an undergraduate course in <u>Fitness Assessment</u> and <u>Exercise Prescription Exercise Testing and Prescription</u> may take an additional elective in place of Kinesiology <u>7250X</u>, <u>students who have completed an undergraduate course in Sport or</u> <u>Exercise Nutrition may take an additional elective in place of Kinesiology 7279X</u>. Students matriculating in this track must have a current CPR certification prior to graduation at a level equivalent to American Safety and Health Institute <u>CPR Pro Basic Life Support</u> for the Professional Rescuer.

Sport Science

Students selecting the track in Sport Science must take the following courses:

Kinesiology <u>7100X</u> Technology in Kinesiology

Kinesiology 7250X Fitness Assessment and Exercise Prescription

Kinesiology 7364X Biomechanics of Sport Performance

Kinesiology 7365X Biomechanics of Orthopedic Injury

Kinesiology 7370X Research Seminar in Sport Science

Students in either track may select additional credits from any 7000 level course offered by the Department of Kinesiology to fulfill the 36-credit requirement provided they have met the appropriate prerequisites. Other elective courses may be selected with the approval of the Graduate Deputy or Department Chair.

Rationale:

An important part of the Department's mission is "...to provide the theoretical and practical skills necessary for exercise science students to become American College of Sports Medicine (ACSM) certified and/or registered professionals...". Recently the ACSM revised the

Performance Domains and Associated Job Tasks associated with certification as a Clinical Exercise Physiologist (see attachment). The Department has carefully analyzed the new Domains and Tasks and has revised the curriculum to reflect the changes. During this review it was noted that the track in Sport Science had little relevance for current Exercise Professionals. As this track is not popular, does not appear to lead to any meaningful job opportunities and will not lead to professional certification it was suggested that it be removed. Since the track in Sport Science will no longer exist, we are changing the name of the program back to its original name, Exercise Science and Rehabilitation.

Date of departmental approval: 14 November 2017

Effective date of the change: Fall, 2018

Department of Secondary Education

M.A. degree program in middle childhood education (5-9) – general science teacher – specialization in biology, chemistry, physics, or earth science HEGIS code 0804.04; SED program code 26820

Informed by the National Science Education Standards for the professional development of science educators, the program involves teachers in learning science content using the process of inquiry. The program is also committed to expanding the classroom to include the local environment and science-rich community resources such as zoos, parks, museums, nature centers and gardens. The program introduces future educators to scientific literature, media and technological resources that expand their science knowledge and their ability to access further knowledge.

Certification requires the completion of a minimum of 30 credits within one science discipline including coursework at both the undergraduate and graduate level. This program leads to certification to teach Regents level science.

General matriculation requirements

Applicants to this program must submit scores on the Content Specialty Test (CST) in the discipline of specialization (biology, chemistry, physics or earth science.)

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test to be considered for matriculation.

General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission."

General degree requirements

Thirty to <u>39</u> <u>40</u> credits are required for the degree depending on applicants' qualifications. Students must complete 15 credits in courses in biology, chemistry, earth and environmental science, physics, and general science.

Students who have not already completed 30 credits in the science discipline of specialization upon admission must take courses in that discipline until the 30 credit requirement has been met. Once the thirty credit requirement has been met, students may take additional coursework in a science other than the discipline of specialization.

The program of study must be approved by the Program Head of middle school science education.

Students must complete the following education courses in the stated sequence:

Secondary Education 7310T, 7311T, 7340T 7314X, 7320T and 7321T. All required education courses and some education electives require permission for registration as indicated in the Schedule of Classes.

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Head of middle school science education.

Middle childhood education with a specialization in biology, chemistry, physics, or earth science This program leads to a Master of Arts in Education and a New York State Professional Certificate in Middle Childhood Education with a specialization in biology, chemistry, physics, or earth science (grades 5-9). Matriculation requirements for all three options below include an undergraduate major in biology, chemistry, physics, or earth and environmental science or the equivalent.

Option (A): 30 credits.

Matriculation requirements

Applicants must hold a New York State Initial Certificate in Middle Childhood Education (grades 5-9) or its equivalent.

Degree requirements

Thirty credits are required for the degree.

In addition to Six credits from among Secondary Education 7310T, 7311T, 7314X, 7324X, 7315 and 7325X; and Secondary Education 7320T and 7340T 7321T. In addition, the following courses are required: 15 credits in graduate courses in any one of the following: biology and/or any course numbered general science (GSCI) 7030 -7039 and GSCI 7053, chemistry, physics, or earth and environmental science, and/or any GSCI course numbered 7041T-7059T.;- and general science; and an a 3 credit elective selected from Secondary Education; Childhood, Bilingual and Special Education.;- Earth and Environmental Science, or General Science.

Option (B): 30-33 credits Matriculation requirements

Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent or a New York State Initial Certificate in Adolescence Education (grades 7-12) or its equivalent.

Degree requirements

Thirty to thirty-three credits are required for the degree.

In addition to Secondary Education 7310T, 7311T, <u>7314X, 7324X, 7315, 7325X,</u> 7320T and 7340T <u>7321T</u>, the following courses are required: 15 credits in graduate courses in any <u>one</u> of the following: biology <u>and/or any course numbered general science (GSCI) 7030 -7039</u>, chemistry, physics, <u>or</u> earth and environmental science, and/<u>or any course numbered 7041T-7059T</u>; and an elective. Student teaching in grades 7-9 for those with Initial Certification in

Childhood, Bilingual and Special Education (Secondary Education 7330T) or grades 5-6 for those with Initial Certification in Adolescence Education (Secondary Education 7332T) or mentored teaching in middle childhood for full time teachers.

Option (C): 39 30-40 credits

This program leads to both New York State Initial and Professional Certificates in Middle Childhood Education with a specialization in biology, chemistry, physics, or earth science (grades 5-9).

Degree requirements

Thirty-nine Thirty to 40 credits are required for the degree. Students must complete Secondary Education 7500X, 7310T, 7311T, 7314X, 7315X, 7324X, 7380T prior to student teaching, SEED 7330T and 7332T 7381, 7383, 7542T and 7543T. Students must obtain permission from the Program Head of middle school science education to

register for these courses.

In addition to the above, the following courses are required: Secondary Education 7340T <u>7320T</u>, 7503X, 7671X, 15 credits in graduate courses in any <u>one</u> of the following: biology <u>and/or any</u> <u>course numbered general science (GSCI)</u> <u>7030</u>-<u>7039</u>, chemistry, physics, <u>or</u> earth and environmental science, and/or any course numbered <u>7041T-7059T</u>.

Option (D): <u>30-</u>36 credits

Matriculation requirements

Applicants must hold a New York State Transitional B Certificate in Middle Childhood Education: Biology, Chemistry, Earth Science, or Physics (grades 5-9). Requirements for the Transitional B Certificate are determined by the New York State Education Department.

This program leads to both New York State Initial and Professional Certificates in Middle Childhood Education with a specialization in biology, chemistry, physics, or earth science (grades 5-9).

Degree requirements

Thirty to 36 -six credits are required for the degree.

Students must complete Secondary Education 7500X, 7310T, 7311T, <u>7314X, 7315X, 7324X,</u> <u>7325X, 7320X 7320T</u>, 7503X, 7671T <u>7671X</u> and 7340T <u>7321T</u>. Students must obtain permission from the Program Head of middle school science education to register for these courses.

In addition to the above, 15 credits in graduate courses in any one of the following: biology and/or any course numbered general science (GSCI) 7030 -7039, chemistry, physics, or earth and environmental science, and/ or any course numbered 7041T-7059T.

Rationale:

As we are streamlining our science education major requirements, we are synchronizing education requirements for the various science content majors within science education. A range of content courses specific to each specialization are indicated. In addition typos for some of the course numbers have been corrected (i.e. SEED 7671X).

<u>Goal</u>:

Program Assessment Schedule. Each department or program should have a clearly defined assessment cycle which explains how one of the programmatic goals, identified, will be assessed each year. The programmatic assessment cycle must be outlined, showing:

a. The goal(s) to be assessed each academic year.

Each academic year the program identifies new goals in order to comply with changing NYS certification requirements and national program accreditation requirements. We have a three year cycle of self assessment.

b. The process, which will allow the program to collect relevant feedback from students enrolled and completing their degrees.

Each academic year the program identifies new procedures in order to comply with changing requirements for national program accreditation. We collect student feedback from student focus groups and during individual advisement. In addition we collect data on student achievement in state licensing examinations.

c. The inclusion of data collected to support the request being made. See most recent accreditation reports

d. An articulation of how changes being made help to "close the loop" by applying what has been learned to assure the continuation of what is going well and/or how the department will work together to intervene to improve those goals whose achievement needs to improve. As part of our program and national accreditation goals we are continually monitoring student progress, course offerings and certification requirements

Date of departmental or program committee approval: 14 November 2017

Effective date of the change to/or addition of a program: Fall 2018

Department of Secondary Education

M.A.T. degree program: earth science teacher (grades 7-12) HEGIS code 1917.01; SED program code 33640 (Concentration A); 33641 (Concentration B)

Matriculation requirements

Each candidate will be evaluated individually. Based upon this evaluation and certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Head of middle school science education. Applicants to Concentration A must have completed a minimum of six credits in earth and environmental science or in cognate sciences including chemistry and physics. Applicants to Concentration B must have completed a minimum of 9 credits in earth science and six credits in cognate sciences including chemistry and physics. Students deficient in science credits may be accepted on condition that they complete additional coursework as recommended by the Program Head of middle school science education.

This program leads to a Master of Arts in Teaching Earth Science, and a New York State Professional Teaching Certificate in Adolescent Science Education with a specialization in earth science in grades 7-12.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 500 650 on the paper based test or 280 on the computer based test or 61 114 on the internet based test to be considered for matriculation.

General matriculation and admission requirements of the Division of Graduate Studies are in the "Admission" section.

Degree requirements

Thirty to thirty-three credits are required for the degree depending on the applicants' previous coursework, teaching experience and the certificates the applicant holds.

Concentration (A): 30 credits (for in-service teachers)

This program leads to a New York State Professional Teaching Certificate in Adolescent Earth Science and General Science Education for in-service science teachers. Applicants must hold a New York State Initial Certification in classroom teaching and a minimum of six credits in earth and environmental science or in cognate sciences including chemistry and physics. The following required courses: Earth Science and Environmental Science 7013T, 7040T, 7044T, and either 7006T or 7042T. Twelve additional credits in Earth Science and Environmental Science numbered 7000T or higher, or 7100 or higher with permission of the chairperson, or GSCI 7014T, 7041T, or other GSCI courses with permission of the Program <u>Coordinator</u>. Secondary Education 7340T and one of the following courses Secondary Education 7311T, 7305T, 7326T or 7320T <u>and 7321T</u>.

Concentration (B): 30- 36-37 credits (for pre-service teachers)

This option leads to both New York State Initial and Professional Teaching Certificates for preservice science teachers. Applicants must have completed a minimum of 9 credits in Earth science and six credits in cognate sciences including chemistry and physics.

Fifteen credits in Earth and Environmental Sciences numbered 7000T or higher, or 7100 or higher with permission of the chairperson, <u>or GSCI 7014T</u>, 7041T, or other GSCI courses with <u>permission of the Program Coordinator</u>. All of the following courses in education: Secondary Education 7500X, 7503X, 7312T or 7311T, <u>7314X or 7324X</u>, <u>7315X</u>, <u>7320T</u>, <u>7380T and</u> 7671T₇ and 7340T.

Other requirements that must be met include 100 hours of field experience, 40 days or 300 hours of student teaching at appropriate grade levels (Secondary Education 7381T, 7383T 7332T and 7542T and 7543T) or one year of full-time teaching at the appropriate subject area at appropriate grade level, completed study at the college level of a foreign language, and any additional New York State requirements.

Rationale:

As we are streamlining our science education major requirements, we are synchronizing education requirements for the various science content majors within science education. The course substitutions cover all of the same state mandated material. Study of foreign language is a matriculation requirement, not a program requirement.

SEED 7305 was a typo. No such course exists.

Goal:

Program Assessment Schedule. Each department or program should have a clearly defined assessment cycle which explains how one of the programmatic goals, identified, will be assessed each year. The programmatic assessment cycle must be outlined, showing:

a. The goal(s) to be assessed each academic year.

Each academic year the program identifies new goals in order to comply with changing NYS certification requirements and national program accreditation requirements. We have a three year cycle of self assessment.

b. The process, which will allow the program to collect relevant feedback from students enrolled and completing their degrees.

Each academic year the program identifies new procedures in order to comply with changing requirements for national program accreditation. We collect student feedback from student focus groups and during individual advisement. In addition we collect data on student achievement in state licensing examinations.

c. The inclusion of data collected to support the request being made.

See most recent accreditation reports

d. An articulation of how changes being made help to "close the loop" by applying what has been learned to assure the continuation of what is going well and/or how the department will work together to intervene to improve those goals whose achievement needs to improve.

As part of our program and national accreditation goals we are continually monitoring student progress, course offerings and certification requirements

Date of departmental or program committee approval: 14 November 2017

Effective date of the change to/or addition of a program: Fall 2018

Clearances: Clearance sought and obtained from the Department of Earth and Environmental Science (14 November 2017).
SECTION A-III: CHANGES IN DEGREE REQUIREMENTS

Feirstein Graduate School

M.F.A. degree program in cinema arts HEGIS code 1010; SED program code 36817

The Barry R. Feirstein Graduate School of Cinema offers a master of fine arts degree in cinema arts with a concentration in one of the following areas: producing, directing, screenwriting, cinematography, post-production, or digital animation and visual effects. The three-year, 66-credit program prepares students for professional careers in their area of concentration through a combination of practical and theoretical courses.

Matriculation Requirements

Applicants who have completed a bachelor's degree satisfy the undergraduate requirements of this program. General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission."

Degree Requirements

66 credits are required for the degree.

All students in the directing, cinematography, producing, screenwriting and postproduction tracks must complete the following courses: All of the following FILM 7013G, 7014G, 7015G, 7023G, 7801G, <u>7811G</u>, 7942G, 7964G

In addition, students must complete requirements in one concentration as follows:

Directing

All of the following courses: FILM 7101G, 7111G, 7121G, <u>7131G</u>, 7141G, 7201G, 7202G, 7301G, 7821G, 7831G, 7951G, 7961G

and

Any three graduate film courses not required for the MFA in cinema arts and for this concentration.

Cinematography

All of the following courses: FILM 7201G, 7202G, 7211G, 7221G, 7231G, 7302G, 7522G, 7523G, 7541G, 7821G, 7831G, 7951G, 7961G and

Any two graduate film courses not required for the MFA in cinema arts and for this concentration.

Producing

All of the following courses: 7302G, 7401G, 7411G, 7412G, 7422G, 7423G, 7431G, <u>7432G</u>, <u>7433G</u>, <u>7471G</u>, 7531G, 7831G, 7951G, 7961G

and

Any three graduate film courses not required for the MFA in cinema arts and for this concentration.

Screenwriting

All of the following courses: FILM 7301G, 7302G, 7303G, 7311G, 7312G, 7321G, 7322G, 7323G, 7331G, 7332G, 7952G, 7962G and

Any three graduate film courses not required for the MFA in cinema arts and for this concentration.

Post-Production

All of the following courses: FILM 7302G, 7501G, 7502G, 7511G, 7512G, 7513G, 7515G, 7521G, 7522G, 7523G, 7524G, 7531G, <u>7541G</u>, <u>7811G</u>, 7953G, 7963G and

Any two graduate film courses not required for the MFA in cinema arts and for this concentration.

Digital Animation and Visual Effects:

All of the following courses: Film 7005G, 7014G, 7015G, 7601G, 7611G, 7612G, 7613G, 7614G, 7621G, 7622G, 7624G, 7631G, 7634G, 7943G, 7955G, 7965G, 7966G and Four Five elective courses*

* Examples of Digital Animation & Visual Effects Advanced Discipline Electives:
3D Character Animation 1
3D Character Animation 2
Typography, Design, and Motion Graphics
Motion Capture
Editing
Screenwriting
Directing Actors
Sound Editing and Design

Lighting Workshop 3D Computer Animation 4 Hybrid Animation Experimental Animation Theories of Animation & VFX

Rationale:

The changes included in this document are designed to better organize the curriculum and to rationalize the process of matriculation through the various programs. We have also made changes to course names to better reflect the content of these courses and added new courses to keep the program relevant to the dynamic changes occurring in film industry.

Date of Departmental Approval: 14 November 2017

Effective Date of the change: Fall 2018

SECTION A-IV: NEW COURSES Conservatory of Music

MUSC 7017X Recording Music for Media

45 hours; 3 credits

Bulletin Description: Regular sessions where students write, perform, and record music for media. Primarily intended for students in composition, performance, media scoring, sonic arts, and music technology. May be repeated for credit.

Prerequisite: Permission of the program director.

Frequency of Offering: 1 section every other semester

Projected Enrollment: 12 students per section

Clearances: FILM; TVRA

Rationale: This course will provide interdisciplinary collaboration between performers, composers, and technologists. Traditionally, music in academic practice is intended for the stage. However, the reality of music in today's professional landscape means recording and arranging for media in addition to live performance. It is necessary that students learn the practice of recording which requires an entirely different set of skills than live performance. For example, in performance, there are often rehearsals which deal with nuance and ensemble, leading up to the performance for a live audience. In the studio, musicians are expected to play a musical passage perfectly on the first or second take. There is no room for error, and they must sight-read music with passion and perfection without any auditory or visual feedback from an audience and very little from their fellow players. The way musicians interact with one another and communicate with an audience is fundamentally altered by the presence of a click track and a microphone. The introduction of these two key elements is crucial to the recording process, but the performers must adjust and still be musical within these constraints. Composers and recordists will have a regular opportunity to hone their skills and learn from the experience of recording with real musicians on a regular basis. We may also periodically bring in professionals from the recording industry to work with the students.

Program/Department's Goals Addressed by Course: Interdisciplinary collaboration and modern musical practice (with an eye/ear toward the past) are essential objectives. Creating opportunities for students to work together, learn from one another's specialization and hone their craft and skills, will lay the groundwork for lifelong collaboration. Composers, performers, and engineers all need one another in order to have music to play, hear music, and document and transmit music on a global level. Additionally, the way music is transmitted in our current landscape means that the large majority consumers are not seeing music live, but rather listening to recorded music. Our students need to reach the widest possible audience, and recorded music is one of the most powerful means to do so.

Objectives/Outcomes of Course:

LEARNING OBJECTIVES:

- Provide students with an environment to collaborate.

- Guide students in current practice in the recording industry.

- Successfully write, perform, and record music for media at a professional level.

OUTCOMES ASSESSMENT:

Students will demonstrate their ability to meet the stated learning objectives by:

- Writing, playing, and recording of short musical works.

- Completion of multiple recording projects, including cues for commercials, films, and video games.

- Completion of a portfolio of work to be presented at the end of the semester.

Course Outline:

Week 1: An investigation in the history of recording session work, including the technology used, mic placement, and technique.

Week 2: Legal and business considerations in recording session work including scheduling and booking recording sessions to maximize budget and efficiency.

Week 3: Techniques in recording individual instruments, multitracking, doubling, recording in sections, and recording an entire group or large ensemble.

Week 4: Write, play, and record music cues.

Week 5: Write, play, and record music cues.

Week 6: Write, play, and record music cues.

Week 7: Critique and review music cues.

Week 8: Guest professionals work with the students (for example, may be a recording engineer, session musicians, or composer).

Week 9: Write, play, and record music cues.

Week 10: Write, play, and record music cues.

Week 11: Write, play, and record music cues.

Week 12: Critique and review music cues.

Week 13: Write, play, and record music cues.

Week 14: Write, play, and record music cues.

Week 15: Present completed portfolios. Critique and review of work.

Method of Evaluation: Performance on assignments, critiques, and final portfolio.

Method of Assessment: Student's grade will be determined as follows: Participation: 30%, Critiques: 20%, Final Portfolio: 50%.

A+ (98-100) Indicates truly exceptional performance and is rarely given.

A (95-100) Excellent. Completed all work at a near perfect level, with only minimal issues.
A- (90-94) Very Good. Completed all work, with minimal issues, and often exceptional work.
B+ (87-89) Good. Completed all work, with minimal issues, and some exceptional work.
B (84-86) Above Average. Completed all work, with minimal issues, but nothing exceptional.
B- (80-83) Average. Completed most work, with minimal issues, but nothing exceptional.
C+ (76-79) Satisfactory. Able to complete the work but nothing exceptional.
C (70-75) Passing. Performed at the minimum acceptable level to pass.
F (0-69) Unable to perform required work at an acceptable level, and/or unable to complete tasks.

Bibliography:

Buhler, James and David Neumeyer. *Hearing the Movies: Music and Sound in Film History*. Oxford University Press, 2015.

Colatosti, Camille. *To Be An Artist: Musicians, Visual Artists, Writers, and Dancers Speak*. E L Kurdyla Publishing, 2011.

Granata, Charles, Nancy Sinatra, and Phil Ramone. Sessions with Sinatra: Frank Sinatra and the Art of Recording. Chicago Review Press, 2003.

Hall, Rick. *The Man from Muscle Shoals: My Journey from Shame to Fame*. Heritage Builders, 2016.

Hartman, Kent. *The Wrecking Crew: The Inside Story of Rock and Roll's Best-Kept Secret.* St. Martin's Griffin, 2013.

Huber, David and Robert E. Runstein. Modern Recording Techniques. Focal Press, 2013.

Powrie, Phil and Robynn J. Stilwell. *Composing for the Screen in Germany and the USSR: Cultural Poli tics and Propaganda*. Indiana University Press, 2007.

Date of departmental approval: 14 November 2017

SECTION A-IV: NEW COURSES Conservatory of Music

MUSC 7701X Techniques in Performance for Singers

45 hours; 1 credit

Bulletin Description: An investigation into practical techniques for dynamic and truthful storytelling in singing using songs in the singer's native language. Exercises will explore the kinesthetic, vocal, and facial modes: how to expand their vocabulary and strength, and how to release tensions that arise as each of the performance modes are asked to channel higher levels of performance energy. Specific attention will be given to how we combine the modes into the unique form of opera/musical theater. The first half of class is dedicated to exploratory exercises, and the second half of class is dedicated to putting discoveries from those exercises into practical use in singing repertoire in a master class setting. The class will culminate in a performance of the selected songs in the singer's native language. May be taken for credit each semester the student is enrolled.

Prerequisite: audition

Frequency of Offering: One section per semester.

Projected Enrollment: 12-15 students

Rationale: Singers engage in private lessons from "parts" experts where they explore one part of their craft at a time: a voice teacher explores vocal technique, a musical coach explores musical style, diction, and phrasing, and an acting teacher explores acting techniques. A performance, however, requires the singer to combine all of these elements into a cohesive whole. In most training, the only chance a singer receives to explore how to best combine these different expressive worlds is in the performance itself. This class seeks to rectify that situation so that singers can not only practice the full act of musical-theater performance in class, but also so that singers will learn how to practice fully on their own so that they may show up to the first day of professional rehearsals fully prepared, without spending the whole fee on their preparation.

Clearances sought: None

Objectives of the Course

- 1. Performance and Creative Skills: experience in performing opera/musical theater and creating a meaningful recital.
- 2. Basic Musicianship: understanding of how music, theater, and physical worlds interrelate to form a powerful and cohesive performance.
- 3. Knowledge of Repertory and its Cultural Context: choosing pieces in the singer's native tongue and exploring their meaning in relation to the singer's background.

Outcomes of the Course

- 1. Demonstrating self-proficiency and curiosity in full practice as singing actors.
- 2. Expand the range and power as singing actors.

- 3. Demonstrating an ability in students to translate useful information in their weaker mode (vocal, musical, or acting) into information in their stronger performance mode.
- 4. Develop an understanding of song repertoire in the singer's native language.

Method of Evaluation

- 1. Students will be filmed at the beginning of the semester, mid-semester, and at the final concert. They will be asked to write a three-page analysis commenting on their process, and transformation. Students will received a similar analysis from the professor.
- 2. Students will receive a bi-weekly written assessment regarding in class performances.
- 3. Attendance and weekly preparation will be 40% of the grade, Midterm and Final 20%, and Performance Observations will be 10%.

Method of Assessment

Students will be graded on their weekly preparation related to the activities listed in the course outline. Voice area instructors will be asked to observe the progress and further assessment will be observed at the end of the semester jury performance. The end of semester student and professor evaluations will of an important opportunity to measure achievement of goals. **Course Outline**

Week Topics

- 1 Audition as Practicum
- 2 Introductions and Course Overview: selection of Songs for each Singer
- 3 Exercises in Listening: exploring the strength and variety of facial mode/improvisation. Recitation of memorized song text. Deconstructing song texts. MASTERCLASS: 3 Songs. READING: Empty Space Chapters 1-2
- 4 Exercises on exploring strength and variety of physical mode/improvisation, combining text and music: extension of intention in spoken song text. Examining the effects of musical setting. MASTERCLASS: 3 Songs. READING: Empty Space Chapters 3-4
- 5 Exercises on exploring strength and variety of vocal mode/improvisation. Sense memory. MASTERCLASS: 3 Songs. READING: Complete Singing actor: Pages 1-40.
- 6 Exercises on combining facial and physical modes, extended improvisation in storytelling. MASTERCLASS: 3 Songs. READING: Complete Singing-The first half of class is dedicated to exploratory exercises and the second half of class is dedicated to putting discoveries from those exercises into practical use in singing repertoire in a master class setting. Actor Pages 40-80.
- 7 Exercises on combining physical and vocal modes and extended improvisation in storytelling. MASTERCLASS: 3 Songs. READING: Complete singing actor Pages 80-120.
- 8 Exercises on combining vocal and facial modes and extended improvisation in storytelling. MASTERCLASS: 3 Songs. READING: Complete singing actor Pages 120-End.
- 9 Exercises on combining vocal, facial, and physical modes. Discussion of how to translate from one to another. Extended improvisation in all modes. MASTERCLASS: 3 Songs. READING: The Talent Code: First 3 Chapters.
- 10 Opening warmup and exercises. Discussion of performance presentation. Rehearsal of Scenes. READING: Talent Code chapters 3-6
- 11 Opening warmup and exercises. Rehearsal of scenes. READING: Talent Code chapters 6-9
- 12 Opening warmup and exercises. Rehearsal of scenes. READING: Talent Code Finish.

- 13 Opening warmup and exercises. Rehearsal of scenes. READING: Talent Code chapters 6-9
- 14 Dress Rehearsals & Notes
- 15 Final Performance

Suggested Textbook

Balk, Wesley. The Complete Singer-Actor. Minneapolis, MN: University of Minnesota. 1985

Bibliography

Balk, Wesley. The Radiant Performer: The Spiral Path to Performing Power. Minneapolis, MN: University of Minnesota. 1991

Brook, Peter. The Empty Space. New York, NY: Simon & Schuster, Inc., 1968. Coyle, Daniel. The Talent Code. New York, NY: Random House, Inc., 2009.

Date of departmental approval: Nov. 14, 2017

SECTION A-IV: NEW COURSES Conservatory of Music

MUSC 7712X Glee Club

45 hours; 1 credit

Bulletin Description: A vocal ensemble for beginning to intermediate singers that strives to build musicianship and music literacy skills through a repertoire and performance based curriculum. A diverse selection of repertoire from the Renaissance through contemporary musical theatre will offer opportunities to examine social, political, and historical aspects related to the music. May be taken for credit each semester the student is enrolled.

Frequency of Offering: 1 section every semester

Projected Enrollment: 12-15 students per section

Clearances: None

Rationale: A non-auditioned ensemble offers the greater Brooklyn College community the opportunity to perform while providing foundations in musicianship and music literacy for each participant. Participants will benefit from instruction through the methods of Dalcroze and Kodaly. The addition of this ensemble will prepare participants for more advanced ensembles offered at the conservatory.

Objectives of the Course: To build a non-auditioned vocal ensemble to perform repertory from the Renaissance through contemporary musical theater.

Common [College-Wide] Goals Addressed by Course:

- 1. Ability to work collaboratively and creatively to address complex questions and problems.
- 2. Understanding of the relation between the arts, histories, and cultures of the past and those of the present.

Department Goals Addressed by Course:

- 1. Performance and Creative Skills: Experience in composition, both original and based on models.
- 2. Basic Musicianship: Understanding of musical elements
- 3. Knowledge of Repertory and its Cultural Context: Understanding of the relationship of music to other arts and to technology.

Outcomes of the Course

- 1. Develop music literacy foundations that will prepare participants to be successful and independent ensemble musicians.
- 2. Develop vocal and performance technique through the rehearsal process and performances.
- 3. Connect repertoire to political, social, and historical contexts.

Method of Evaluation

1) Students will be offered one individual voice lesson with the instructor to refine and build on techniques and pedagogy presented to the entire group.

- 2) Students will offer goals at the beginning of the semester and write a self-reflection at the end of the semester. In this two page paper students will be asked to comment on the development of their voice through rehearsal, practice, and performance experience.
- 3) Attendance and weekly preparation will be 40% of the grade, Concerts and Performances will be 20%, and the final observation will be 10%.

Method of Assessment Shouldn't #3 from above be here?

Music concepts will be assessed in class with weekly worksheets and group-based learning activities. Spotlight topics will be incorporated into corresponding repertoire for the semester. The final observation will be compared to the personal goals listed at the beginning of the semester in an effort to compare and track progress of 14 weeks of rehearsal, practice, and performances.

Course Outline:

Week	Topics
1	Introductions and course overview
	Before the Singing: Posture, Hearing, General Topics
	Music Concept: Musical Map: The staff, notes, and pitches; conventions/terminology
	of following a musical score.
2	Spotlight Topic: Kodaly/Curwen Hand Signs
	Music Concept: Treble Clef, Musical Alphabet, Note values,
3	Spotlight Topic: Vocal Health
	Music Concept: Scales
4	Spotlight Topic: Respiration
	Music Concept: Intervals
5	Spotlight Topic: Phonation
	Music Concept: Time Signature, Rhythm organization
6	Spotlight Topic: Resonation
	Music Concept: Bass Clef
7	Spotlight Topic: Articulation
	Music Concept: Performance Etiquette
8	Midterm Concert
9	Spotlight Topic: Dalcroze Eurythmics
	Music Concept: Triads
10	Spotlight Topic: Coordination
	Music Concept: Chords, Repeat signs
11	Spotlight Topic: Diction
	Music Concept: Expressive features in Music
12	Spotlight Topic: Body Mapping
	Music Concept: Key Signatures
13	Spotlight Topic: Ethos of Music (Psychological influences and emotive aspects)
	Music Concept: Suspension, dynamics, text painting
14	Class Solo Performances
15	Final Concert

Bibliography

- 1. Dayme, Bunch M. <u>Dynamics of the Singing Voice</u>. New York: Springer-Verlag Wien, 2009.
- 2. Five Centuries of Choral Music for Mixed Voices. Volume 1.

Repertoire:

Traditional Canon
Traditional Canon
Gregg Smith
William Billings

Choral Octavo (be selected from the	e following):
Oseh Shalom	Nurit Hirsch
Adinu (Sufi)	Shireen Abu-Khader and Andre de Quadros
If music be the food of love	Gregg Smith
Ise Oluwa (Nigerian)	arr. Ron Kean
I hear America Singing	arr. Andre J. Thomas
Sing of Spring	George Gershwin
You raise me up	arr. Mark Hayes
You'll never walk alone	arr. Mark Hayes
Sound the Trumpet	Henry Purcell
Gloria in excelsis	Antonio Vivaldi (ed. Sherri Porterfield)
A red, red rose	Daniel Burton
Bonse Aba (Zambian)	arr. Andrew Fischer
Banks of Doon (Scottish)	Donna Gartman Schultz
Five Centuries of Choral Music	Selections

Date of departmental approval: 14 November 2017

SECTION A-IV: NEW COURSES Conservatory of Music

MUSC 7713X Vocal Repertory Practicum for Oratorio and Opera

45 hours; 1 credit

Bulletin Description: A vocal repertory course for advanced singers to explore appropriate repertoire for future engagements. The course strives to build the repertory of each singer as well as provide the experience of learning a role for important oratorio and opera settings. The repertoire will be tailored to the participants of the class. Selected repertoire from the Renaissance through the twentieth century will offer opportunities to examine social, political, and historical aspects related to the music. May be taken for credit each semester the student is enrolled.

Prerequisite: Audition

Frequency of Offering: 1 section every semester

Projected Enrollment: 12-15 students per section

Rationale

The voice department of the Conservatory of Music at Brooklyn College benefits from a vocal repertory course focused on oratorio and opera; a standard course at many leading conservatories. The course offers opportunities for performance in a safe and mentored environment. Additionally, past Brooklyn College students have advocated for such a course in an effort to provide relevant role experience for repertoire lists and resumes.

Clearances: None

Objectives of the Course: To build the repertory of individual singers.

Common [College-Wide] Goals Addressed by Course:

3. Understanding of the relation between the arts, histories, and cultures of the past and those of the present.

Department Goals Addressed by Course:

- 4. Performance and Creative Skills: Experience in composition, both original and based on models.
- 5. Basic Musicianship: Understanding of musical elements
- 6. Knowledge of Repertory and its Cultural Context: Understanding of the relationship of music to other arts and to technology.

Outcomes of the Course

- 4. Develop repertoire lists with appropriate and relevant roles.
- 5. Provide experiences on campus for performance in safe and mentored environment.
- 6. Connect repertoire to political, social, and historical contexts.

Method of Evaluation

4) Students will be offered individual consultations about roles for future endeavors.

- 5) Attendance and weekly preparation will be 40% of the grade, Concerts and Performances will be 20%, and the final observation will be 10%.
- 6) The final observation will be compared to the personal goals listed at the beginning of the semester in an effort to compare and track progress of 14 weeks of rehearsal, practice, and performances.

Course Outline:

Week	Topics
1	Introductions and course overview
	Role Assignments and scores are distributed
2	Libretto Analysis
3	Libretto Analysis
4	Role Analysis
	Each singer prepares a complete analysis of the role
5	Orchestral Score Lens
	Singers Examine the orchestra score and make notations in piano vocal scores.
6	Cultural, Historical, Socio-Economic Examination of the piece
7	Rehearsal
8	Rehearsal
9	Rehearsal
10	Rehearsal
11	Rehearsal
12	Rehearsal
13	Rehearsal
14	Dress Rehearsal
15	Final Concert

SUGGESTED REPERTOIRE

Bach, Mass in B-minor Mendelssohn, *Elijah* Verdi, *Requiem* Handel, *Solomon* Handel, *Julius Cesar* Janacek, *Cunning Little Vixen* Puccini, *Gianni Schicchi*

Date of departmental approval: 14 November 2017

SECTION A-IV: NEW COURSES Conservatory of Music

MUSC 7782G Global Music Ensemble

45 hours; 1 credit

May be taken for credit each term the student is enrolled.

Bulletin Description: This course performance class will be dedicated to styles and repertoires of music that lie outside the realms of standard Western Art Music and American Jazz. Each semester the ensemble will focus on a specific musical tradition form one of the following areas: Latin America, the Caribbean, Africa, Eastern Europe, the Mid-East, and South and East Asian. May be taken for credit each semester the student is enrolled.

Prerequisite: Audition or permission of the program director.

Frequency of offering: 1 section per semester with different theme

Projected enrollment: 10 students

Clearances: None

Rationale: This course will broaden our student's exposure to music practices outside our current Conservatory emphasis on the Western Classical and standard American Jazz. Through active performance students will be become acquainted with new compositional forms, rhythmic patterns, melodic organization, harmonic structures, and timbral effects not taught in our conventional theory and performance classes. The course will be particularly useful to students in our new Global Jazz program that combines American jazz with various world styles, and to our performance/composition students looking for new ways to organize and articulate musical ideas.

Program/ Department Goals Addressed by Course:

- 1. To explore the diversity of world music cultures.
- 2. To improve individual instrumental and vocal technique.
- 3. To strengthen individual earn training/listening skills.
- 4. To learn how to play in various large and small ensemble situations.

Objectives of Course:

1. To explore in depth the performance practices of a specific world music other than Western classical or standard American jazz music.

2. To discover new individual instrumental techniques not practiced in Western classical or standard American jazz music.

3. To discover new ways of organizing music and thinking about music beyond the Western classical and standard American jazz canons.

4. To experience new ways of playing with ensembles other than Western classical orchestras/chamber groups or standard American jazz ensembles.

Outcomes Anticipated for Course:

1. Demonstrate familiarity with the performance practices of a new music culture.

2. Demonstrate proficiency in specific instrumental playing techniques.

3. Demonstrate an understanding of musical organizational structures (form, rhythm, melody, harmony, timbre, etc.) of a new music culture.

4. Demonstrate comfort in playing in an ensemble other than Western classical

orchestras/chamber groups or standard American jazz ensembles.

Method of Evaluation:

Students will receive a final grade based on the following:

1. Rehearsal Preparation: Ability to play the assigned music well early in the semester and demonstrated progress from week to week on technical and artistic elements, so that it is a positive contribution for the ensemble. (20%)

Active Participation: Musical responsiveness in coachings, being able to absorb musical and technical suggestions and retain those aspects from week to week. Participation in creating a piece or an interpretation, both spoken ideas and performance expression of ideas (40%)
 Professional interaction with peers and professor; being punctual, and giving and receiving comments constructively (20%).

4. Performance in final recital (20%).

Method of Assessment

Students will be graded on preparation and performance activity as noted above. Students will be given further feedback in private consultation with the professor/ensemble leader. Student evaluations will be used to assessment course adherence to stated goals.

1.	Introduction; repertory discussion
2.	Rehearsal
3.	Rehearsal
4.	Rehearsal
5.	Rehearsal
6.	Rehearsal
7.	Rehearsal
8.	Rehearsal
9.	Rehearsal
10.	Rehearsal
11.	Rehearsal
12.	Rehearsal
13.	Rehearsal
14.	Concert/Recital

Course Outline

Select Bibliography (reading assignments for themed ensembles as appropriate) Miller, Terry. *World Music: A Global Journey* (Routledge, 2012).

Slobin, Mark. *Fiddler on the Move: Exploring the Klezmer World* (Oxford University Press, 2000).

Ruckert, George. *Music in North India: Experiencing Music, Expressing Culture* (Oxford University Press, 2003).

Stone, Ruth. *Music in West Africa: Experiencing Music, Expressing Culture* (Oxford University Press, 2004).

Stuempfle, Stephen. *The Steelband Movement*. *The Forging of a National Art in Trinidad and Tobago* (University of Pennsylvania Press, 1995).

Titon, Jeff et al. *Worlds of Music: An Introduction to the Music of the World's Peoples* (Schirmer Books, 5th Edition, 2008).

Turino, Thomas. *Moving Away from Silence: Music of the Peruvian Altiplano and the Experience of Urban Migration* (University of Chicago, 2010).

Waxer, Lise, editor. Situating Salsa: Global Markets and Local Music Making in Latin Popular Music (Routledge, 2002).

Wolf, Richard, editor. *Theorizing the Local: Music, Practice, and Experience in South Asia and Beyond* (Oxford University Press, 2009).

Zheng, Su. *Claiming Diaspora: Music Transnationalim, and Cultural Politics in Asian/Chinese America* (Oxford University Press, 2010).

Date of Departmental Approval: 14 November 2017

SECTION A-IV: NEW COURSES Conservatory of Music

MUSC 7810X Seminar in Language and Diction for Singers

30 hours; 3 credits

Bulletin Description: Essentials of effective singing diction in English, Italian, French, and German. Review of the International Phonetic Alphabet (IPA) and its applications with Italian, French, German, Spanish, and English. Thorough study of standard lyric pronunciation in two European languages, with fundamentals of their respective phonetics and the rules governing their pronunciation. Supervised singing of solo vocal repertoire with clarity and expression. Languages of focus will rotate from term to term. May be taken twice for credit, provided that the languages of focus are different.

Prerequisite: Permission of the director.

Frequency of Offering: Every semester

Projected Enrollment: 12-15 students per semester

Rationale: Musicians who are training to become professional singers must have basic competence in correct diction, including the correct pronunciation of vowels and consonants in modern European languages (e.g., Italian, English, German, French, Spanish). The Conservatory of Music has long needed this course, which will provide an essential skill for singers seeking successful careers in opera, musical theater, concert music, art songs, church music, etc.

Clearances sought: Modern Languages

Learning Objectives: The correct pronunciation of vowels and consonants in modern European languages, as it applies to vocal repertory.

Departmental Outcomes

- 1. Stylistic Understanding. Ability to identify (at sight) and discuss at an advanced level musical scores in terms of period, genre, possible composer, and identifying musical traits.
- 2. Analytical Skills. Ability to listen to, analyze, explain, and discuss at an advanced level a musical score, i.e. with sufficient sophistication and appropriate attention to details such as key areas, harmonies, motives, rhythm, phrasing, texture, dynamics, register, color, text-music relationships, serial techniques, musical grammar and rhetoric, language, etc.
- Terminology. Understand the musical terminology pertaining to the history, theory, composition, and performance of music. Music-education students will also be expected to demonstrate knowledge of terminologies from recognized standard pedagogies in music. (In this course students will become familiar with using IPA Int'l. Phonetic Alphabet.)
- 4. Technical advancement and musical maturity in public performance at a professional level.

- 5. Demonstrated acquaintance with a broad range of repertoire for one's primary instrument or voice. (For this course, students will encounter vocal repertoire in different languages.)
- 6. Ability to speak and write substantively and persuasively about the music composed for one's primary instrument or voice (with emphasis on music written since 1700). (In this course, students will effectively pronounce and better understand the foreign-language texts that they are learning to sing.)

Outcomes of the Course

- 1. Exhibiting an appropriate mastery of a broad range of vocal music in at least two different modern languages. [25%];
- 2. Participating weekly in master-class adjudication and feedback on diction and pronunciation [25%];
- 3. Completing spoken and written assignments about the languages that they are studying in a given semester. [25%]
- 4. Oral and written tests on their thorough acquaintance with IPA and singer's pronunciation/diction for at least two modern languages. [25%]

Assessment:

Written, oral, and performance assignments in at least two assigned foreign languages throughout the semester, graded by the instructor. Singing, as a publicly adjudicated performance before the faculty and the class, at least two "sets" of songs in the assigned foreign languages of the particular semester. Midterm and Final Examinations on the principles of I.P.A. (with both written and oral questions).

Course Outline [Sample 14-week syllabus T.B.A.] Are we still waiting on this?

Week 1: Introduction to the basics of the language(s) under study in that particular semester. The essentials of I.P.A. (international phonetic alphabet).

Weeks 2-14: Each week students will be expected to practice and apply the correct pronunciation for the particular language under study, with assistance from I.P.A. guides and online examples. Regular in-class recitations and performances of assigned texts will be recorded, assessed, and graded to determine each student's progress.

Week 8: Midterm Examination (oral and written).

Week 15: Final Exam/Performance/Recitation.

Suggested Textbook

LaBouff, Kathryn. Singing and Communicating in English: A Singer's Guide to English Diction. New York: Oxford UP, 2008.

Moriarty, John. Diction: Italian, Latin, French, German; the Sounds and 81 Exercises for Singing Them. Boston: E.C. Schirmer Music, 1975. Print.

Bibliography

Adams, David. A Handbook of Diction for Singers: Italian, German, French. New York: Oxford University Press, 1999.

Adler, Samuel. *Phonetics and Diction in Singing: Italian, French, Spanish, German.* Minneapolis, MN: University of Minnesota Press, 1967.

Forward, Geoffrey G. and Elisabeth Howard. American Diction for Singers: Standard American Diction for Singers and Speakers. Los Angeles, CA: Alfred Publishing, 2001. Hines, Robert Stephan. Singers' Liturgical Latin: Rules for Pronunciation plus Standard Sacred Texts with IPA Transcriptions and English Translations. Lavergne, TN: Lightning Source, 2003. Sheil, Richard. A Singer's Manual of Foreign Language Dictions, 6th edition, revised and expanded. New York: YBK Publishers, 2004.

*Wall, Joan, Robert Caldwell, Tracy Gavilanes, and Sheila Allen. *Diction for Singers: A Concise Reference for English, Italian, Latin, German, French, and Spanish Pronunciation.* Redmond, WA: Pst...Inc., 1990.

Date of Departmental Approval: 14 November 2017

SECTION A-IV: NEW COURSES Department of Earth and Environmental Science

EESC 7910G Issues in Earth and Environmental Sciences in NYC

45 hours lecture; 3 credits

Bulletin Description: Overview of issues in earth and environmental science relevant to the historical and future development of the New York City region. Geological process that shaped the NYC area; current state of the environment and remediation initiatives; effect of climate change on NYC infrastructure; resource requirements of the city.

Prerequisites: 15 credits in Earth and Environmental Science

Contact Hours: 3

Frequency of Offering: once per year

Projected Enrollment: 15 students

Clearances: None

Rationale:

This capstone course for students in the MA program stresses breadth of knowledge in Earth and environmental science in order to make graduates more adaptive in the workforce in the NYC region. The course will provide a means to assess MA program outcomes, and will provide students with a broad overview in both the MA and MS of the ways in which the natural environment has effected, and continues to effect, the development of NYC.

Program/Department Goals Addressed by Course:

- Develop understanding of the role of the natural environment and natural forces in the continuing development of New York City
- Integrate the content, approaches, and perspectives of both the Earth and environmental sciences
- Have a means to effectively evaluate program outcomes

Objectives of Course:

- Students will learn how the natural physical environment affected the growth and development of New York City
- Students will learn what environmental issues face NYC
- Students will learn what actions are being taken to improve environmental conditions and increase the resilience of NYC
- Students will use quantitative data to analyze an environmental issue
- Students will further develop technical writing skills

Outcomes Anticipated for Course:

• Students will be able to describe how the geological setting and natural environment affected the historical development of NYC

- Students will be able to describe the environmental issues facing NYC, and discuss strategies for mitigation of environmental threats
- Students will be able to integrate Earth and environmental concepts, approaches, and perspectives into analyses of issues facing NYC
- Students will be able to use quantitative data sets to analyze an issue in Earth and environmental science
- Students will be able to analyze spatial patterns in data using GIS
- Students will be able to write a technical research report

Course Outline

Week	Торіс
1	The emergence of NYC topography
2	Role of geology in the settlement and expansion of NYC
3	Use of mineral and energy resources in NYC
4	Mineral-derived hazards in NYC (asbestos; mercury; radon)
5	Surface Flooding in NYC
6	Storms and New York City
7	Contaminants in the subsurface (soils and groundwater)
8	Superfund sites and their remediation (Gowanus, Newtown)
9	Climate change and sea level rise – problems and responses
10	NYC biodiversity – rehabilitation of parks, marine/estuary fauna, migratory animals
11	Sustainability issues – energy needs, water, recreation, quality of life
12	Case Study
13	Case Study
14	Case Study

Method of Evaluation

Responses to Weekly Readings	20%
Case Study Report	40%
Final Exam	40%

Method of Assessment

Content knowledge and integration (Outcomes 1-3) will be evaluated by responses to readings and the final exam. Weekly feedback to reading responses will provide formative assessment of their understanding of course material. The Final Exam will provide summative assessment of their content knowledge.

The Case Study Report will assess students' abilities to integrate Earth and Environmental concepts, conduct quantitative analyses, interpret spatial data using GIS, and communicate effectively in a professional format (Outcomes 3-6). The case study will focus on the impact of NYC's terminal moraine on current environmental issues in the city. Students will use GIS to analyze maps of elevation, green space, flood occurrence, and temperature. A statistical analysis of the data will be used to determine relationships between these datasets. Finally, students will perform a literature review and write a report on their results.

Readings and References

- Kadinsky, S., 2016, Hidden Waters of New York City: A history and guide to 101 forgotten lakes, ponds, creeks, and streams in the five boroughs. The Countryman Press, Woodstone, VT.
- Kemp, A., 2013, <u>Contribution of relative sea-level rise to historical hurricane flooding in</u> **New York** <u>City</u> Journal of Quaternary Science, vol. 28, pp. 537-541
- Mandigo, A., DiDenza, D., Keimowitz, A., and Fitzgerald, N., 2016, Chemical contamination of soils in the New York City area following Hurricane Sandy. Environmental Geochemistry and Health, v. 38, pp. 1115-1124
- Maresca, G, 1984, Asbestos in lake and reservoir waters of Staten Island, New York; source, concentration, mineralogy, and size distribution. Environmental Geology and Water Sciences, v. 6, pp. 201-210
- Marquardt, M., 2011, <u>When the dust settles; investigating lingering health questions 10 years</u> <u>after 9/11</u>. Earth, v. 56, pp.28-31
- McDonald, S., 2016, <u>Groundwater impacts on surface water and sediment; Gowanus Canal</u>, <u>Brooklyn</u>, **New**_York. Remediation v. 26, pp. 53-71
- Mitchell, R., 2014, Lead (Pb) and other metals in New York City community garden soils; <u>factors influencing contaminant distributions</u>.. Environmental Pollution, v. 187, pp. 162-169
- Mukundan, R., 2103, <u>Suspended sediment source areas and future climate impact on soil</u> erosion and sediment yield in a <u>New</u><u>York</u><u>City water supply watershed</u>, <u>USA</u>. Geomorphology, v. 183, pp. 110-119
- Orton, P., 2016, <u>A validated tropical-extratropical flood hazard assessment for New_York</u> <u>Harbor</u>. Journal of Geophysical Research: Oceans, v. 121, pp.8904-8929
- Sanderson, E., 2009. Manahatta, A Natural History of New York City; Chapter 3: The fundamentals of Manahatta, pp. 66-101. Abrams, New York
- Sanderson, E., 2009. Manahatta, A Natural History of New York City; Chapter 5: Ecological neighborhoods, pp. 66-101. Abrams, New York
- Swanson, L., Dorsch M., Giampieri, M., Otron, P., Psarris, A., and Sanderson, E., 2016, Dynamics of the Biophysical Systems of Jamaica Bay, In: Sanderson, E., Solecki, W., Waldman, J., Parris, A. (eds.) Prospects for Resilience: Insights from New York City's Jamaica Bay Island Press
- Shelby, M., 2016, <u>Tsunami hazard assessment in the Hudson River estuary based on dynamic</u> <u>tsunami-tide simulations</u>. Pure and Applied Geophysics, v. 173, pp. 3999-4037
- Yin, J., 2016, <u>Coupled modeling of storm surge and coastal inundation; a case study in</u> **New York** <u>City during Hurricane Sandy</u>. Water Resources Research, v. 52, pp. 8685-8699

Date of Departmental Approval: 14 November 2017

SECTION A-IV: NEW COURSES Department of Earth and Environmental Science

EESC 7911G Terrestrial and Aquatic Environmental System Dynamics

45 hours lecture; 3 credits

Bulletin Description: Systems approach studies of energy flow, material exchange and ecosystem dynamics in terrestrial and aquatic environments; ecosystem feedback processes; biogeochemical cycles; human impacts and alteration of natural system functioning. Case studies of local, terrestrial and aquatic environments.

Prerequisites: none

Contact hours: 3

Frequency of offering: biannually

Projected enrollment: 15 students

Clearances: None

Rationale:

This course demonstrates the interconnectedness and complementary nature of approaches, methods, and subject matter across the earth and environmental sciences. It will provide common learning experiences for students of both earth and environmental sciences in order to further develop a sense of community in diverse graduate student cohorts. It will also address graduate student demand for increased course offerings in ecosystem dynamics. This course will investigate abiotic and biotic components of terrestrial and aquatic environments and how the interplay of these components and their feedback processes have shifted in past and present-day environments and how they're projected to change in the future and what can potentially be done to offset these changes.

Department Goals Addressed by Course:

- 1. Integrate the content, approaches, and perspectives of both the earth and environmental sciences.
- 2. Approach the subject matter using scientific knowledge from both earth and environmental sciences.
- 3. Increase understanding of human influence and dependence on the environment.

Objectives of Course:

- 1. Increase student understanding about flows of energy and materials in terrestrial and aquatic ecosystems.
- 2. Illustrate the interplay between Earth's abiotic and biotic components and interrelationships between organisms and environmental parameters.
- 3. Explore past and present energy flow, material exchange and biogeochemical cycling in shaping organism diversity and abundance and population dynamics for understanding how anthropogenic impacts may influence system dynamics.
- 4. Understand how anthropogenic impacts may influence ecosystem dynamics and strategies for offsetting these impacts.

Learning Outcomes:

Upon completion of the course students will be able to:

- 1. Describe the abiotic and biotic components of common environmental processes.
- 2. Trace energy and material flow and biochemical cycles through environmental systems.
- 3. Apply integrative and conceptual analysis techniques to the study of a wide variety of environmental systems.
- 4. Articulate an energy and material flow budget and biogeochemical cycles in local terrestrial and aquatic systems.

Course Outline:

Week	Topic/Activity and Due Dates
1	Connections: Earths Atmosphere, Lithosphere, Hydrosphere, & Biosphere
	Case Study Group Formation
2	Primary production: Aquatic; Case Study Ecosystem Assignments
3	Primary production: Terrestrial
4	Consumer energetics and secondary production: Aquatic
5	Consumer energetic and secondary production: Terrestrial
6	Biogeochemical cycles: General; Case Study Outlines w/ Reference Lists Due
7	Biogeochemical cycles: Aquatic
8	Biogeochemical Cycles: Terrestrial
9	Coupled terrestrial-aquatic systems – Watersheds
10	Coupled terrestrial-aquatic systems – Urbanization
11	Coupled terrestrial-aquatic systems – Agriculture
12	Coupled terrestrial-aquatic systems – Coastal
13	Case Study Oral Presentations
14	Case Study Oral Presentations; Case Study Critiques/Feedback

Method of Evaluation:

- 15% Homework Sets
- 15% Journal Article Summaries and Discussions
- 30% Examinations (final)
- 40% Case study: outline and reference list (5%), final report (15%) and presentation (20%)

Method of Assessment:

There are two forms of assessment learning outcomes: 1) formative assessment of learning gains of course concepts and class materials learning gains; 2) summative assessment of presentation products.

- 1. Formative Assessment: Homework sets, journal article summaries and discussions will be routinely administered and graded to ensure pre-class preparation and rapid feedback regarding understanding of class materials and concepts. Case study outline and reference lists will be reviewed and graded to provide students feedback on project organizational structure and concept integration.
- 2. Summative Assessment: Case study report and presentation will assess students' ability to think critically, apply integrative skills and communicate both in writing and orally. Midterm and final exams will also be administered to assess students' content knowledge.

Textbook

Weathers KC, Strayer DL, Likens GE, Eds. 2013. Fundamentals of Ecosystem Science. Academic Press. 312 p.

Bibliography

- Conley, D. J., H. W. Paerl, R. W. Howarth, D. F. Boesch, S. P. Seitzinger, K. E. Havens, C. Lancelot, and G. E. Likens. 2009. Controlling eutrophication: Nitrogen and phosphorus. Science 323:1014-1015.
- Emerson, S. and J. Hedges. 2008. Chemical Oceanography and the Marine Carbon Cycle. Cambridge University Press.
- Enger, E. and B. Smith. 2008. Environmental Science (14th Ed.), McGraw-Hill Education. ISBN-13: 978-0073532554
- Groffman, P. M., M. L. Cadenasso, J. Cavender-Bares, D. L. Childers, N. B. Grimm, J. M. Grove, S. E. Hobbie, L. R. Hutyra, D. G. Jenerette, T. McPhearson, D. E. Pataki, S. T. A. Pickett, R. V. Pouyat, E. J. Rosi-Marshall, and B. L. Ruddell. 2017. Moving towards a new Urban Systems Science. Ecosystems 20:38-43.
- Marcelli-Libelli, S. 2016. Environmental Systems Analysis with Matlab. CRC Press. ISBN-13: 978-1498706353
- Pace, M. L., S. R. Carpenter, and J. J. Cole. 2015. With and without warning: managing ecosystems in a changing world. Frontiers in Ecology and the Environment 13:460-467.
- Weathers, K. C., P. M. Groffman, E. Van Dolah, E. S. Bernhardt, N. B. Griffm, K. McMahon, J. P. Schimel, M. Paolisso, R. Maranger, S. Baer, K. Brauman, and E. Hincklye. 2016.
 Frontiers in ecosystem ecology from a community perspective: The future is boundless and bright. Ecosystems 19:753-770.

Date of Departmental Approval: 14 November 2017

SECTION A-IV: NEW COURSES Department of Earth and Environmental Science

EESC 7912G Earth's Climate

45 hours lecture; 3 credits

Bulletin Description: Overview of the cycles, processes, and history that govern the Earth's climate from both an earth science and environmental science perspective. Scientific investigation of: climate interactions with the biosphere, lithosphere, cryosphere, and hydrosphere; scales and processes of climate, weather, and teleconnections; global energy budget and climate change.

Prerequisites: None

Contact hours: 3

Frequency of offering: biannually

Projected enrollment: 15 students

Clearances: None

Rationale:

The course demonstrates the interconnectedness and complementary nature of approaches, methods, and subject matter across the earth and environmental sciences, and will provide common learning experiences for students of both earth and environmental sciences in order to further develop a sense of community in diverse graduate student cohorts. The course also addresses graduate student demand for course offerings in atmospheric science in the MA/MS curriculum and move course selections towards fully representing the Earth's spheres: lithosphere, hydrosphere, biosphere, and atmosphere.

Department Goals Addressed by Course:

- Integrate the content, approaches, and perspectives of both the earth and environmental sciences.
- Approach the subject matter (climate) using scientific knowledge from both earth and environmental sciences.
- More fully represent the knowledge and research of the full EESC faculty in course offerings.
- Increase understanding of human influence and dependence on the environment.

Objectives of Course:

- Students will learn scientific basics of climate and atmospheric science.
- Students will learn how climate interacts with the lithosphere, biosphere, and hydrosphere.
- Students will develop the scientific background to competently discuss anthropogenic climate change and natural climate fluctuation.
- Students will utilize skills in math and physics to properly represent atmospheric processes.
- Students will read scientific reports to learn about the current state of climate science.

Outcomes Anticipated for Course:

- Students will be able to describe the basic physical processes which control the Earth's climate and weather at various scales.
- Students will be able to describe the historic and current atmosphere as well as its interactions with Earth's lithosphere, hydrosphere, and biosphere.
- Students will be able to integrate earth and environmental concepts, approaches, and perspectives into climate science.
- Students will be able to use scientific equations to describe the climate system.
- Students will be able to identify proper sources for researching the current state of climate science.

Week	Торіс
1	An overview of Earth's climate
2	Icehouse-greenhouse intervals in Earth's history
3	Causes of glaciation
4	Historical biosphere-climate interactions
5	Influence of the lithosphere on climate
6	Atmospheric circulation
7	Oceanic circulation
8	Global energy budget
9	Weather
10	Teleconnections: between weather and climate
11	Water and climate
12	Thunderstorms and cyclones
13	Field trip to Lamont-Doherty (Ice) Core Repository
14	Anthropogenic climate change and presentations

Course Outline:

Method of evaluation:

Homework assignments:	35%
Final Exam:	35%
Presentation:	30%

Method of assessment:

Course content and integration (outcomes 1-4) will be evaluated by homework and the final exam. Weekly homework will assess ongoing and developing knowledge while the final exam will assess cumulative climate knowledge.

Presentations will assess student ability to find and read scientific data and reports (outcome 5). Students will present a synopsis of a chapter from a chosen climate report to the class. The presentation will include data from primary sources.

Bibliography:

Aherns, D.C. and R. Henson, 2014, *Meteorology Today: An Introduction to Weather, Climate, and the Environment*. Boston, MA, Cengage Learning, 585 p.

- Benn, D.I. Davies, D.J.A., 2010. *Glaciers and Glaciation*. Hodder Arnold Publ. 802 pp. ISBN 0340905794, 9780340905791.
- IPCC, 2014, Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

Hoffman, P.F., Schrag, D.P., 2002. The snowball Earth hypothesis: testing the limits of global change. Terra Nova, 14:129–155.

Kopp, R.E., Kirschvink, J.L., Hilburn, I.A., Nash, C.Z. 2005. The Paleoproterozoic snowball Earth: A climate disaster triggered by the evolution of oxygenic photosynthesis. Proc. Nat.Acad. Sci. USA, 102: 11131–11136. doi10.1073pnas.0504878102

- Kasting, J.F. 2005., Methane and climate during the Precambrian era. Precambrian Research 137 (2005) 119–129, doi:10.1016/j.precamres.2005.03.002.
- Maruyama, S.; Santosh, M., 2008. Models on Snowball Earth and Cambrian explosion: A synopsis. Gondwana Research. 14: 22–32. doi:10.1016/j.gr.2008.01.004.
- Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., 2014, Climate Change Impacts in the United States: The Third National Climate Assessment. U.S. Global Change Research Program, 841.

New York City Panel on Climate Change, 2015, Building the knowledge base for climate resiliency. Annals of the New York Academy of Sciences, 1336 (1): 1–150.

Olsen, P.E. 1986. A 40-Million-Year Lake Record of Early Mesozoic Orbital Climatic Forcing. Science, New Series, 234:842-848.

Royer, D.L., Berner, R.A., Park, J. 2007. Climate sensitivity constrained by CO₂ concentrations over the past 420 million years. Nature, 446: 530-532. doi:10.1038/nature05699

- Walker, J.C.G. 1982. Climatic Factors on the Archean Earth. Palaeogeography, Palaeoclimatology, Palaeoecology, 40:1-11.
- Wallace, J. M. and P. V. Hobbs, 2006, *Atmospheric Science: An Introductory Survey*, second edition. Academic Press, 483 pp.
- Wallmann, K., 2008. Mesozoic climate: Liverworts and all. Nature Geoscience. 1:14-15.
- Wolf, E.T., Toon, O.B. 2014. Controls on the Archean Climate System Investigated with a Global Climate Model. Astrobiology, 14, doi: 10.1089/ast.2013.1112
- Zachos, J., Pagani, M., Sloan, L., Thomas, E., Billups, K., 2001.Trends, Rhythms, and Aberrations in Global Climate 65 Ma to Present. Science, 292: 686-693.

Date of Departmental Approval: 14 November 2017

SECTION A-IV: NEW COURSES Department of Earth and Environmental Science

EESC 7913G Natural Resources, Management and Conservation

30 hours lecture; 30 hours lab/field trip; 3 credits

Bulletin Description: Principles and practices for sustainably managing natural resources (fossil fuels, alternative energy sources, base metals, strategic metals, soils, water); extraction methods; waste products and their environmental impact; approaches to remediation; approaches to minimizing environmental impact.

Prerequisites: None

Contact hours: 3

Frequency of offering: Biannually

Projected enrollment: 15 students

Clearances: None

Rationale:

This course demonstrates the interconnectedness and complementary nature of approaches, methods, and subject matter across the earth and environmental sciences, and provides common learning experiences for students of both earth and environmental sciences in order to further develop a sense of community in diverse graduate student cohorts. It also addresses graduate student demand for increased course offerings in resources and their management. This course will discuss the range of non-biological natural resources, the potential environmental impacts associated with their use, and practices/strategies related to their management and conservation.

Department Goals Addressed by Course:

- To demonstrate the interconnectedness and complementary nature of the approached, methods, and subject matter across the Earth and environmental sciences
- To provide common learning experiences for students of both Earth and environmental students in order to further develop a sense of community in diverse graduate student cohorts
- Foster interdisciplinary thinking and increase understanding of human influence and dependence on the environment

Objectives of Course:

- 1. Provide an in-depth understanding of non-biological natural resources, resource limitation and depletion, environmental consequences of resource extraction and usage.
- 2. Introduce students to strategies and approaches to natural resource conservation and management, and the concept of waste-to-resource in the context of urban sustainability.
- 3. Develop skills in problem-solving with respect to solutions and approaches to resource use

4. Develop communication skills associated with working with professionals from other disciplines, as well as the public

Learning Outcomes:

Upon completion of the course students will be able to:

- 1. Describe the current issues and information related to common natural resources and challenges in their managing and exploitation.
- 2. Discuss common practices in natural resources conservation and management,
- 3. Apply the knowledge and principles related to the exploitation and management of resources to decision making and policy.
- 4. Convey the concepts related to resource conservation and sustainability to the public.

Course Outline

WEEK	TOPIC (2 hours each)	Case Study (2 hours each)
1	Our Need for Natural Resources	Group discussion
2	Historical and current principles and practices in resource conservation and sustainability	Group discussion
3	Fossil Fuels: Exploration, Extraction, Demands	Natural Gas Production and Hydraulic Fracturing
4	Alternative Energy: Sources, Viability	EU Renewable Energy Directive
5	Base Metals: Exploration, Extraction, Demands	Acid Drainage and Mine Waste Alternatives
6	Strategic Metals: Exploration, Extraction, Demands	Strategic Metals as a Requirement for Renewable Energy
7	Soil as a natural resource	The history of lead use and environment
8	Soil contamination	Urban agriculture & challenges
9	Soil conservation	Exploring solutions to the soil contamination problem
10	Water as a natural resource	California drought and water management
11	Drinking water pollution	Bangladesh groundwater arsenic problem
12	Stormwater management: converting a problem into a resource	NYC GI Program
13	Waste-to-resource: sustainable future for global cities (I)	The story on gypsum wallboard
14	Waste-to-resource: sustainable future for global cities (II)	Organic waste in the City

15 FINAL EXAM

Method of Evaluation:

- 10% Weekly Reading Summaries
- 30% Group investigative project on a selected topic
- 10% White paper
- 50% Final Exam

Method of Assessment:

<u>Weekly Reading Summaries</u>: formative assessment of objectives 1 to 3, and of class preparedness

Exam: Summative assessment of objectives 1 and 2 through short answer and essay questions.

<u>Investigation Report</u>: To assess objective 3, students will work individually, to gather information from a variety of sources, and write a comprehensive report on their choice of concepts/issues discussed in class, including recommendations for action and policy.

<u>White paper</u>: Students will write a short (3 pages) informative whitepaper directed at a community or public-interest group related to the topic of their investigation. This will assess objective 4.

Bibliography

- Alonso, E., Sherman, A., Wallington, T., Everson, M., Field, F., Roth, R., and Kirchain, R., 2012, Evaluating Rare Earth Element Availability: A Case with Revolutionary Demand from Clean Technologies. *Environmental Science & Technology*, v. 46, pp. 3406-3414.
- Center for Neighborhood Technology, 2010. The value of green infrastructure: a guide to recognizing its economic, environmental ans social benefits. 80 pages. Available at <u>http://www.cnt.org/sites/default/files/publications/CNT_Value-of-Green-Infrastructure.pdf</u>
- Gregory, K., Vidic, R., and Dzombak, D., 2011, Water Management Challenges Associated with the Production of Shale Gas by Hydraulic Fracturing. Elements, v. 7, pp. 181-186
- Henry, H., Naujokas, M., Attanayake, C., Basta, N., Cheng, Z., Hettiarachchi, G., Maddaloni, M., Schadt, C., and Scheckel., K. "Bioavailability-based In Situ Remediation to Meet Future Lead (Pb) Standards in Urban Soils and Gardens." Environmental Science and Technology, 49 (15), 8948-8958
- Hernberg, S. (2000) Lead poisoning in a historical perspective. American Journal of Industrial Medicine, 38, 244-254.
- IGES White Paper. Chapter 6: Urban Organic Waste From Hazard to Resource. Available at https://pub.iges.or.jp/system/files/publication_documents/pub/book/796/08_chapter6.pdf Johnson, B., and Hallberg, K., 2005, Acid mine drainage remediation options: a review. Science of the Total Environment, v. 338, pp. 3-14
- MacDonald, G. (2015) Beyond the perfect drought: California's real water crisis. Yale Environment 360. Available at

http://e360.yale.edu/features/beyond_the_perfect_drought_californias_real_water_crisis

Norra, S., Cheng, C. Urban Soils Contamination. In: Soils within Cities: Global approaches to their sustainable management. Editors: IUSS Working Group SUITMA. Catena Soil Sciences, ISBN 978-3-510-65411-6. p35-42.

Shanghai Manual – A Guide for Sustainable Urban Development in the 21st Century. Chapter 5 – Municipal Solid Waste Management: Turning Waste into Resources. 39 pages. Available at

http://www.un.org/esa/dsd/susdevtopics/sdt_pdfs/shanghaimanual/Chapter%205%20-% 20Waste_management.pdf

- Smith, M., Lingas, E., and Rahman, M. (2000) Contamination of drinking water by arsenic in Bangladesh: a public health emergency. Bulletin of the World Health Organization, 78(9), 1093-1103.
- Vengosh, A., Jackson, R., Warner, N., Darrah, T., and Kondash, A., 2014. A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States. *Environmental Science & Technology*, v.48, pp. 8334-8348

Date of Departmental Approval: 14 November 2017

SECTION A-IV: NEW COURSES Department of Earth and Environmental Science

EESC 7914G Earth's Ocean

45 hours lecture; 3 credits

Bulletin Description: The ocean and its interaction with the solid earth. The ocean in earth history; ocean morphology; origin of ocean chemistry; present day ocean circulation and its effects on ocean life; biogeochemical cycles; ocean productivity; anthropogenic influences on ocean chemistry and resources; interaction of ocean with Earth's climate; one or more field trips.

Prerequisites: None

Contact hours: 3

Frequency of offering: Biannually

Projected enrollment: 15 students

Clearances: None

Rationale:

This course demonstrates the interconnectedness and complementary nature of approaches, methods, and subject matter across the earth and environmental sciences, and provides common learning experiences for students of both earth and environmental sciences in order to further develop a sense of community in diverse graduate student cohorts. It also addresses graduate student demand for increased course offerings in ecosystem dynamics. This course will discuss the origin and evolution of the oceans, both the underlying lithosphere and the overlying waters.

Department Goals Addressed by Course:

- 1. Increase the department's emphasis on the hydrosphere and aquatic environments to better reflect the department's expertise
- 2. Expand the course offerings of the department to include an emphasis on environmental issues
- 3. Foster interdisciplinary thinking and increase understanding of human influence and dependence on the environment

Objectives of Course:

- 5. Provide an in-depth understanding of the physical, chemical, biological, and human processes affecting marine environments.
- 6. Develop proficiency in acquiring, visualizing and interpreting data from a variety of sources in ocean science.
- 7. Develop quantitative reasoning skills.

Learning Outcomes:

Upon completion of the course students will be able to:

5. Explain how the ocean 'works' in a quantitative way;

- 6. Identify important processes that regulate ocean productivity and the structure of marine ecosystems; and
- 7. Evaluate current research on the ocean and its role in climate.

Course Outline:

Week	Lecture
Unit 1	Ocean History
Weeks 1 - 3	Topics: origin of the ocean; puzzle of seawater composition; hydrothermal circulation; plate tectonics and the shape of ocean basins; riverine input
Unit 2	The Oceans Today
Weeks 4 - 9	Topics: physics governing ocean circulation; current systems; abyssal circulation; marine ecosystem structure; physical determinants to ocean productivity and food-webs; seasonal variability; spatial variability; deep-sea communities; cycles of major elements of life;
Unit 3	The Future Ocean
Weeks 10 - 14	Topics: carbon cycle; climate change and ocean circulation; ocean acidification; sea-level rise and coastal impacts, ocean fertilization and geoengineering; fisheries effects on marine ecosystems

Method of Evaluation:

30% Readings and participation in class discussions

30% Exercises in oceanographic data interpretation and visualization

40% Final Exam

Method of Assessment:

Three assessment tools are used to measure the degree of achievement of distinct learning objectives.

Exams: The cumulative final exam will focus on major concepts discussed during the semester through essay-type questions.

Readings-Discussion. Each week, the students will read selections, from the primary literature that discuss the current topic, with an emphasis on recent significant published work. The sequence will be: lecture on a particular topic, assigned reading, class discussion. The discussion assessment will be used to measure the progress towards mastering lecture topics, and also to show relevance between concepts and 'real-world' problems. The students will therefore experience a topic four times: lecture, homework, class discussion, and in the data interpretation (below).

Data Interpretation: Students will be given some oceanographic data to plot and interpret based on what is presented in the lecture material. Class time will be devoted to this.
Textbook

Denny, M. 2006. "How the Ocean Works", Princeton University Press.

Bibliography

- Coale, K. H. et al. 1996. A massive phytoplankton bloom induced by an ecosystem-scale iron fertilization experiment in the equatorial Pacific Ocean. Nature 383, 495-501.
- Conover, R. J. 1968. Life in a nutritionally dilute environment. American Zoologist 8, 107-118.
- Emerson, S. and J. Hedges. 2008. Chemical Oceanography and the Marine Carbon Cycle. Cambridge University Press.
- Eppley, R.W. and B.J. Peterson. 1979. Particulate organic matter flux and planktonic new production in the deep ocean. Nature 282, 677-680.
- Falkowski, P. G. and J. A. Raven. 1997. Aquatic Photosynthesis. Blackwell Science.
- Finley, C. 2011. All the Fish in the Sea. Maximum Sustainable Yield and the Failure of Fisheries Management. Univ. Chicago Press.
- Henson, S., Beaulieu, C., & Lampitt, R. (2016). Observing climate change trends in ocean biogeochemistry: when and where. Global Change Biology, 22(4), 1561–1571. DOI: 10.1111/gcb.13152, 10.1111/gcb.13152
- Langmuir, C. H., and W. S. Broecker. 2012. *How to Build a Habitable Planet*. Princeton U. Press.
- Mann, K. H. and J. R. N. Lazier. 1991. *Dynamics of Marine Ecosystems: Biological-Physical Interactions in the Ocean*. Blackwell.
- *Oceanography*. December 2009. Special Issue on the Future of Ocean Biogeochemistry in a High-CO₂ World. The Oceanography Society.
- Sverdrup, H. U. 1953. "On conditions for the vernal blooming of phytoplankton." J. Conseil perm. int. Explor. Mer 18: 287-295
- von Arx, W. S. 1962. An Introduction to Physical Oceanography. Addison-Wesley.

Date of Departmental Approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Department of English

ENGL 7850X The Future of Publishing

30 hours plus conference; 3 credits

Bulletin description:

Overview of the past, present, and possible future of the book publishing industry. Historical analysis is integrated with hands-on, collaborative training in the skills required to shepherd books from authors to readers.

Frequency of offering: once per year

Projected enrollment: 20 students

Clearance: None

Rationale:

As the foundation course for the graduate Publishing Certificate, this course addresses the dramatic transformation the industry has recently undergone and examines various component fields of an industry in transition. Academic treatment is married with practical training and experiential learning. Before advancing to the focused treatment of the various aspects of the industry offered in the other certificate courses, The Future of Publishing gives students an overview of the editorial, publicity, marketing, sales, and digital components through student collaboration, guest lectures, and traditional assigned readings and discussion.

Objectives of Course:

This course supports the English department's goal to prepare students for real-world application of their training in language, linguistics, and written communication. Serving a student body that is culturally and linguistically diverse, this course affirms the department's goal to foster authentic learning and global awareness. This course supports the mission of the College by advancing its commitment to "capitalize on Brooklyn as a learning environment and a gateway to the world" (2015 Strategic Plan).

Outcomes anticipated for Course:

Students who successfully complete this course will be able to:

- 1. understand how language operates;
- 2. read and think critically;
- 3. express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline;
- 4. conduct research.

Course Material

Sample syllabus

Week 1: Publishing Models

Overview of models: major; independent; nonprofit; university; online. The digital realm, the Amazon factor, and other new trends. Issues of diversity. The job market.

Week 2: Developing a Publishing Mission and Vision

Writing assignment: 500-word opinion essay on recent publishing event, trend, or notable book. Missions, visions, and profit: balancing idealism and culture with financial and business realities; shaping a publishing vision.

Week 3: Editors and Editing

Reading assignment: André Schiffrin, The Business of Books Discussion of Schiffrin's book and the history of the publishing business. Overview of editorial approaches, responsibilities, and processes. Class visitor: Editor at major trade publishing house.

Week 4: Editorial Boards

Reading assignment: sample manuscript submissions

Formation of student publishing groups; in-class evaluation of manuscripts; groups pitch decisions to full class.

Class visitor: Editor at major trade publishing house.

Weeks 5-6:

Reading assignment: Adam Davidson, "How Dead is the Book Business?" (New York Times 13 Nov 2012); Eric Pfanner & Amy Chozick, "Random House and Penguin Merger Creates Global Giant" (New York Times 29 Oct 2012); Scott Timberg, "Book Publishing Crisis: Capitalism Kills Culture" (Salon 10 Nov 2012).

Discussion of assigned reading; Student publishing groups present names, mission statements, logos; Student publishing groups present and receive feedback on cover designs. Class visitor: Representative of the National Book Foundation.

Week 7: Marketing, Publicity, and Promotion

Assignment: Student publishing groups develop marketing plans, revise covers based on feedback.

Presentations of marketing plans and revised cover designs; Overview of marketing, publicity, and promotion.

Class visitor: Representative of the PEN American Center.

Week 8: A Writer's Life & Issues of Diversity

Reading assignment: Elizabeth Nuñez, Boundaries.

Discussion of writers' lives, earning a living, fiction vs. memoir, race and gender in the publishing industry. What would a healthier publishing business look like? Class visitor: Elizabeth Nuñez.

Week 9: Case Studies in Publishing Successes and Failures Writing assignment: An essay of 500+ words analyzing one publishing success story or one publishing failure story in previous year.

Student presentations of success or failure analysis; feedback from instructor and class.

Week 10: Literary Agents

Writing assignment: Questions for class visitor, a literary agent.

Reading assignment: David Bell, "The Bookless Library" (New Republic 2 Aug 2012); Lisbet Rausing, "Toward a New Alexandria" (New Republic 12 Mar 2010). Class visitor: Literary agent.

Week 11: E-Publishing, Production, and Design

Overview of e-publishing, production, and design; the production, conversion, and content opportunities of e-books; challenges and options of design.

Week 12: Literary journals & Writers conferences; the "Urban Lit" phenomenon. Reading assignment: Two issues of major contemporary literary journal; select essays on "urban lit."

Class visitors: Editor of major contemporary literary journal; "Urban Lit" best-selling author.

Week 13: Finances

Reading assignment: excerpt from Jason Epstein, *Book Business: Publishing Past, Present, and Future.*

Discussion of author contracts, sample Profit & Loss statements.

Week 14: Presentations of Publishing Proposals & Anatomy of a Contemporary Hit Student publishing group presentations, including mission, infrastructure, budget and financing, marketing strategies, e-book program, editorial policies, and cover design. Discussion of the path of a "hit" book, including Skype interview with best-selling author.

Week 15: Final paper due

Writing assignment: an essay of 1000+ words on what would help to create a more writerfriendly culture, including role (if any) of government, role of families, schools, and religious institutions, and role of market forces.

Methods of Evaluation

Essay on recent publishing event, trend, or notable book Case study of a publishing success or failure Collaborative publishing proposal and presentation Essay on creating a more writer-friendly culture

Methods of Assessment

- Students' ability to understand how language operates (Outcome 1) is assessed through the essay on creating a more writer-friendly culture.
- Students' ability to read and think critically (Outcome 2) is assessed through the essay on a recent publishing event, trend, or notable book.
- Students' ability to express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline (Outcome 3) is assessed through the collaborative publishing proposal and presentation.
- Students' ability to conduct research (Outcome 4) is assessed through the case study of a publishing success or failure.

Date of Departmental Approval: 17 October 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Department of English

ENGL 7860X The Editor in the 21st Century

30 hours plus conference; 3 credits

Bulletin description:

Aspects of the editor's responsibilities in the publishing process, from acquisitions, to working with authors, to managing the publication, to developing a list. Editors as technicians and cultural gatekeepers. Topics include manuscript editing, writing copy, and developing marketing tools for internal and external use.

Frequency of offering: once per year

Projected enrollment: 20 students

Clearance: None

Rationale:

If authors are the lifeblood of the book publishing industry, editors are the heart and circulatory system of organizations. This course familiarizes students with the editorial functions of a publishing operation, with emphasis on the editor's role in giving shape and direction to work in progress and advocating for that work until it reaches readers.

Objectives of Course:

This course supports the English department's goal to prepare students for real-world application of their training in language, linguistics, and written communication. Serving a student body that is culturally and linguistically diverse, this course affirms the department's goal to foster authentic learning and global awareness. This course supports the mission of the College by advancing its commitment to "capitalize on Brooklyn as a learning environment and a gateway to the world" (2015 Strategic Plan).

Outcomes anticipated for Course:

Students who successfully complete this course will be able to:

- 5. understand how language operates;
- 6. read and think critically;
- 7. express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline;
- 8. conduct research.

Course Material

Sample syllabus

Week 1: Editors as Cultural Gatekeepers Introduction to the course. Six questions editors ask before acquiring a book.

Week 2: Acquisitions

Material located with strike-through is to be deleted and material <u>underlined</u> is to be added

The editor's considerations in signing an author. Discussion of *Avid Reader*. Reading assignment: Robert Gottlieb, *Avid Reader: A Life* (Farrar Strauss & Giroux, 2016)

Week 3: The Author's Champion The editor's role as influencer. Writing assignment: comparative analysis of lists of different imprints Guest lecture: Chris Jackson, Editor in Chief, One World/Random House

Week 4: Cultivating the Forest vs. the Trees Reading assignment: Betsy Lerner, *The Forest for the Trees: An Editor's Advice to Writers* (Riverhead Books, 2010)

Week 5: Reading the Readership Using the media to build a list. Reading assignment: Michael Korda, *Another Life: A Memoir of Other People* (Random House, 1999)

Weeks 6 and 7: Relationships with Colleagues & Agents Book proposals, agents, rejection letters and deal memos. How to get the acquisitions green light from Editorial Boards. Guest lecture/workshop: Dawn Davis, Publisher, Atria Books (Simon and Schuster)

Week 8: The Responsibilities of the Author

Editing the manuscript.

Reading assignment: excerpts from Strunk & White, *The Elements of Style*, and *The Chicago Manual of Style*.

Week 9: Editing Manuscripts and Passing Manuscripts for Press Writing editorial evaluations and marking the manuscript. Sample manuscripts distributed for assignment.

Week 10: Working with Design, Publicity, Marketing, and Sales Developing tools that sell a book, in-house and in the marketplace.

Week 11: Making the Most of Meetings and Presentations Guest lecture/workshop: Cherise Fisher (former Editor-in-Chief, Plume Books), Sarah Lazin (former book developer, Rolling Stone), Johanna Castillo (VP & Executive Editor, Atria Books), or Francis Lam (Editor, Clarkson Potter)

Weeks 12 and 13: Publishing groups present Assignment due: Edited sample manuscript Student publishing groups present their lists to class. Feedback and critique. Each editor presents his or her individual title.

Week 14: Recap and Questions Editors as cultural gatekeepers, author's champions, and company's product developers.

Methods of Evaluation

Material located with strike-through is to be deleted and material <u>underlined</u> is to be added

Written comparative analysis of lists of different imprints Written evaluation and marking of sample manuscripts In-class presentation of individual title in group list Written analysis of approaches taken by class visitors as editors

Methods of Assessment

- Students' ability to understand how language operates (Outcome 1) is assessed through the written evaluation and marking of sample manuscripts.
- Students' ability to read and think critically (Outcome 2) is assessed through the comparative analysis of imprint lists and the written analysis of editorial approaches.
- Students' ability to express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline (Outcome 3) is assessed through the in-class presentation.
- Students' ability to conduct research (Outcome 4) is assessed through written analysis of editorial approaches taken by class visitors.

Date of Departmental Approval: 17 October 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Department of English

ENGL 7870X Publishing in the Digital Order

30 hours plus conference; 3 credits

Bulletin description:

Close examination of digital publishing models, analysis of case studies, and introduction to industry-standard software. Students create and maintain an online publication, develop a publicity and marketing campaign, and address the design and legal aspects of the emerging digital publishing environment.

Frequency of offering: once per year

Projected enrollment: 20 students

Clearance: None

Rationale:

Digital publishing includes the production and circulation of eBooks and non-book format publication on digital platforms. Although traditional books are not obsolete, these publishing modes have transformed the industry decisively. Electric Literature, Lit Hub, Book Riot, Buzz Feed Books, among others, comprise a new digital publishing universe, and even traditional book publishing now relies heavily on digital tools and platforms for production, publicity, and marketing. Whether students enter the publishing industry in a digital-only field or a traditional field, this course equips them to navigate this new landscape and anticipate industry needs.

Objectives of Course:

This course supports the English department's goal to prepare students for real-world application of their training in language, linguistics, and written communication. Serving a student body that is culturally and linguistically diverse, this course affirms the department's goal to foster authentic learning and global awareness. This course supports the mission of the College by advancing its commitment to "capitalize on Brooklyn as a learning environment and a gateway to the world" (2015 Strategic Plan).

Outcomes anticipated for Course:

Students who successfully complete this course will be able to:

- 9. understand how language operates;
- 10. read and think critically;
- 11. express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline;
- 12. conduct research.

Course Material

Sample syllabus

Weeks 1-2: New Business Structures

Comparison of Amazon, independent digital models, and corporate digital models. Reading assignment: Rossman, *The Amazon Way*; Piper, *Book Was There*.

Material located with strike-through is to be deleted and material underlined is to be added

Assignment due: What market forces created an opening for Amazon, and what did they do to exploit it?

Weeks 3-4: Digital and Online Marketing Assignment due: Analysis of success or failure of a specific new publishing model. Reading assignment: Woll, *Publishing for Profit* chapter 11, "Direct Response Marketing: Internet 101," and chapter 13, "Electronic Publishing and Marketing"; Li and Bernoff, part I, "Understanding the Groundswell," and part II, "Tapping the Groundswell."

Weeks 5-6: Publicity and Public Relations in the Digital Realm Reading assignment: Woll, *Publishing for Profit* chapters 9-10, "Sales...and More Sales," "Subsidiary Rights"; Li and Bernoff, part III, "The Groundswell Transforms."

Weeks 7-8: Best Practices in Era of Social Media and YouTube Reading assignment: Nahon and Hemsley, *Going Viral*.

Week 9: Author Contracts in the Digital Age Legal issues and licensing rights. Reading assignment: Woll, *Publishing for Profit* chapter 6, "Protect Your Assets" Assignment due: Case study of a publishing phenomenon that led to a legal battle.

Week 10: Presentation of digital marketing and publicity programs Assignment due: Students present programs, critique from professor and classmates.

Weeks 11-12: Production I Software, Cover Design, Typesetting, Typography. Burns and Cohen, *Digital Publishing with Adobe InDesign CC*, chapters 1-4.

Weeks 13-14: Production II Metadata, Print production vs. eBook production. Burns and Cohen, *Digital Publishing with Adobe InDesign CC*, chapters 5-8. Assignment due: Adobe InDesign CC exercise

Required Materials:

Burns, Diane, and Sandee Cohen. *Digital Publishing with Adobe InDesign CC*. Peachpit Books/Pearson, 2015.

Li, Charlene, and Josh Bernoff. *Groundswell: Winning in a World Transformed by Social Technologies*. Forrester Research, 2011.

Nahon, Karine, and Jeff Hemsley. Going Viral. Polity Press, 2013.

Piper, Andrew. *Book Was There: Reading in Electronic Times*. University of Chicago Press, 2012.

Rossman, John. *The Amazon Way: Fourteen Leadership Principles Behind the World's Most Disruptive Company*. 2nd edition. Clyde Hill Publishing, 2016.

Woll, Thomas. *Publishing for Profit: Successful Bottom-Line Management for Book Publishers*. 4th edition. Chicago Review Press, 2014.

Methods of Evaluation

Written analysis of market forces around Amazon Written analysis of success or failure of a publishing model Case study of publishing phenomenon that prompted legal battle Adobe InDesign CC exercise Small-group presentations of students' own on-line publishing program

Methods of Assessment

- Students' ability to understand how language operates (Outcome 1) is assessed through the case study and the Adobe InDesign CC exercise.
- Students' ability to read and think critically (Outcome 2) and students' ability to conduct research (Outcome 4) are assessed through the analysis of market forces and the analysis of a publishing model's success or failure.
- Students' ability to express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline (Outcome 3) is assessed through the small-group presentations of on-line publishing program.

Date of Departmental Approval: 17 October 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Department of English

ENGL 7880X Publishing Internship

30 hours plus conference; 3 credits

Bulletin description:

Work in a publishing company or literary agency in one of the following capacities: editorial, sales, marketing, publicity, legal, or literary agent. Prerequisite: ENGL 7850X.

Frequency of offering: once per year

Projected enrollment: 20 students

Clearance: None

Rationale:

Internships provide students an opportunity to learn valuable skills, make professional contacts, and gain real-world work experience. Because publishing is comprised of many sub-fields on the editorial and business sides of the industry, students may take this course twice toward the degree requirements.

Objectives of Course:

This course supports the English department's goal to prepare students for real-world application of their training in language, linguistics, and written communication. Serving a student body that is culturally and linguistically diverse, this course affirms the department's goal to foster authentic learning and global awareness. This course supports the mission of the College by advancing its commitment to "capitalize on Brooklyn as a learning environment and a gateway to the world" (2015 Strategic Plan).

Outcomes anticipated for Course:

Students who successfully complete this course will be able to:

- 13. understand how language operates;
- 14. read and think critically;
- 15. express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline;
- 16. conduct research.

Course Material:

The internship experience itself constitutes the course material.

Methods of Evaluation:

Work journal Supervisor's evaluation Short analytical essays (3) Interview with an industry professional

Methods of Assessment:

- Students' ability to understand how language operates (Outcome 1) is assessed through the short analytical essays.
- Students' ability to read and think critically (Outcome 2) and students' ability to conduct research (Outcome 4) are assessed through the work journal and the interview with an industry professional.
- Students' ability to express ideas orally and in writing in cogent form and in accordance with the conventions of the discipline (Outcome 3) is assessed through the supervisor's evaluation.

Date of Departmental Approval: 17 October 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Department of Mathematics

MATH 6141T Transition to Algebraic Thinking for Middle School Teachers I

3 hours, 3 credits.

Topics in transitioning from arithmetic to algebraic thinking for teachers of upper elementary and middle school mathematics.

Prerequisite: Permission of the graduate deputy.

Frequency of offering: every Fall semester.

Projected enrollment: 20.

Clearances: Secondary Education

Rationale: Students enrolled in the DoE Algebra for All program (A4A) are typically upper elementary or lower middle school teachers. The course is designed to support the DoE's program and provide a rigourous content course for teachers enrolled in the program in transitioning from arithmetic thinking to algebraic thinking.

Program goals addressed by the course:

- Learn mathematical concepts transitioning from arithmetic thinking to algebraic thinking
- Experience an inquiry-based approach to mathematics instruction
- Practice articulating mathematical arguments
- Find and explore connections between the mathematics of this class and school mathematics

Objectives of the course:

- Develop concepts and skills through four approaches to algebra: Problem Solving, Patterns and Sequences, Functions and Modeling, and Generalization and Proof
- Engage each of the National Council of Teachers of Mathematics (NCTM) process standards, namely: problem solving, communication, reasoning and proof, connections, and representation.
- Discuss algebraic concepts, how they are presented to students in typical textbooks and discuss authentic student work on tasks.

Outcomes anticipated for the course:

- Learn mathematical concepts transitioning from arithmetic thinking to algebraic thinking
- Experience an inquiry-based approach to mathematics instruction
- Practice articulating mathematical arguments
- Find and explore connections between the mathematics of this class and school mathematics

Course Outline

Weeks 1 & 2: Chapter 1: Introduction to Problem Solving

Weeks 3 & 4:

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Chapter 2: Solving Equations.

Weeks 5 & 6: Chapter 3: Introduction to Patterns.

Weeks 7, 8 & 9: Chapter 4: Growing Patterns.

Week 10: Midterm

Week 11 & 12: Chapter 5: Sequences.

Weeks 13 & 14: Chapter 6: Representing Functional Relationships.

Assigned Text:

Stump, S., Roebuck, K., & Bishop, J. (2009). *Algebra for Elementary and Middle School Teachers*. New York, NY: Pearson Custom Publishing.

Bibliography

Dunham, W. (1990). Journey Through Genius. New York: John Wiley and Sons.

Ore, O. (1988). Number theory and its history. Dover Publications, New York.

Stein, S. (1963). Mathematics: the man-made universe. Dover Publications, New York

Method of evaluation:

Attendance and Participatic	on 5%	
Wiki Contributions		10%
Weekly Problem Sets	35%	
Midterm Exam	20%	
Final Exam		30%

Method of assessment:

The activities in the class have a structure of Explore, Discuss, Reflect. Students explore a mathematical task alone or in groups, discuss with the whole class and then engage in a reflection activity. The content of the activities is Problem Solving, Patterns and Sequences, Functions and Modeling, and Generalization and Proof. The activities involve, at various stages, the NCTM process standards enumerated above. Many of the tasks involve samples from textbooks and samples of student work. Through the activities the students will learn mathematical concepts transitioning from arithmetic thinking to algebraic thinking. The Explore, Discuss, Reflect model represents an inquiry-based approach to instruction. The discussions and reflections afford students the opportunity to articulate mathematical arguments. The tasks involving samples from textbooks and samples of student work allow students to find and explore connections between the mathematics of this class and school mathematics.

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Wiki contributions: the "Discuss" part of the Explore, Discuss, Reflect sequence is done online for the homework problems.

Weekly Problem Sets: The "Explore" and "Reflect" parts of the Explore, Discuss, Reflect sequence are submitted as homework.

Midterm and Final exams: The "Explore" part of the Explore, Discuss, Reflect sequence is the content of exam questions.

Assigned Text:

Stump, S., Roebuck, K., & Bishop, J. (2009). *Algebra for Elementary and Middle School Teachers*. New York, NY: Pearson Custom Publishing.

Bibliography

Dunham, W. (1990). Journey Through Genius. New York: John Wiley and Sons.

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Stein, S. (1963). Mathematics: the man-made universe. Dover Publications, New York

Date of departmental approval: 14 November 2017

Effective date: Fall 2018

SECTION A-IV: NEW COURSES Department of Mathematics

MATH 6142T Transition to Algebraic Thinking for Middle School Teachers II

3 hours, 3 credits.

Topics in transitioning from arithmetic to algebraic thinking for teachers of upper elementary and middle school mathematics.

Prerequisite: Permission of the graduate deputy.

Frequency of offering: every Spring semester.

Projected enrollment: 20.

Clearances: Secondary Education

Rationale: Students enrolled in the DoE Algebra for All program (A4A) are typically upper elementary or lower middle school teachers. The course is designed to support the DoE's program and provide a rigourous content course for teachers enrolled in the program in transitioning from arithmetic thinking to algebraic thinking.

Program goals addressed by the course:

- Learn mathematical concepts transitioning from arithmetic thinking to algebraic thinking
- Experience an inquiry-based approach to mathematics instruction
- Practice articulating mathematical arguments
- Find and explore connections between the mathematics of this class and school mathematics

Objectives of the course:

- Develop concepts and skills through four approaches to algebra: Problem Solving, Patterns and Sequences, Functions and Modeling, and Generalization and Proof
- Engage each of the National Council of Teachers of Mathematics (NCTM) process standards, namely: problem solving, communication, reasoning and proof, connections, and representation.
- Discuss algebraic concepts, how they are presented to students in typical textbooks and discuss authentic student work on tasks.

Outcomes anticipated for the course:

- Learn mathematical concepts transitioning from arithmetic thinking to algebraic thinking
- Experience an inquiry-based approach to mathematics instruction
- Practice articulating mathematical arguments
- Find and explore connections between the mathematics of this class and school mathematics

Course Outline

Weeks 1 & 2: Chapter 1: Introduction to Problem Solving

Weeks 3 & 4:

Material located with strike-through is to be deleted and material <u>underlined</u> is to be added

Chapter 2: Solving Equations.

Weeks 5 & 6: Chapter 3: Introduction to Patterns.

Weeks 7, 8 & 9: Chapter 4: Growing Patterns.

Week 10: Midterm

Week 11 & 12: Chapter 5: Sequences.

Weeks 13 & 14: Chapter 6: Representing Functional Relationship*s*.

Assigned Text:

Stump, S., Roebuck, K., & Bishop, J. (2009). *Algebra for Elementary and Middle School Teachers*. New York, NY: Pearson Custom Publishing.

Bibliography

Dunham, W. (1990). Journey Through Genius. New York: John Wiley and Sons.

Ore, O. (1988). Number theory and its history. Dover Publications, New York.

Stein, S. (1963). Mathematics: the man-made universe. Dover Publications, New York

Method of evaluation:

Attendance and Participatio	n 5%	
Wiki Contributions		10%
Weekly Problem Sets	35%	
Midterm Exam	20%	
Final Exam		30%

Method of assessment:

The activities in the class have a structure of Explore, Discuss, Reflect. Students explore a mathematical task alone or in groups, discuss with the whole class and then engage in a reflection activity. The content of the activities is Problem Solving, Patterns and Sequences, Functions and Modeling, and Generalization and Proof. The activities involve, at various stages, the NCTM process standards enumerated above. Many of the tasks involve samples from textbooks and samples of student work. Through the activities the students will learn mathematical concepts transitioning from arithmetic thinking to algebraic thinking. The Explore, Discuss, Reflect model represents an inquiry-based approach to instruction. The discussions and reflections afford students the opportunity to articulate mathematical arguments. The tasks involving samples from textbooks and samples of student work allow students to find and explore connections between the mathematics of this class and school mathematics.

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Wiki contributions: the "Discuss" part of the Explore, Discuss, Reflect sequence is done online for the homework problems.

Weekly Problem Sets: The "Explore" and "Reflect" parts of the Explore, Discuss, Reflect sequence are submitted as homework.

Midterm and Final exams: The "Explore" part of the Explore, Discuss, Reflect sequence is the content of exam questions.

Assigned Text:

Stump, S., Roebuck, K., & Bishop, J. (2009). *Algebra for Elementary and Middle School Teachers*. New York, NY: Pearson Custom Publishing.

Bibliography

Dunham, W. (1990). Journey Through Genius. New York: John Wiley and Sons.

Ore, O. (1988). Number theory and its history. Dover Publications, New York.

Stein, S. (1963). Mathematics: the man-made universe. Dover Publications, New York

Date of departmental approval: 14 November 2017

Effective date: Fall 2018

SECTION A-IV: NEW COURSES Department of School of Psychology, Counseling and Leadership

SPCL 7828T College Admissions and Postsecondary Counseling

3 hours; 3 credits

Description

Introduction to college admissions and postsecondary counseling. Explores college and career readiness programs and activities within k-12 school systems. The course integrates human development, social justice, and multiculturalism to support student's successful transition to college and postsecondary opportunities.

Prerequisite: Matriculation in the Advanced Certificate in School Counseling and permission of Program Coordinator

Contact Hours: 45

Frequency of Offering: One section per year

Projected enrollment: 25 students

Clearances: None

Rationale:

The School Counseling Program currently has a course (*SPCL7809T Career and Educational Counseling*) where college advising is minimally addressed within the broader context of career counseling. More recently, the field of school counseling through its professional organizations--American School Counseling Association (ASCA), Council for Accreditation of Counseling and Educationally Related Programs (CACREP)--has demonstrated a need for school counselors to develop specific skills that support students' entry into college. This shift in the field demands that counselor education programs offer stand-alone courses that effectively prepare school counselors to assist school-age students in successfully transition into college. This initiative was supported by the White House's College Opportunity Agenda and CUNY Central have been invested in "maximizing school counselors' impact and influence on college enrollments". By offering this course the School Counseling Program objectives are enhanced by providing their graduate students with the skills and competencies necessary to support school-age students to improve post-secondary options and outcomes.

Program/Department Goals Addressed by Course:

The School Counseling Program at Brooklyn College states in its mission its commitment to having graduates who "are equipped to encourage and support children and youth in their aspirations and to collaborate with families, community members, and other educators to prepare them well for postsecondary education, meaningful life work, and citizenship".

Specific Program Goals Addressed:

1. Assume the roles and functions of the professional school counselor as described by the CACREP, the ASCA, *National Standards*, and ASCA *National Model*.

- 2. Apply and adapt theories of counseling, human development, educational and psychological assessment, career and educational development, family counseling and group dynamics into effective evidence-based interventions and practices for individuals, groups, and families.
- 3. Form effective helping relationships with diverse individuals and groups.
- 4. Apply educational planning, career development and decision theory, and knowledge of sources of career information to student development and aspirations.
- 5. Apply evidence-based research results and culturally competent research skills to guide counseling practice.

Objectives of the Course:

The learning objectives for students are as follows (CACREP standards are in italics):

- 1. Understands current models of school counseling programs (e.g., American School Counselor Association [ASCA] National Model) and their integral Relationship to the total educational program. *(CACREP, A5)*
- Knows how to design, implement, manage, and evaluate transition programs, including school-to-work, postsecondary planning, and college admissions counseling. (CACREP,C4)
- 3. Understands the cultural, ethical, economic, legal, and political issues surrounding diversity, equity, and excellence in terms of student learning. (CACREP, E1)
- 4. Identifies community, environmental, and institutional opportunities that enhance—as well as barriers that impede—the academic, career, and personal/social development of students. (CACREP, E2)
- 5. Understands the ways in which educational policies, programs, and practices can be developed, adapted, and modified to be culturally congruent with the needs of students and their families. *(CACREP*,E3)
- 6. Advocates for the learning and academic experiences necessary to promote the academic, career, and personal/social development of students. *(CACREP,F2)*
- 7. Engages parents, guardians, and families to promote the academic, career, and personal/social development of students. (CACREP, F4)
- 8. Assesses and interprets students' strengths and needs, recognizing uniqueness in cultures, languages, values, backgrounds, and abilities. (CACREP, H1)
- 9. Assesses barriers that impede students' academic, career, and personal/social development.(CACREP H5)
- 10. Implements strategies and activities to prepare students for a full range of postsecondary options and opportunities. (CACREP,L2)

Outcomes Anticipated for Course:

Students will:

- Develop knowledge, skills, and strategies needed to assist students in the college application and admissions process.
- Review the literature in college and career readiness, with particular focus on bridging academic gaps and providing services for underserved populations.
- Design a Comprehensive College and Career Readiness/Admissions Counseling Program.
- Critically explore the importance personal-social or social-emotional skills for college, postsecondary and career success.

Course Requirements and Assignments

1) <u>Attendance Class Participation (10%)</u> Class attendance is mandatory: it is expected that students will attend <u>every class</u> and stay for the entire class session (not leave early). More than one **excused** absence will affect course grade. The professor reserves the right to decide what constitutes an excused absence. <u>Each unexcused</u> <u>absence and each excused absence over one</u> will result in *progressive* lowering of the final grade by half (e.g. A- → B+... B → B-; B- → C). Students should call and/or email the professor *in advance* regarding any absences or lateness. Punctuality is also mandatory: coming in to class after a discussion has begun can be quite disruptive. Therefore, students should make every effort to come to class on time. <u>Each time a student comes to class after the session has begun or leaves the class prior to dismissal will result in *progressive* lowering of the final grade (e.g. A- → B+... B → B-; B- → C).</u>

Brooklyn College abides to the state law regarding non attendance because of religious beliefs, as expressed in page 53 of the student bulletin (available at: http://www.brooklyn.cuny.edu/bc/pubs/bulletin/2010/ug_bulletin2010.pdf). As cited in the bulletin (p. 53), New York State Education Law, Title I, Article 5, Section 224-a, declares that: "Any student in an institution of higher education who is unable, because of his [or her] religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements." In addition, "It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his [or her] religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he [or she] may have missed because of such absence on any particular day or days... No adverse or prejudicial effects shall result to any student because of his [or her] availing himself [or herself] of the provisions of this section." If you are unable to attend class in any occasion for religious reasons, please notify me in advance to make the necessary arrangements.

2) <u>Comprehensive College and Career Readiness Plan & Presentation (40%)</u> Student will work in groups 4-5 to design a *Comprehensive College and Career Readiness/Admissions Counseling Program*. Each group will identify a NYC public high school with 250-500 students. Using data on the school selected a plan will be designed. This design will follow the ASCA Model and will include the following components:

Section 1: Foundations (2-4 pages)

- a) *Beliefs and Philosophy:* Carefully explore and describe your beliefs and philosophy regarding students, college and career readiness.
- b) *Mission Statement:* Create a mission statement that addresses College and Career Readiness Goals for all Students
- c) List and describe standards and will guide your CCCRP. (ASCA National Standards, NOSCA Standards, ASCA Ethical Code etc.

Section 2: Delivery Systems (8-10 pages)

a. *College and Career Readiness Curriculum*: Provide description of curriculum guidance that will be delivered, provide detail list of topics to be covered and delivered to 9th, 10th, 11th and 12th graders. State the desired objectives.

Material located with strike-through is to be deleted and material underlined is to be added

- b. *Individual Student Planning*: Describe college admissions services that will be provided to individual students.
- c. *Responsive Services*: Describe responsive services. Describe how you will address the specific needs of students and families that may arise in the college admissions process. These services may target specific student populations such as, English Language Learners (ELL) undocumented students, LGBTQ students, first generation college students, nontraditional college students, students with disabilities, among other underserved groups.
- d. *System Support*: Describe how the school counseling program will support the school's overall goal to improve college and career readiness for all students. State how you're your department support teacher, administrator, families and students to play their part in this process.
- e. Develop a 2016-2017 Calendar of Events that detail, college, career and admission services and programs for your school.

Section 3: Management Systems (2-4 pages)

- a. Management Agreements: How will the services and programs be management? How will you work with school administrators to support the implementation and successful delivery of your services and programs?
- b. Advisory Council: Will need an advisory council or committee of counselors, administrators, teachers, parents and other stakeholders to assist.
- c. Use of data: How will you collect, analyze and use data throughout the process.
- d. Action Plan

Section 4: Accountability System: (2-4 pages)

This section will answer the following question:

- a. How will students be different (better) as a result of the school counseling program's **CCR Plan**?
- b. How will the plan be evaluated? What data will be collected and used to evaluate the success of the plan?
- c. What reports (monthly, annually etc.) will the school counseling department produce on the progress of its program? What will be the use and purpose of this report?
- 3) <u>Best Practice Interview with a College Counselor (10%, 6-8 pages)</u> Interview a high school counselor who does college admissions counseling. In your interview focus on the following questions:
 - a. What are the major challenges and opportunities involved in college admissions counseling?
 - b. What are best practice strategies for working with parents?
 - c. What alternate postsecondary options/services are provided to students who do not wish to immediately attend college?
 - d. How do you measure the success of your college admissions program?

Write a report on the findings of your interview. Make references to journal articles throughout your report. References should support your efforts to understand of the school counselor practice in light of what has been written on the topic.

4) Personal-Social Skills and College Success (10%, 6-8 pages).

Personal-social skills and mindsets have been identified as key components for college, postsecondary and career success. In your paper do the following:

- a) Critically explore the importance of these factors in determining students' college and career outcomes.
- b) Assess the relevance of standards (ASCA, NOSCA, ACT etc.) in identifying important skills that students (will) need in order to succeed.
- c) Consider specific strategies school counselors may adapt in order to support student success after they have gained admission into college.
- d) Use APA writing standards and cite at least five (5) journal sources.

5) Midterm Exam (30%)

The midterm exam will review the first five weeks of instruction.

Evaluation

Grading Criteria:

Attendance Class Participation	10%
Comprehensive College and Career Readiness Plan & Presentation	40%
Interview with a College Counselor	10%
Personal-Social Skills and College Success	10%
Midterm	30%
TOTAL 100%	

Course Outline: College Admissions and Postsecondary Counseling

WEEK	TOPIC	Readings
1	Understanding College and Career Readiness	Readings
	 Defining College and Career Readiness 	CAC Chapters 1 & 11
	 Exploring the role of School Counselors 	ACT, Inc. (2006).
 College Bound Students College and Career Readiness: Implications for Social Justice and Multiculturalism. 	 College Bound Students College and Career Readiness: Implications for Social Justice and Multiculturalism. 	Conley, D. T. (2012).
		NOSCA, (2015)

2	College Planning 101	Readings
	Assessing Postsecondary Readiness Testing	CAC Chapter 12
	 Opportunity Programs Action Planning 	Options Institute (2015) Assessment of Postsecondary Readiness
3	Effective Postsecondary Planning	<u>Readings</u>
	 Working with parents and teachers and administrators Setting up college counseling office Community resources The College search Matching Students to Colleges Making use of College Tours and Fairs Interview with a College Counselor Paper DUE	CAC Chapters 3 & 10 Options Institute (2015) Matching Students to Colleges Postsecondary Opportunities CUNY, SUNY and Private Colleges Matching Student
		Hooker, S., & Brand, B. (2010)
4	Parts of an Application	Readings
	Letters of Recommendation	18
5	The college essay/personal statement	<u>Readings</u> CAC Chapters 5 & 7
6	Standardized Testing	<u>Readings</u> CAC Chapter 16
	College Success: Personal-Social Skills	Wimberly, G. L., & Noeth, R. J. (2005)
		ASCA (2015) Mindsets & Behaviors for Student Success
7	MIDTERM EXAM	

8	Financial Aid Counseling and Scholarship	Readings CAC Chapter 19 Options Institute (2015) Financial Aid Application Process
9	 Specific Populations Undocumented students English Language Learners (ELL) Lower SES and Nontraditional College Students Special Populations: LGBTQ students 	Readings Abrego, L. J. (2006) CAC Chapters 6, 7 & 8 La Rosa, D., Luna, M., & Tierney, W. G. (2006). Luzzo, D. A. (1999)
10	Admissions Decisions and Alternatives to College Personal-Social Skills and College Success Paper DUE	Readings CAC Chapters12, 13 &14
11	Ethical Considerations	Readings CAC Chapter 9
12	College Admissions Scenario	Readings CAC Chapter 11
13	Comprehensive College and Career Readiness/Admissions Counseling Program - Group Presentations	Presentation Due
14	Comprehensive College and Career Readiness/Admissions Counseling Program - Group Presentations	Presentations Due
15	Integration of concepts and review; class evaluation	

Required Text/Readings

College Admission Counseling, National Association for College Admission Counseling, (2006)

Additional Readings

- Abrego, L. J. (2006). "I can't go to college because I don't have papers": Incorporation patterns of Latino undocumented youth. *Latino Studies*, *4*(3), 212-231.
- Achieve, Inc. (2004). *Creating a High School Diploma That Counts*. Prepared for The American Diploma Project. Washington, D.C.: Author. Retrieved April 7, 2010, from <u>http://www.achieve.org/files/ADPreport_7.pdf</u>.

- ACT, Inc. (2006). Ready for College and Ready for Work: Same or Different? Iowa City, Ia.: Author. Retrieved April 7, 2010, from http://www.act.org/research/policymakers/pdf/ReadinessBrief.pdf.
- Aldeman, Chad, and Kevin Carey (2009). *Ready to Assemble: Grading State Higher Education Accountability Systems*. Washington, D.C.: Education Sector.
- Alliance for Excellent Education (2006). *Paying Double: Inadequate High Schools and Community College Remediation*. Washington, D.C.: Author. Retrieved April 7, 2010, from <u>http://www.all4ed.org/files/archive/publications/remediation.pdf</u>.
- American School Counseling Association (ASCA) Mindsets & Behaviors for Student Success: K-12 College- and Career-Readiness Standards for Every Student <u>https://schoolcounselor.org/asca/media/asca/home/MindsetsBehaviors.pdf</u> Retrieved: March 5, 2015.
- Baber, L. D., Castro, E. L., & Bragg, D. D. (2010). Measuring Success: David Conley's College Readiness Framework and the Illinois College and Career Readiness Act. In Brief. Office of Community College Research and Leadership. http://files.eric.ed.gov/fulltext/ED513397.pdf
- Bloom, T. (2010). College and career readiness: A systemic P-20 response. <u>http://www.naviance.com/docs/naviance_white_paper_college_and_career_readiness_a</u> <u>systematic_p20_response.pdf</u>
- Bogard, Kimber, and Ruby Takanishi (2005). PK-3: An aligned and coordinated approach to education for children 3 to 8 years old. Social Policy Report, 29(3): 3–23. Retrieved April 7, 2010, from <u>http://www.fcd-us.org/usr_doc/PK-</u> <u>3AnAlignedandCoordinatedApproach.pdf</u>.
- Brand, B., Board, S. R. E., & Work, H. S. T. (2009). High school career academies: A 40-year proven model for improving college and career readiness. National Career Academy Coalition. http://files.givewell.org/files/unitedstates/NAF/Betsy%20Brand%20AYPF%20Career%20 Academy%20paper.pdf
- Carey, Kevin (2006). *Hot Air: How States Inflate Their Educational Progress Under NCLB*. Washington, D.C.: Education Sector.
- Common Core State Standards Initiative (2010). Washington, D.C.: National Governors Association Center for Best Practices and Council of Chief State School Officers. Retrieved April 7, 2010, from <u>http://www.corestandards.org</u>.
- Conley, D. T. (2012). A Complete Definition of College and Career Readiness. *Educational Policy Improvement Center (NJ1)*. <u>http://files.eric.ed.gov/fulltext/ED537876.pdf</u>
- Conley, D. T. (2012). The complexity of college and career readiness. *Educational Policy Improvement Center at the University of Oregon, Power Point Presentation at The New School.* <u>http://www.acrpro-training.org/TheComplexityofCollegeandCareerReadiness.pdf</u>
- Duderstadt, J. J. (1997). The future of the university in an age of knowledge. *Journal of Asynchronous Learning Networks*, 1(2), 78-88. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.96.1139&rep=rep1&type=pdf

Dymnicki, A., Sambolt, M., & Kidron, Y. (2013). Improving college and career readiness by incorporating social and emotional learning. *Washington, DC: College & Career Readiness & Success Center at American Institutes for Research*.

Guided Pathways to Success. Retrieved November 17, 2014 http://completecollege.org/docs/GPS%20BOOKLET%2006-14%20FINAL.pdf

- Henderson, Anne, and Nancy Berla (eds.) (1994). A New Generation of Evidence: The Family Is Critical to Student Achievement. Washington, D.C.: Center for Law and Education.
- Holzer, Harry J, and Robert I. Lerman (2009). *The Future of Middle-Skill Jobs*. Washington, D.C.: Brookings Institution. Retrieved April 7, 2010, from <u>http://www.brookings.edu/~/media/Files/rc/papers/2009/02_middle_skill_jobs_holzer/02_middle_skill_jobs_holzer.pdf</u>.
- Hooker, S., & Brand, B. (2010). College knowledge: A critical component of college and career readiness. *New directions for youth development*, *2010*(127), 75-85. <u>http://completecollege.org/resources/</u>
- La Rosa, D., Luna, M., & Tierney, W. G. (2006). Breaking through the Barriers to College: Empowering Low-Income Communities, Schools, and Families for College Opportunity and Student Financial Aid. *Center for Higher Education Policy Analysis, University of Southern California*. <u>http://files.eric.ed.gov/fulltext/ED498745.pdf</u>
- Luzzo, D. A. (1999). Identifying the Career Decision-Making Needs of Nontraditional College Students. Journal of Counseling & Development, 77(2), 135-140.<u>http://westallen.typepad.com/files/10.1.1.202.6401.pdf#page=23</u>
- Mau, W. C. J. (2004). Cultural Dimensions of Career Decision-Making Difficulties. The Career Development Quarterly, 53(1), 67-77. <u>http://www.nsparc.msstate.edu/content/green/Factors%20influencing%20Occupational%</u> <u>20Choice/Career%20Development%20Quarterly-Wei-Cheng%20J.-</u> %20Cultural%20Dimensions%20of%20Career%20Decision-Making%20Difficulties.pdf
- McDonough, P. M. (2005). Counseling and college counseling in America's high schools. *State* of college admission, 107-121. http://catholic4less.com/files/McDonough_Report.pdf
- Meeder, H. (2008). The Perkins Act of 2006: Connecting Career and Technical Education with the College and Career Readiness Agenda. Achieve Policy Brief. *Achieve, Inc. http://files.eric.ed.gov/fulltext/ED499901.pdf*
- Mueller, D., & Gozali-Lee, E. College and career readiness. <u>http://www.gennextmsp.org/wp-</u> content/uploads/2013/09/GenNext_CollegeCareerReadinessReport.pdf
- NOSCA (2015) Eight Components of College and Career Readiness. <u>http://media.collegeboard.com/digitalServices/pdf/nosca/11b_4416_8_Components_WE</u> <u>B_111107.pdf</u>
- NOSCA (2015) Elementary School Counselors Guide. <u>http://media.collegeboard.com/digitalServices/pdf/advocacy/nosca/11b-</u> <u>4383 ES Counselor Guide WEB 120213.pdf</u>
- Oliverez, P. M., Chavez, M. L., Soriano, M., & Tierney, W. G. (2006). The College & Financial Aid Guide for: AB540 Undocumented Immigrant Students. *Center for Higher Education Policy Analysis, University of Southern California.* http://files.eric.ed.gov/fulltext/ED498734.pdf
- Pittman, K. J. (2010). College and Career Readiness. School Administrator, 67(6), 10-14.
- Remediation Retrieved November 17, 2014 <u>http://completecollege.org/docs/CCA-Remediation-</u> final.pdf

Remediation Retrieved November 17, 2014

http://completecollege.org/docs/Time Is the Enemy.pdf

Remediation Retrieved November 17, 2014

http://completecollege.org/docs/Three%20Policies%20to%20Reduce%20Time%20to%2 0Degree%20-%20Nate%20Johnson.pdf

- Rimer, S., & Arenson, K. W. (2004). Top Colleges Take More Blacks, but Which Ones? *New York Times*, *24*, A1. <u>http://www.nuatc.org/articles/pdf/CollegesTakeMoreTopBlacks.pdf</u>
- The Game Changers, Retrieved November 17, 2014 from http://completecollege.org/pdfs/CCA%20Nat%20Report%20Oct18-FINAL-singles.pdf
- Tucker, B. (2011). The dream deferred: How "college and career readiness" looks from below. *English Journal*, *100*(3), 115-116. <u>http://www.ncte.org/library/NCTEFiles/Resources/Journals/EJ/1003-jan2011/EJ1003Dream.pdf</u>
- Wiley, A., Wyatt, J., & Camara, W. J. (2010). *The development of a multidimensional college readiness index* (Vol. 3). College Board Research Report. <u>http://www.cascadeeducationalconsultants.com/resources/Blog/College-Readiness-</u> <u>Index.pdf</u>
- Wimberly, G. L., & Noeth, R. J. (2005). College readiness begins in middle school. ACT, Washington, DC. <u>http://act.org/research/policymakers/pdf/CollegeReadiness.pdf</u>
- Yeado, J. (2013) Intentionally successful improving minority student college graduation rates. The Education Trust. <u>http://edtrust.org/wp-</u>content/uploads/2013/10/Intentionally_Successful.pdf

Date of departmental approval: 17 October 2017

Effective date: Fall 2018

SECTION A-IV: NEW COURSES Department of School of Psychology, Counseling and Leadership

SPCL 7880X Introduction to Mindfulness in Schools

3 hours; 3 credits

Description

Critical introduction to mindfulness and contemplative practices with an emphasis on practices for student mindfulness programs and their relevance to urban school goals including academic success and social-emotional learning. Review and critique of program assumptions, research, methods, risks, and ethics. Consideration of emerging programs that account for emotional, social, moral, developmental, political, and cultural factors.

Prerequisite: Permission of Department

Contact Hours: 45

Frequency of Offering: Every semester

Projected enrollment: 20 students

Clearances: NA

Rationale:

New York City Department of Education Chancellor Carmen Farina has endorsed mindfulness programs in the city schools to help students deal with stress and to promote academic success (https://www.nytimes.com/2015/10/24/nyregion/under-stress-students-in-new-york-schools-find-calm-in-meditation.html? r=0). Our affiliate high school, the Brooklyn College Academy, has instituted a mindfulness space and program (https://www.amny.com/news/brooklyn-college-academy-debuts-new-space-dedicated-to-mindfulness-1.14325351). Counselor educators are required to offer "developing or innovative techniques/ procedures/modalities," in which they "explain the potential risks, benefits, and ethical considerations of using such techniques/ procedures/modalities" (F.7.h., ACA Code of Ethics) and mindfulness is one such "modality." Considering the significant need for prevention programs in schools and the burgeoning research-base, a course on mindfulness adds a further preventive modality that addresses stress, emotional self-regulation, and bullying in schools for both students, teachers, and school personnel.

Program/Department Goals Addressed by Course:

The School of Education at Brooklyn College prepares teachers, administrators, counselors, and school psychologists to serve, lead and thrive in the schools and agencies of this city and beyond. Through collaborative action, teaching and research, we develop our students' capacities to create socially just, intellectually vital, aesthetically rich and compassionate communities that value equity and excellence, access and rigor.

School of Education Goals Addressed by Course:

- 1. The course prepares educators to lead and thrive in schools by creating innovative, compassionate and socially just initiatives that improve the lives of students.
- 2. The course enhances self-reflective practice and provides skills and opportunities for educators to self-reflect.

Material located with strike-through is to be deleted and material <u>underlined</u> is to be added

3. The course emphasizes and prepares students to demonstrate strategies for creating mindfulness programs that are relevant for the diverse urban school population.

Objectives of the Course:

Students will:

- 1. Acquire basic knowledge and skills necessary to develop and initiate mindfulness programs with children and youth.
- 2. Learn how to critically evaluate these programs via readings, discussions, and field site visits.
- 3. Design social mindfulness programs that take into account the values of optimal selfdevelopment and universal social justice.

Outcomes Anticipated for Course:

Students will:

- Become knowledgeable and skilled in developing quality mindfulness programs, practices, and strategies for children and youth
- Develop a needs assessment that identifies the developmental, moral, cultural, and social context of a site setting for a mindfulness program
- Critically review the literature in psychology and education that describe the benefits and limitations of mindfulness and mindfulness programs
- Create a proposal for a mindfulness program and consider how to negotiate the proposal successfully through the system

Method of Evaluation:

Evaluation is based on

A proposal and a final project paper presented in class Report of a field visit and interview A self-reflective paper or journal on a contemplative practice Participation and discussion

Method of Assessment:

Field site and interview report20 pointsQuality of participation and discussion10 pointsSelf-reflective paper or journal10 pointsFinal project paper/presentation60 points

Course Outline

Week 1 Introduction to the Field, Controversies, Meditation Practice and Contemplative Study Students learn about and practice mindfulness meditation; they consider its value in education, and critically address some of its problematic social contexts

Readings and assignments:

-Jeff Wilson, Mindful America. New York: Oxford. chapters 3,4,6

-Deborah Orr, "Thinking Outside the Academic Box: An Introduction to Mindfulness Meditation for Education" <u>http://www.othereducation.org/index.php/OE/article/view/17/14</u>

-David Foster Wallace, "This is Water" Commencement talk 2005

Material located with strike-through is to be deleted and material underlined is to be added

https://www.youtube.com/watch?v=8CrOL-ydFMI http://www.metastatic.org/text/This%20is%20Water.pdf

-A Black Woman's Guide to Meditation https://www.youtube.com/watch?v=Vvumbrnasg0

-David Nichtern introduction to meditation https://www.youtube.com/watch?v=yMz_UagXkFk

Week 2 Meditation and Mindfulness: Buddhist and Secular Practices

Students focus on the personal relevance of mindfulness meditation to their own lives and issues through leading mindfulness educators

Readings and Assignments

-Tara Brach Face and Overcome the Trance of Fear

http://www.yogajournal.com/article/yoga-101/befriend-fears/

http://www.tarabrach.com/transforming-two-fears-fof-and-fomo/

-Pema Chodron on Fear, Loneliness, Failing http://www.lionsroar.com/category/teachers-spotlights/pema-chodron-teachers/

-Lodro Rinzler, The Buddha Walks Into a Bar, chapters 1,2,5 (on line)

-Sharon Salzberg, "What does mindfulness really mean anyway" <u>https://onbeing.org/blog/what-does-mindfulness-really-mean-anyway/7431/</u> -Articles and podcasts https://www.sharonsalzberg.com/posts-podcasts/

Week 3 Secular Mindfulness Programs with Students

Students focus on mindfulness programs in K-12 schools that target students with the intention of improving academic success, social emotional learning, concentration, stress-reduction, and executive function.

Readings and Assignments

-David Gelles, Mindfulness for Children Guide https://www.nytimes.com/guides/well/mindfulness-for-children

-Deliso, M. 2017, October 1. "Brooklyn College Academy debuts new space dedicated to mindfulness." *AMNewYork*. <u>https://www.amny.com/news/brooklyn-college-academy-debuts-new-space-dedicated-to-mindfulness-1.14325351</u>

-Susan Kaiser Greenland & Trudy Goodman, "Mindfulness with Children: Working with Difficult Emotions" <u>http://www.lifespanlearn.org/documents/Goodman-article.pdf</u> -Linda Lantieri, "Cultivating the Social, Emotional, and Inner Lives of Children and teachers

http://www.lindalantieri.org/documents/CultivatingtheSocialEmotionalandInnerLivesofChildren andTeachersFINAL.pdf -Nauman, E. 2014, Mar 24 How does mindfulness help control behavior (executive function) https://greatergood.berkeley.edu/article/item/How_does_mindfulness_help_control_behavior

Videos: Mindfulness with Students

Young Kids: http://www.youtube.com/watch?v=uD99Vv38gty Elementary: http://www.youtube.com/watch?v=2W_yMvoMVb0 Teens: http://www.youtube.com/watch?v=QYV9pk57cMA College: http://www.youtube.com/watch?v=UJlvgYM-0 http://www.youtube.com/watch?v=UJlvgYM-0

Two videos from Mindful Schools: "Room to Breathe" and Healthy Habits of Mind" http://www.mindfulschools.org/resources/explore-mindful-resources/ See critiques by Forbes and Cannon below

Week 4 Secular Mindfulness Programs with Teachers: Stress, Presence

Students focus on mindfulness programs that target teachers who experience considerable and increasing stress from the neoliberal demands of education policies.

Readings and Assignments

Proposal idea due

-Resources for Teachers: Activities, self-care, readings http://www.mindfulteachers.org/

-Tish Jennings, Reducing stress for teachers, an interview; TED talk <u>https://www.youtube.com/watch?v=00TSpgilzz0</u>

-Tish Jennings, "Teachers Tuning In," Mindful Magazine http://www.mindful.org/mindful-voices/on-education/teachers-tuning-in

-Tish Jennings Talks About CARE for Teachers, Youtube, https://www.youtube.com/watch?v=Gm24D8yniGQ

-Tish Jennings powerpoint on CARE:

http://www.care4teachers.org/wp-content/uploads/2012/02/CARE-AERA-Presentation-2012.pdf

-Amy Saltzman, "Mindfulness: A Guide for Teachers" http://www.contemplativemind.org/admin/wp-content/uploads/2012/09/Mindfulness-A_Teachers_Guide.pdf

-Diane Ravitch War on Teachers video 14:34 <u>https://www.youtube.com/watch?v=A_HwI6S92Eo</u>

Week 5 Critical Social Mindfulness in Education: Overview and Critique

Students learn about the backlash to the secular mindfulness movement as it promotes and reinforces an individualistic, self-centered orientation on both personal and institutional levels in many areas. Also a look at the lack of solid research; questioning of the objective paradigm as suitable to "measure" mindfulness

Readings and Assignments

Material located with strike-through is to be deleted and material underlined is to be added

-Ron Purser & David Loy, "Beyond McMindfulness "http://www.huffingtonpost.com/ron-purser/beyond-mcmindfulness b 3519289.html -David Forbes, "Critical Integral Contemplative Education" http://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1100&context=bc pubs -David Forbes, "Neoliberalism and Mindfulness in education: Accommodation or transformation?" Chapter in Weaving Complementary Knowledge Systems and Mindfulness to Educate a Literate Citizenry for Sustainable and Healthy Lives Małgorzata Powietrzyn ska and Kenneth Tobin (Eds.) on Blackboard or online -Funie Hsu, "What is the sound of one invisible hand clapping: Neoliberalism, the Invisibility of Asian and Asian American Buddhists and secular mindfulness in Education" https://www.academia.edu/30684271/What Is the Sound of One Invisible Hand Clapping Neoliberalism the Invisibility of Asian and Asian American Buddhists and Secular Min dfulness in Education -Funie Hsu, The Heart of Mindfulness: A Response to the New York Times http://www.buddhistpeacefellowship.org/the-heart-of-mindfulness-a-response-to-the-newvork-times/#comment-126122 Weak research evidence for Mindfulness based interventions for youth and teens: - Felver, J. C., & Cintly E. Celis-de Hoyos, C.E., Tezanos, K, & Singh, N.N. A systematic review of mindfulness-based interventions for vouth in school settings. https://www.researchgate.net/publication/273349460 A Systematic Review of Mindfulness-Based Interventions for Youth in School Settings. -May, C. 2017, October 31. Mindfulness training for teens fails important test. Scientific https://www.scientificamerican.com/article/mindfulness-training-for-teens-fails-American. important-test/?wt.mc=SA Facebook-Share Week 6 Critical Social Mindfulness: An Alternative Model Students are introduced to a critical, alternative model of social mindfulness that situates mindfulness within its moral, developmental, cultural, and social contexts and discuss how to further develop this approach **Readings and Assignments** Stages of self development: -Susann Cook-Greuter, "A Detailed Description of the Development of Nine Action Logics"

-Susann Cook-Greuter, "A Detailed Description of the Development of Nine Action Logics" <u>http://nextstepintegral.org/wp-content/uploads/2011/04/The-development-of-action-logics-</u> <u>Cook-Greuter.pdf</u> pp 7-35

-David Forbes, chapter from "Mindfulness and its discontents," Description of an evolving program on Blackboard

-David Forbes, Modes of Mindfulness: Prophetic Critique and Integral Emergence http://academicworks.cuny.edu/bc_pubs/99/

Week 7 Anti-Oppressive Pedagogy and Mindfulness

Students read and discuss how mindfulness is becoming part of an anti-oppressive critical pedagogy that promotes full self-development and social justice instead of reinforcing neoliberal individualism and conventional success in schools. It is applied in small groups and within the culture of the school.

Readings and Assignments:

Self-reflection or journal on mindfulness practice due

-Beth Berila, Integrating mindfulness into anti oppression pedagogy, New York: Routledge; chapters on Blackboard -website, <u>http://www.contemplativepracticesforantioppressionpedagogy.com/</u>

-Jenn Cannon, Education as the practice of freedom: A social justice proposal for mindfulness

educators

https://www.researchgate.net/publication/310492535 Education as the Practice of Freedo m_A_Social_Justice_Proposal_for_Mindfulness_Educators

-Sheryl Petty, ed., Social Justice, Inner Work, and Contemplative Practice http://www.contemplativemind.org/files/ICEA_vol1_2017.pdf

-David Forbes, Finding the zone: Mindfulness with high school football team <u>http://discoverthought.com/Education/References_files/3%20Finding%20the%20Zone%20For</u> <u>bes.pdf</u>

-Natalie Flores, "A Critical and Comprehensive Review of Mindfulness in the Early Years" in Purser, Forbes, and Burke, *Handbook of Mindfulness: Culture, Context, and Social Engagement* (Springer, 2016). on Blackboard

-Deborah Orr, Anti-Oppressive pedagogies. <u>http://files.eric.ed.gov/fulltext/EJ728316.pdf</u>

Week 8 Mindful Investigation & Disruption of Everyday Cultural Norms

Students are introduced to using mindfulness as a critical practice and a research tool to uncover implicit, unaddressed cultural norms of everyday life that contribute to people's stress and unhappiness. It is applied in small groups and within the culture of the school. They investigate some examples such as competitive individualism in school, texting by teens, and anxiety. Other topics will be included.

Readings and Assignments

-Steven Stanley, Swimming Against the stream https://www.researchgate.net/publication/268284060_Swimming_against_the_Stream_Mindf ulness_as_a_Psychosocial_Research_Methodology

-Stanley, S., Edwards, V., Ibinarriaga-Soltero, B., & Krause, G. (in press). Awakening psychology: investigating everyday life with social mindfulness. *SAGE Research Cases*

-Is the Drive for Success Making Our Children Sick?

Material located with strike-through is to be deleted and material <u>underlined</u> is to be added

http://mobile.nytimes.com/2016/01/03/opinion/sunday/is-the-drive-for-success-making-ourchildren-sick.html?referer

Teens, texting, and anxiety

-Twenge, J.M. (2017, September). Have Smartphones destroyed a generation? *Atlantic.*<u>https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/?utm_source=atlfb)</u>.

-Denizet-Lewis, B. (2017, October 11). Why are more American teenagers than ever suffering from severe anxiety? *New York Times.*

https://www.nytimes.com/2017/10/11/magazine/why-are-more-american-teenagers-than-eversuffering-from-severe-anxiety.html?hp&action=click&pgtype=Homepage&clickSource=storyheading&module=second-column-region®ion=top-news&WT.nav=top-news

+ Other topics

Week 9 Critical Social Mindfulness: Racism, Neoliberalism

Students consider how social mindfulness can critically address racism and neoliberalism and help K-12 and other students resist these and develop healthier more evolved ways to be.

Readings and Assignments

Racism

-Woods-Giscombe, C.L & Gaylord, S.A. "The cultural relevance of mindfulness meditation as a health intervention for African Americans" 2014, September, *J. Holistic Nursing* <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4102670/</u>

Rhonda Magee:

-How mindfulness can defeat racial bias <u>https://greatergood.berkeley.edu/article/item/how_mindfulness_can_defeat_racial_bias</u>

-Breathing together through I can't Breathe http://www.contemplativepracticesforantioppressionpedagogy.com/blog/breathing-togetherthrough-i-cant-breathe-the-ethics-and-efficacy-of-mindfulness-in-working-toward-justice-forall-keynote-talk-by-rhonda-magee-jd

-Angel Kyodo Williams:

Podcast

https://www.sharonsalzberg.com/metta-hour-podcast-episode-42-rev-angel-kyodo-williams/ TED talk

https://www.youtube.com/watch?v=PztCw49OQ2g

Article

https://www.lionsroar.com/where-will-you-stand/

Neoliberalism:

-P Verhaeghe, Neoliberalism, 2014, Sept 29. Guardian

https://www.theguardian.com/commentisfree/2014/sep/29/neoliberalism-economic-systemethics-personality-psychopathicsthic

-Angela Davis neoliberalism and racism

Material located with strike-through is to be deleted and material underlined is to be added

http://www.truth-out.org/opinion/item/16188-recognizing-racism-in-the-era-of-neoliberalism

-Third Through Sixth Graders' Perceptions of High Stakes Testing (Cut and Paste below if it doesn't connect)

http://www.soe.vt.edu/tandl/pdf/Barksdale/Publication Barksdale RTPenPals 3rd6thHighSta kes.pdf

Week 10 Urban Trauma and Social Mindfulness

Students examine the degrees of trauma experienced by urban students in everyday life and how social mindfulness can address them

Readings and Assignments

Field Site Visit and Interview Report Due

Urban Trauma -Trauma and bullying: Key and Peele 2 minute video https://www.voutube.com/watch?v=CUvFevGxaaU

-Healing the Hurt: Trauma and Young Men of Color http://www.sanctuarvweb.com/Portals/0/Bloom%20Pubs/Related%20Authors/2009%20Rich% 20Corbin%20Bloom%20Healing%20the%20Hurt%20California%20Endowment.pdf

-Sondra Bloom, Trauma and Children and Cultural Change http://www.sanctuaryweb.com/Portals/0/Bloom%20Pubs/2005%20Bloom%20Creating%20Sa nctuary%20for%20Children%20AACRC.pdf

-Arthur Dobrin, "The Effects of Poverty on the Brain," https://www.psychologytoday.com/blog/am-i-right/201210/the-effects-poverty-the-brain

-Mindfulness with Trauma

http://www.rebelbuddha.com/2011/10/using-mindfulness-based-psychotherapy-andmindfulness-meditation-to-overcome-trauma/

-Negative effects of mindfulness re triggering trauma: M Farias & C. Wickholm: "Has the science of mindfulness lost its mind?"

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5353526/

Week 11 Mindful Social Action

Students will consider how mindfulness can help social activism and also how as part of a mindfulness program in education a critical understanding of the structural and institutional systems is necessary for full growth and social justice

Readings and Assignments

-Adam Bucko, "Occupy Spirituality: Prayer And Protest In The Age Of Trump," April 16, 2017, Huffington Post

https://www.huffingtonpost.com/entry/occupy-spirituality-prayer-and-protest-in-theage us 58ec0ea3e4b081da6ad0070a

Material located with strike-through is to be deleted and material underlined is to be added
-James Rowe, 2015, March 21. "Zen and the art of social maintenance movements." *Waging Nonviolence*. <u>https://wagingnonviolence.org/feature/mindfulness-and-the-art-of-social-movement-maintenance/</u>.

-James Rowe,2015, September 28," Learning to love us versus them thinking" *Transformation*. <u>https://www.opendemocracy.net/transformation/james-k-rowe/learning-to-love-us-versus-them-thinking</u>

-Zack Walsh, Contemplative praxis for social-ecological tansformation http://arrow-journal.org/wp-content/uploads/2017/10/Z.Walsh-Contemplative-Praxis-Oct-2017.pdf

-Purser, R. & Forbes, D, 2014, May 5. Search outside yourself: Google misses a lesson in Wisdom 101. *Huffington Post.*

https://www.huffingtonpost.com/ron-purser/google-misses-a-lesson_b_4900285.html

-Leslie Booker https://www.lesliebooker.com/

-Wright, R. 2017, October 9. "Mindful resistance" is the key to defeating Trump. Vox. https://www.vox.com/the-big-idea/2017/10/2/16394320/mindful-resistance-key-defeatingtrump-mindfulness.

-Lee, F. 2017, October 13. Why I've started to fear my fellow social justice advocates. *Yes magazine*. <u>http://www.yesmagazine.org/people-power/why-ive-started-to-fear-my-fellow-social-justice-activists-20171013/</u>

Week 12 Urban Community Youth Centers employing mindfulness and yoga: Visit local sites*

Students will have visited some of these sites as well as schools in which mindfulness is being practiced. Students may provide informal reports based on their assignment, and/or the class discusses these and other community sites to learn what is being done and what is needed

Readings and Assignments

• *The Lineage Project: Meditation and Yoga for Inner City Youth, New York City: <u>http://www.lineageproject.org</u>

 *Peace on the Street: A Harlem Zen for for Youth, New York City; Stan Koehler: <u>http://www.peaceonthestreet.com</u> <u>http://www.tricycle.com/feature/peace-street?page=0,1</u>

• *Project Awake Youth: Brooklyn Zen Center: <u>http://awakeyouth.org</u> Afterschool program

• The Holistic Life Foundation Mindfulness with Inner City Youth, Baltimore, MD; Atman and Ali Smith: <u>http://www.hlfinc.org/home.htm</u> <u>http://prevention.psu.edu/people/documents/SayOm.pdf</u>

http://shambhalasun.com/index.php?option=com_content&task=view&id=3656&Itemid=0
-Building a Mindful Nation Congressman Tim Ryan visits Holistic Life Program http://www.youtube.com/watch?v=nv9RlmCrnOU
see this Gap video: <u>https://www.youtube.com/watch?v=ZZF_uMfpmyg</u>).
Youth Yoga Dharma, Daly City, CA: http://youthyogadharma.org
 *Reciprocity Foundation, New York City; Adam Bucko: <u>http://www.reciprocityfoundation.org</u> Inward Bound Mindfulness Education: <u>ibme.info</u> -CLOSED: Linda Lantieri, The Inner Resilience Program, New York: <u>http://www.innerresilience-tidescenter.org/</u>
• *Covenant House, transitioning homeless youth. Youth Rising Project sponsored by Teachers' College Spirituality and Psychology Program, <u>http://www.nytimes.com/2012/08/10/education/columbia-program-merges-therapy-and-spirituality.html?pagewanted=all&_r=0</u>
http://www.circleofa.org/library/course-meets-world/love-is-in-the-fabric-of-the-universe/
 *The Interdependence Project, Manhattan <u>http://theidproject.org/</u>
 *Brooklyn School for Social Justice, Bushwick; Brooklyn College Academy, Coney Island Ave, other DOE school sites
Week 13 Presentations of Final Project (Can be in progress) Students informally present and discuss their final project on social mindfulness
Week 14 Presentations of Final Project (Can be in progress) Students informally present and discuss their final project on social mindfulness
Week 15 Summary of Course Students will convene, reflect on their experiences, and evaluate the course
Readings and Assignment Final Project paper due The project will have been to develop a social mindfulness project for a school or targeted population that takes into account personal awareness, development, enactment, cultural and social/structural/policies issues. It can include drama or film scripts, multimedia presentations, etc. but requires consultation and prior approval from the instructor. Present informally to the class.
References Books:

Christophe Andre, Looking at Mindfulness. 2016. Blue Rider Press.

Harvey Aronson, Buddhist Practice on Western Ground, 2004, Boston: Shambhala Heesoon Bai, et al Contemplative Learning Across Disciplines. 2015. Albany: SUNY. Heesoon Bai, et al The Intersubjective Turn: Theoretical Approaches to Contemplative Learning and Inquiry across Disciplines. 2017. Albany: SUNY Daniel Barbezat & Mirabai Bush, Contemplative practices in Higher Education 2013. San Francisco: Jossey Bass Manu Bazzano, Zen and Therapy. 2017. New York: Routledge. Manu Bazzano, After Mindfulness, 2014. New York: Palgrave Beth Berila, Integrating Mindfulness and Anti-Oppression Pedagogy. 2015. New York: Routledge Barry Boyce, ed. The Mindfulness Revolution. 2011. Shambhala Sun. Sam Binkley, Happiness as Enterprise, 2008. Albany: SUNY Adam Bucko & Matthew Fox, Occupy Spirituality. 2013. Berkeley: North Atlantic Books. Mirabai Bush, ed. Contemplation Nation. 2011. Create Space Publishers Jeremy Carrette and Richard King, Selling Spirituality. 2005. Taylor & Francis. Carl Cederstrom & Andre Spicer, The Wellness Syndrome. 2015. London: Polity Richard Davidson, The Emotional Life of Your Brain 2012. Avery William Davies, The Happiness Industry. 2016. London: Verso. Marie Eaton et al, Contemplative Approaches to Sustainability in Higher Education. 2016. New York: Routledge. Oren Ergas & Sharon Todd, eds., Philosophy East/West. 2016. Wiley-Blackwell Miguel Farias & Catherine Wikholm, The Buddha Pill: Can Meditation Change You? 2015. Watkins. Cordelia Fine, Delusions of Gender 2011. New York: Norton Owen Flanagan, The Bodhisattva's Brain. 2013. MIT Press. David Forbes, Boyz 2 Buddhas 2004. New York: Peter Lang. Mark Forman, A Guide to Integral Psychotherapy. 2010. Albany: SUNY Christopher Germer et al., Mindfulness and Psychotherapy. 2016. Guilford David Harvey, A Brief History of Neoliberalism. 2007. New York: Oxford. Chris Hedges, Empire of Illusion. 2010. New York: Nation Books Terry Hyland, Mindfulness and Learning 2011. New York: Springer Eva Illouz, Saving the Modern Soul. 2008. Berkeley: California Patricia Jennings, Mindfulness for Teachers. 2015. New York: Norton Thomas Joiner, Mindlessness. 2017. New York: Oxford A. Karr & M Wood, The Practice of Contemplative Photography. 2011. Boston: Shambhala Robert Kegan & Lisa Lahey, An Everyone Culture. 2016. Cambridge: Harvard Business Review Robert Kegan, In Over Our Heads. 1994. Cambridge: Harvard. Frederic Laloux, Reinventing Organizations. 2014. Nelson Parker David Levy, Mindful Tech: How to Bring Balance to Our Digital Lives. 2017. New Haven: Yale Jing Lin, R. Oxford & E Brantmeirer, *Re-invisioning Higher Education* 2013. Charlotte: Information Age. David Loy, A New Buddhist Path. 2015. Boston: Wisdom. David Loy, A Buddhist History of the West. 2002. Albany: SUNY David Loy, The Great Awakening. 1997. Boston: Wisdom Barry Magid, What's Wrong with Mindfulness and What Isn't. 2016. Boston: Wisdom Joel Magnuson, From Greed to Well Being. 2016. Policy Press Gabor Mate, In the Realm of Hungry Ghosts. 2010. Berkeley: North Atlantic Ken Mcleod, Mindful Politics. 2006. Boston: Wisdom Steve McIntosh, Evolution's Purpose. 2012. Select Books

David McMahan. The Making of Buddhist Modernism 2008. New York: Oxford Thomas Merton, Mystics and Zen Masters 1999. New York: Farrar, Straus & Giroux Paul Moloney, The Therapy Industry 2013. London: Pluto Parker Palmer & Arthur Zajonc, The Heart of Higher Education 2010. San Francisco: Jossev Bass Ron Purser, David Forbes, Handbook of Mindfulness: Culture, Context, and Social Engagement 2016. New York: Springer M. Powietrzynska & K. Tobin (eds). Mindfulness and Educating Citizens for Everyday Life, Vols. 1&2. 2017. Sense Publishers Daniel Rechtschaffen, The Way of Mindful Education 2014. New York: Norton Ron Roberts, Roberts, R. The Off-Modern: Psychology estranged. 2017. London: Zero Books. Tim Rvan. A Mindful Nation 2013. Hav House. Amy Salzman & Christopher Willard, Teaching Mindfulness Skills to Kids and Teens. 2017. Guilford. Linda Sanders, Contemplative Studies in Higher Education. 2014. San Francisco: Jossey Bass Ed Sarath, Improvisation, Creativity, and Consciousness. 2014. Albany: SUNY K Schoenert-Reichl & R Roeser, Handbook of Mindfulness in Education. 2017. New York: Springer. Zindel Segal, Mindfulness-Based Cognitive Therapy for Depression 2012, Guilford. Daniel Siegel, The Mindful Brain 2007. New York: Norton Dean Sluyter, Cinema Nirvana 2005. Three Rivers Press. David Smail, Power, interest, and Psychology. 2013 PCCS Books Dorothy Soelle, The Silent Cry 2001, Fortress Anna Stetsenko, The Transformative Mind 2016. New York: Cambridge Paul Tillich, My Search for Absolutes 1969. Touchstone Robert Thurman, Inner Revolution 1999. Riverhead. Francisco Varela, Gentle Bridges 2001. Boston: Shambhala Roger Walsh, Essential Spirituality 2000. New York: Wiley Allan Wallace. Meditations of a Buddhist Skeptic, 2013. New York: Columbia Roger Walsh & Frances Vaughn, Paths Beyond Ego 1993. Tarcher Perigee John Welwood, Toward a Psychology of Awakening 2002. Boston: Shambhala Ruth Whippman, America the Anxious. 2017. New York: St. Martin's Ken Wilber, Integral Meditation 2016. Boston: Shambhala Ken Wilber, Integral Spirituality 2006. Boston: Shambhala Angel Williams, Radical Dharma 2016. Berkeley: North Atlantic Mark Williams et al. The Mindful Way Through Depression 2007. Guilford Jeff Wilson, Mindful America. 2014. New York: Oxford Betsy Wisner, Mindfulness and Meditation for Adolescents. New York: Palgrave. Keith Witt, Integral Mindfulness 2014. Integral Publishers Robert Woods & Kevin Healey, eds., Prophetic Critique and Popular Media 2013. New York: Peter Lang Arthur Zajonc, Meditation as Contemplative Inquiry 2008. Lindesfarne

Selected Articles

Nick Begley, Psychological Adoption and Adaptation of Eudaemonia <u>http://positivepsychology.org.uk/psychological-adoption-eudaimonia/</u> Sondra Bloom et al, Healing the Hurt: Trauma-Informed Approaches to the Health of Boys and Young Men of Color

http://www.sanctuaryweb.com/Portals/0/Bloom%20Pubs/Related%20Authors/2009%20Rich%20Corbin%20Bloom%20Healing%20the%20Hurt%20California%20Endowment.pdf

Nancy Davis, "Integral Methodological Pluralism in Educational Research"

http://nextstepintegral.org/wp-content/uploads/2011/04/Integral-Methodological-Pluralism-Nancy-Davis.pdf

-Arthur Dobrin, "The Effects of Poverty on the Brain,"

https://www.psychologytoday.com/blog/am-i-right/201210/the-effects-poverty-the-brain Kevin Healy, Searching for Integrity: The Politics of Mindfulness in the Digital Economy http://nomosjournal.org/2013/08/searching-for-integrity/

David Loy, Can Mindfulness Change a Corporation?

http://www.buddhistpeacefellowship.org/can-mindfulness-change-a-corporation/

Evelyn Fox Keller, A Feeling For The Organism: The Life and Work of Barbara McClintock

https://epistemologies.files.wordpress.com/2007/10/a-feeling-for-the-organism-comp.pdf

J. Lembke & J Funk, Feeding the Hungry Spirits

https://www.academia.edu/26401394/Feeding_the_Hungry_Spirits_A_Socially_Engaged_Budd hist_Response_to_the_Distortion_of_Trauma

David McMahan, Context Matters

https://tricycle.org/magazine/context-matters/

Joseph Milillo, Ronald E. Purser. Organizational Mindfulness Revisited: A Buddhist-based Conceptualization.

https://www.academia.edu/8102895/Mindfulness_Revisited_A_Buddhist-

Based_Conceptualization

Tom Murray, What is the Integral in Integral Education?

http://www.integral-

review.org/documents/Murray,%20Integral%20Pedagogy%20Vol.%205%20No.%201.pdf Edwin Ng & Ron Purser, Mindfulness and Self-Care: Why Should I Care?

http://www.patheos.com/blogs/americanbuddhist/2016/04/mindfulness-and-self-care-why-should-i-care.html

Deborah Orr, Thinking Outside the Academic Box: An Introduction to Mindfulness Meditation for Education

http://www.othereducation.stir.ac.uk/index.php/OE/article/view/17/14

Beth Patterson, Using Mindfulness-Based Psychotherapy And Mindfulness Meditation to Overcome Trauma

http://www.rebelbuddha.com/2011/10/using-mindfulness-based-psychotherapy-and-mindfulness-meditation-to-overcome-trauma/

George Por, Shared Mindfulness and the Commons

http://www.huffingtonpost.co.uk/george-par/shared-mindfulness-and-the-

commons_b_5691051.html

Ron Purser, The Myth of the Present Moment

http://link.springer.com/article/10.1007/s12671-014-0333-z/fulltext.html

Ron Purser & David Loy, Beyond McMindfulness

http://www.huffingtonpost.com/ron-purser/beyond-mcmindfulness_b_3519289.html Thomas Rocha, The Dark Night of the Soul

http://www.theatlantic.com/health/archive/2014/06/the-dark-knight-of-the-souls/372766/

Christopher Titmuss, The Buddha of Mindfulness: A Stress Destruction Programme <u>http://christophertitmussblog.org/the-buddha-of-mindfulness-the-politics-of-mindfulness</u> Glenn Wallace, Elixir of Mindfulness

https://speculativenonbuddhism.com/2011/07/03/elixir-of-mindfulness/#more-237

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Date of departmental approval: 17 November 2017

Effective date: Fall, 2018 semester

SECTION A-IV: NEW COURSES Department of Secondary Education (SEED)

GSCI 7039T Ecology: Ecosystem Dynamics and Conservation

3 hours; 3 credits

Course Description

Foundations of ecology: Ecosystems and biodiversity, including ecosystem components; population dynamics; species roles and interactions; matter, energy and the environment; biotic and abiotic interactions; ecosystem resistance and resilience. Ecosystems and humans, including ecosystem disruption and recovery; the "anthropocene"; interplay of biodiversity conservation and human activities; and multiply interacting systems. Assignments address formulation and testing of scientific questions. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History (Seminars on Science). online.

Prerequisite or Corequisite: None

Frequency of Offering: every semester

Projected enrollment: 1 section of 25 students

Rationale:

In partnership with the American Museum of Natural History (AMNH) new course created to introduce education majors in childhood, middle childhood and adolescence education to science content with a focus on NYS mandated content for teachers.

Clearances: N/A

Class Schedule

This is a six-week online graduate course with an additional week for assignment completion. The course is asynchronous and does not have specific meeting times. Assignments and discussions change on a weekly basis. Students are expected to complete work within the specific week it is assigned.

Format

 Ecology: Ecosystem Dynamics and Conservation is a six-week online graduate course with an additional week for assignment completion. Enrollment is restricted to current or future educators. No prior course in neuroscience or evolutionary biology is required.
 Weekly activities include written reflection on weekly essential questions and using computer interactives to gather data on how the brain works. Activities introduce the technology, tools, and processes that scientists use to study the brain, build models and evaluate evidence. Essays, image galleries and videos will help learners visualize and master the content.

3. **Online discussions** encourage reflection on course content, support and model the inquiry process, and sustain interaction between the offering scientists, seminar instructors, and course members.

4. **Final projects** support the creation on inquiry-based lesson plans focused on a key course concept that might be incorporated into your teaching practice.

Required Textbook

This course requires the following textbook:

Ecology The Economy of Nature

Robert Ricklefs and Rick Relyea 7th Edition ISBN: 1429249951

Support Services

Technical support is available by calling (800) 649-6715 or emailing learn@amnh.org.

The American Museum of Natural History welcomes learners with disabilities into its *Seminars* on *Science* program and will make reasonable accommodations for them. Please contact learn@amnh.org if you require information about requesting accommodation services. These services are only available to registered students with documented disabilities. Please submit requests at least two weeks prior to the start of the course.

Grading

Assessments are based on a detailed grading rubric developed for this course:

Course Assignments: 30% Course Participation & Communication: 40% Final Project: 30%

1. Course assignments will include reflection questions and written assignments.

2. **Class participation** will be evaluated based on the quality and consistency of contribution to the discussion forum. The grades for participation will be posted two weeks after each question opens.

3. **Final Project - Application in the Classroom:** This project allows learners to develop an application that could teach some aspect of the course content to students or other educators. The project may take the form of a classroom unit or a workshop plan (if used for professional development).

4. **Policy**: Everything submitted as an assignment, project, or discussion post must be an original work. References to resource materials are expected and proper citation is required. Assignments are due on the dates specified. Late submissions will be penalized 10%. Revised assignments that incorporate your instructor's feedback will be accepted until the course ends.

Weekly Overview and Expectations

Week 1: Can an ecosystem recover?

We begin in Gorongosa National Park, Mozambique, and pose the question: Can this ecosystem recover after a 15-year civil war? To answer this question, learners must first consider what they need to know— what are the parts that make up this ecosystem, and

how do they interact and work together? How do ecosystems react to disruption? How do we know? We will begin to explore the ecosystem as a dynamic whole rather than as a collection of parts, considering how changes might affect the system in a variety of ways. This application of a systems thinking lens to understanding ecosystems will be a common theme throughout the course.

Week 2: How do we study populations?

This week, we narrow the focus to populations within ecosystems. Who or what populates an ecosystem, and what are their roles? How do these roles change over time? What happens when a species is removed from a system? How do scientists study the populations within an ecosystem, from its largest to its smallest inhabitants? Learners will look for patterns in their own observations using the Wildcam Gorongosa (a series of remote trail cameras throughout Gorongosa National park) and then use the week's resources to understand population dynamics. Learners will explore the important roles different species can play—such as ecosystem engineers, keystone species, and indicator species—and how they shape their ecosystems.

Week 3: How do species coexist?

Last week we looked at what happens when a population is removed from an ecosystem, but what happens when you add a population? How does it affect the other players? This week we focus on community ecology and further explore the interactions between species in an ecosystem. We begin a two-week investigation into the Hudson River ecosystem, where a zebra mussel invasion has had cascading effects. Learners will apply their new understanding of species interactions to interpret real data on the dynamics within the river community.

Week 4: How is an ecosystem a system?

This week, learners will further their understanding about what makes an ecosystem a system by examining the flow of energy and matter through different parts of the environment. This includes understanding the interactions of biotic and abiotic factors within an ecosystem and the services each component provides. Continuing our investigation into the Hudson River ecosystem, learners will look at the short-term and long- term impacts of a disturbance on an aquatic ecosystem and its resilience. We will also be introduced to the complicated effects of both abiotic (climate change) and biotic (herbivory) interactions within a coastal salt marsh system, touching on ecological concepts of thresholds in a system and ecosystem resistance and resilience.

Week 5: How are humans part of the ecosystem?

This week we turn to the role of humans in ecosystems: how humans interact with and are shaped by their environments. We explore the meaning of the "anthropocene" (the title given to the current geological age in recognition of significant impact of human activities) and investigate management approaches that balance human needs and biodiversity. A case study looks at the interplay of biodiversity conservation and local fishery activities using marine reserves. Learners will begin to grapple with the difficulty of implementing conservation solutions in the face of complex or "wicked" problems.

Week 6: Reprise: Can an ecosystem recover?

We return to Gorongosa National Park to wrap up the course. The conversation shifts from "Can an ecosystem recover?" to "Should it recover?" and "What does a successful recovery look like?" We explore how conservation might have to adjust to future challenges such as climate change, extinctions, and human population growth. We also introduce the idea that a spectrum of conservation approaches is necessary, from the preservation of land and species, to the integration of biodiversity into market economies, to the creation and management of "novel" ecosystems. Learners return to their concept maps from the beginning of the course to incorporate their new expertise.

Date of departmental approval: 17 November 2017

Effective date: Fall, 2018 semester

SECTION A-IV: NEW COURSES Department of Secondary Education (SEED)

GSCI 7053T Water

3 hours; 3 credits

Course Description

Exploration of water through an environmental science lens. Chemical and physical properties, abundance, sources, circulation through Earth systems, local and global human impacts; freshwater systems and ecosystem services; wetlands; standards of and threats to water quality; water system management and policies. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History (Seminars on Science).

Prerequisite or Corequisite: None

Frequency of Offering: every semester

Projected enrollment: 1 section of 25 students

Rationale:

In partnership with the American Museum of Natural History (AMNH) new course created to introduce education majors in childhood, middle childhood and adolescence education to environmental science content with a focus on NYS mandated content for teachers.

Clearances: N/A

Course Description

The course begins with an overview of the role of water as a key component of planetary systems, the many ways humans use water and the cumulative effects of human activity on Earth's freshwater supply. It describes the link between water and biodiversity and the services that freshwater ecosystems provide, with a particular focus on wetlands. It considers how this finite resource is distributed across the planet, moves on to the effect of water quality on human health and concludes with an overview of the key challenges that affect water management on a global scale.

During each week of the course, case studies provide learners with in-depth, real-world and diverse exposure to these issues. They also provide opportunities for rich discussion. The studies include the history and hydrology of the Colorado River and the tradeoffs of water management; the livelihoods that revolve around the Mekong River and its fertile delta; the clean-up of wastewater through constructed wetlands in Augusta, Georgia; water supply and management in the New York City watershed; and the complexity of sharing water resources among the eight countries that share southern Africa's Zambezi River Basin.

Objectives

Along with a solid grasp of these water-related issues, students will emerge from the course grounded in the science that underlies all environmental studies. They will be able to:

1. understand the interrelationships between living things and the ecosystems they inhabit;

2. analyze environmental problems caused by changing natural conditions and by human activity;

3. evaluate ways to resolve and/or prevent these problems.

Class Schedule

This is a six-week online graduate course with an additional week for assignment completion. The course is asynchronous and does not have specific meeting times. Assignments and discussions change on a weekly basis. Students are expected to complete work within the specific week it is assigned.

Format

1. **Water** is a six-week online graduate course with an additional week for assignment completion. Enrollment is restricted to current or future educators. No prior course in environmental science is required.

2. **Weekly activities** involve case studies, scientific essays and textbook readings. These materials are augmented by data visualizations, interactive simulations, images, videos and links to material on other websites.

3. **Online discussions** encourage reflection on course content, support and model the inquiry process, and sustain interaction between the offering scientists, seminar instructors, and course members.

4. **Final projects** support the creation on inquiry-based lesson plans focused on a key course concept that you might incorporate into your teaching practice. For current instructor information, please contact <u>seminfo@amnh.org</u>.

Required Textbook

Environmental Science: Earth as a Living Planet

By Daniel B. Botkin, Edward A. Keller Hardcover: 752 pages; Dimensions (in inches): 11 x 8.6 x 1.3 Publisher: Wiley, 7th edition, 2009 ISBN: 0470118555

Support Services

Technical support is available by calling (800) 649-6715 or emailing semadmin@amnh.org.

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Grading

Assessments are based on a detailed grading rubric developed for this course:

Course Assignments: 30% Course Participation & Communication: 40% Final Project: 30%

1. Course assignments will include reflection questions and written assignments.

2. **Class participation** will be evaluated based on the quality and consistency of contribution to the discussion forum. The grades for participation will be posted two weeks after each question opens.

3. **Final Project - Application in the Classroom:** This project allows learners to develop an application that could teach some aspect of the course content to students or other educators. The project may take the form of a classroom unit or a workshop plan (if used for professional development.

4. **Policy**: Everything submitted as an assignment, project, or discussion post must be an original work. References to resource materials are expected and proper citation is required. Assignments are due on the dates specified. Late submissions will be penalized 10%. Revised assignments that incorporate your instructor's feedback will be accepted until the course ends.

Weekly Overview and Expectations Week 1: What is Water?

Covering over 70 percent of Earth's surface, water is central to the movement of matter and energy on

Earth. Only 3% is fresh, and only one percent of that is available to us in aquifers, lakes, rivers, streams, and wetlands. We begin our investigation by exploring how water circulates through Earth systems and is distributed across the planet. Civilization has always centered around access to water, with usage patterns varying across nations and regions. We consider how humans move and store water, and the local and global effects of altering water quality and flow, from lowering water tables to damming the Colorado River. A supplementary essay explains the unique properties of the water molecule.

Expectations

- Review the course orientation
- Explore the physical, historical, and cultural context of the Colorado River system
- Analyze how population growth, agriculture, and hydrological development impact the Colorado River
- Review the water cycle
- Reflect on the different ways that humans impact the supply of water
- Understand the properties of the water
- Participate in the Icebreaker Discussion
- Respond to the Discussion Question: The Mighty Colorado

Week 2: Water & Life

This week describes the vast network of living things that depend on freshwater, and how water shapes wetland, freshwater, and marine communities. We look at different kinds of freshwater systems and the services they provide, from mangrove forests that protect coastlines to watersheds that purify water and mitigate flooding — not to mention hydropower,

transportation, and recreation. How do enterprises like agriculture, industry, and urbanization affect the way these systems function? The week wraps up with an explanation of the concept of ecosystem services and the challenge of assessing their value.

The Case Study looks at the Mekong River basin, where millions of people depend on the river's rich sediment and fish-filled waters.

Expectations

- Examine how water shapes wetland, freshwater and marine communities
- Understand the nitrogen cycle
- Consider the concept of ecosystem services
- Reflect on the various ways that humans impact ecosystems
- Understand the main sources of water pollution and the toll on freshwater species
- Engage in the discussion question: A Challenged River

Week 3: Why Are Wetlands So Important?

Long dismissed as worthless, wetlands were routinely paved over or filled in until scientists grasped the critical biological, chemical, and physical roles they play in Earth systems. This week, we look at what defines a marsh, bog, or peatland (to name just a few kinds of wetlands), and how different species have adapted to these highly variable ecosystems. Nature's water filters, they act as "kidneys" of the landscape, play a key role in the water cycle, and are extremely biologically productive. We go on to examine the major causes of wetland loss; its effects, both local and global; and mitigation and prevention strategies. This week's Case Study takes us to Augusta, Georgia, where grasses and man-made marshes clean effluent from a wastewater treatment plant before it drains into the Savannah River

Expectations

- Explore how constructed wetlands are used to treat a city's wastewater
- Understand the importance of wetlands
- Understand the major causes and effects of wetland loss
- Review the role of wetlands in biogeochemical cycles
- Explore the different ways that wetlands can be protected, managed, and restored
- Complete the assignment: Local Wetlands
- Participate in the discussion question: The value of an ecosystem
- Present preliminary thoughts on the Final Project

Week 4: Managing Earth's Freshwater: What Are the Challenges?

This week addresses the location, quality, and scarcity of this finite resource, and the social, economic, and political aspects of managing water supplies. We discuss the sources and uses of freshwater – including its finite nature, the effect of water scarcity on ecosystems and human populations as well as the industrial and agricultural uses of water. In addition, we discuss the human impact on freshwater resources – including the balancing of competing demands on those resources, the nature of water governance, the implications of water as a privatized commodity, and technologies to increase supply and use water more efficiently, like desalination and reuse. Many of these issues are brought into focus in the first week of a two-

week case study of New York City water supply and management, which focuses on stakeholders'

options for meeting the U.S. Environmental Protection Agency's stringent water quality criteria.

Expectations

- Consider the challenges involved in managing drinking water supply for New York City
- Examine the biophysical, social and economic dimensions of watershed management

• Understand how water scarcity affects human health, ecosystems, agriculture, and urban settlements

- Explore the ramifications of public versus private ownership of water services
- Evaluate the different technologies for addressing water supply and management issues
- Complete the assignment: NYC stakeholders debate
- Participant in the discussion: If you ran the show...

Week 5: What Is Clean Water?

This week discusses the effect of water quality on human health, and the feedback within an environment between healthy non-human species and healthy people. Topics include waterborne diseases, water treatment, water pollution, sewage treatment, techniques to identify and remedy threats to watershed and drinking water quality; and the Clean Water Act and other relevant laws. In the second half of the New York City watershed case study, course participants compare their supply and management solutions to those arrived at in the New York City Watershed Memorandum of Agreement. They also consider the ongoing physical, chemical, and political factors involved in delivering water safely and reliably to nine million customers.

Expectations

- Explore the ways water quality affects human health
- Examine techniques to identify and remedy threats to watershed and drinking water quality

• Review how stakeholders responded to EPA requirements regarding the NYC water supply system

- Respond to the discussion question: Your Drinking Water
- Respond to the discussion question: NYC Stakeholders Debate Revisited
- Submit an outline for your final project

Week 6: How Should We Manage Water Systems?

What key challenges does the future hold? What new technological and political tools can we draw on? This week steps back for a look at the environmental, policy, and socio-economic factors *that affect water management on a global level*. Topics include climate change (including its relationship to water resources; ecosystems and biodiversity; melting ice and rising sea levels; and weather) as well as best practices (including water resource policy, management and conservation). This week's case study focuses on the Zambezi River Basin of southern Africa, which is home to some 40 million people who rely on it for drinking water, fisheries, hydropower, industry, ecosystem maintenance, and other uses. We look at why

transboundary management of shared water resources is so challenging, especially in the developing world.

Expectations

• Understand the ramifications of climate change on the world's freshwater resources

- Examine the environmental, political, and socio-economic factors that affect water management on a global level
- Evaluate best practices in water resource policy
- Reflect on the human right to water
- Participate in the discussion: Applying Your Knowledge
- Submit your final project.

Date of departmental approval: 17 November 2017

Effective date: Fall, 2018 semester

SECTION A-IV: NEW COURSES Department of Secondary Education (SEED)

GSCI 7059T Climate Change

3 hours; 3 credits

Course Description

Foundations of climate change: Climate as a dynamic Earth system. Atmospheric and ocean circulation; heat transfer; the greenhouse effect. The Keeling Curve. Natural and anthropogenic sources of climate change, including drivers and forcings. The role of the ocean in climate change; theory, observation; paleoclimate research; potential consequences, risks and uncertainties. A focus on how scientists study climate including an in-depth application of climate modeling. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History (Seminars on Science). Asynchronous online.

Prerequisite or Corequisite: None

Frequency of Offering: every semester

Projected enrollment: 1 section of 25 students

Rationale: In partnership with the American Museum of Natural History (AMNH) new course created to introduce education majors in childhood, middle childhood and adolescence education to climate science content with a focus on NYS mandated content for teachers.

Clearances: N/A

During each week of this six-week course, participants will utilize essays, multimedia, other websites and online discussion forums to explore a facet of climate science. A weekly case study will focus on contemporary research on some aspect of the climate system. These include biologist Gretchen Hofmann, who studies the effect of ocean acidification on sea urchins; geologist Dorte Dahl-Jensen, who analyzes Greenland ice cores to reconstruct climate history; and meteorologist Alan Robock who investigates the effects of volcanic eruptions, nuclear weapons, and other human activity on the climate system.

Objectives

Students will emerge from the course with an understanding of climate change. They will be able to:

- 1. Demonstrate a solid understanding of the climate system.
- 2. Evaluate the various factors that shape climate.
- 3. Describe how past climates contribute to our current understanding of climate change.
- 4. Explain the consequences, risks, and uncertainties of climate change.

Class Schedule

This is a six-week online graduate course with an additional week for assignment completion. The course is asynchronous and does not have specific meeting times. Assignments and discussions change on a weekly basis. Students are expected to complete work within the specific week it is assigned.

Format

1. **Climate Change** is a six-week online graduate course with an additional week for assignment completion. Enrollment is restricted to current or future educators. No prior science background required.

2. **Weekly activities** involve reading essays, the case study, and textbook assignments. These materials are augmented by data visualizations, interactive simulations, images, videos, and links to material from organizations such as the Goddard Institute for Space Studies and the National Oceanic and Atmospheric Administration.

3. **Online discussions** encourage reflection on course content, support and model the inquiry process, and sustain interaction between the offering scientists, seminar instructors, and course members.

4. **Final projects** support the creation on inquiry-based lesson plans focused on a key course concept that might be incorporated into your teaching practice.

Course Textbooks

This course requires the following textbook: The following textbook is required:

Climate Change: The Science of Global Warming and Our Energy Future

by Edmond Mathez Hardcover: 344 pages Publisher: Columbia University Press (1st edition, 2009) ISBN: 0231146426

The following book is strongly recommended:

Climate Change: Picturing the Science

by Gavin Schmidt, Joshua Wolfe, and Jeffrey D. Sachs Hardcover: 320 pages Publisher: W. W. Norton & Company (1st edition, 2009) ISBN: 0393331253

Support Services

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Grading

Assessments are based on a detailed grading rubric developed for this course:

Course Assignments: 30% Course Participation & Communication: 40% Final Project: 30%

1. Course assignments will include reflection questions and written assignments.

2. **Class participation** will be evaluated based on the quality and consistency of contribution to the discussion forum. The grades for participation will be posted two weeks after each question opens.

3. **Final Project - Application in the Classroom:** This project allows learners to develop an application that could teach some aspect of the course content to students or other educators. The project may take the form of a classroom unit or a workshop plan (if used for professional development)

4. **Policy**: Everything submitted as an assignment, project, or discussion post must be an original work. References to resource materials are expected and proper citation is required. Assignments are due on the dates specified. Late submissions will be penalized 10%. Revised assignments that incorporate your instructor's feedback will be accepted until the course ends.

Weekly Overview and Expectations

Week 1: How Does Climate Work?

The course begins with an introduction to the concept of climate as a dynamic Earth system. We will discuss atmospheric and ocean circulation, which determines how heat is transferred across the globe. We then explore the concept of energy balance — how much of the Sun's energy reaches the Earth, is absorbed, and is reflected back into space – and the greenhouse effect. This week's case study is about Curtis Ebbesmeyer, an oceanographer who uses "flotsametrics" and a network of beachcombers worldwide to trace the paths of ocean currents.

Expectations

- Review the course orientation
- Explore the concept of energy balance and the greenhouse effect.
- Analyze circulation in the atmosphere and ocean.
- Reflect on one scientist's work with ocean circulation.
- Participate in the Icebreaker Discussion.
- Respond to the Discussion Question: Energy Budget

Many factors influence climate on various time scales, including plate tectonics, Earth's orbital variations, long- lived greenhouse gases in the atmosphere, variations in solar luminosity, and volcanic eruptions. This week we examine "drivers" of climate change, with an emphasis on those of the twentieth-century. A case study tells the story of Charles Keeling and his pioneering effort to measure the CO2 content of the atmosphere.

Expectations

- Examine the drivers of climate change.
- Consider drivers affecting climate today.
- Understand the relationship between drivers and forcings.
- Explore early climate science with the Keeling Curve.
- Complete the assignment: Drivers Over Time.

• Engage in the discussion question: The Importance of Drivers

Week 3: How Does the Climate System Respond to Input?

The response of the climate system to changes in radiative forcing will be discussed this week. Also, we review how the carbon cycle works and its fundamental role in the climate system as well as the key role of feedbacks in the climate system. A case study presents Gretchen Hofmann's work on the effects of changing ocean chemistry on ocean life.

Expectations

- Discover the complexity of the climate response to changes in radiative forcing.
- Understand the workings of the carbon cycle and its role in climate change.
- Identify important feedbacks.
- Learn about one scientist's study of ocean acidification and marine calcifiers.
- Participate in the discussion question: Relationships in the Climate System.
- Complete the assignment using a Global Climate Model: Part 1.
- Present preliminary thoughts on the Final Project.

Week 4: How Do We Bring Together Modeling, Theory, and Observation to Understand Cause and Effect?

This week we examine the utility of numerical models in investigating how the climate system works and how it will respond to continued greenhouse gas buildup. We will learn how models are constructed, their inherent reliability, and key factors affecting reliability. Additionally, we will examine how models can help identify the specific forces that caused recent climate change (attribution). A case study describes how meteorologist Alan Robock investigates the effects of volcanic eruptions on the climate system.

Expectations

- Understand the character of climate models and how they are constructed.
- Explore how climate models are used to gain insight into both how the climate system works and what the future may hold.
- Examine how scientists attribute changes in climate to particular forcing factors.
- Consider the importance of both observation and models in understanding the climate system and how they feed off of each other.
- Complete the assignment: Using a Global Climate Model: Part 2.
- Participate in the discussion: Climate Modeling

Variations in past climates are held in ocean and lake sediment cores, ice cores, corals, tree rings, and other geologic records. We will learn how past climate informs us about how the present climate system works, including the sensitivity of climate to changes in radiative balance.

Expectations

- Explain the concept of climate sensitivity.
- Consider the myriad of ways in which past climate informs us about present-day climate change.
- Discover how ice cores are used to decipher past climate.
- Complete the assignment: Using an Empirical Climate Model.
- Respond to the discussion question; The Implications of Understanding.
- Submit an outline for your final project.

Week 6: What are the Potential Consequences, Risks, and Uncertainties of Climate Change?

Some of the potential consequences of climate change, such as sea level rise and disruption of the global food supply that could have major negative impacts on humanity are examined this week. We will discuss the uncertainties in how the future may unfold, the important concept of risk as a means of dealing with uncertainty, and the different levels of risk associated with different consequences. This week includes an interview with Dr. James Hansen, Director of the NASA Goddard Institute for Space Studies.

Expectations

- Understand some of the potentially serious consequences of climate change.
- Explore the uncertainties associated with these and other consequences.
- Examine the concept of risk and the interplay of probability and severity of impact in determining risk.

• Consider the work of a climate scientist advocating for action to combat the effects of climate change.

- Participate in the discussion: Are We Ready for the Future?
- Submit your final project.

Date of departmental approval: 17 November 2017

Effective date: Fall, 2018 semester

SECTION A-IV: NEW COURSES Feirstein Graduate School of Cinema

FILM 7241G Cinematography: Shooting on Film

60 hours; 3 credits

Bulletin description: Lighting and visual storytelling. Current motion picture cameras. Principles of lighting, composition, lenses, camera movement, and postproduction in motion picture film

Prerequisite: Cinematography 1

Frequency of Offering: every other semester

Projected enrollment: 14 students per semester

Clearances: Television and Radio

Rationale: This elective course is offered to train film students in the use of motion picture film as distinct from their digital capture training. Techniques of photochemical exposure add to students skill set. Loading, threading and exposing motion picture film is a specialized skill developed through in-class demonstrations and exercises.

Objectives of Course:

1. To train students in the handling and exposing of motion picture film 2. To equip students with the knowledge of exposing for photochemical processes

3. To develop students suite of skills as cinematographers

4. To demonstrate competencies in traditional film cinematography, as distinct from digital cinematography

Outcomes Anticipated for Course:

At the conclusion of this third semester course, students concentrating in cinematography should

1. Have gained confidence using incident and reflected light meter readings to expose motion picture film

2. Be able to load, thread, and operate a motion picture camera

3. Have developed their ability to design and film complex lighting exercises using motion picture camera equipment

Course Outline:

Week 1:

Introduction to motion picture cameras and lenses (e.g. Panavision Gold II) loading magazines, threading camera

Week 2:

Continue building proficiency loading and threading camera. Review of light meter technique, grey card usage, and precise exposure for motion picture film

Week 3:

Assignments given: in teams students design exercises that convey various motion picture styles

Week 4: Guest DP, presentation on professional case study of motion picture film production

Week 5: In class latitude test and comparison to Digital Cinema camera e.g. Red Weapon

Week 6: In class color test and comparison to Digital cinema camera e.g. Red Weapon and Midterm exam

Week 7: Team 1 shoots in class exercise

Week 8: Team 2 shoots in class exercise

Week 9: Team 3 shoots in class exercise

Week 10: Team 4 shoots in class exercise

Week 11: Team 5 shoots in class exercise

Week 12: Team 6 shoots in class exercise

Week 13: Team 7 shoots in class exercise

Week 14: Review and screening of completed exercises

Week 15: Final exam

Method of assessment:

Performance on Set......10% Mid-term Exam......10% Participation in Class.....10% Final Exam.......20% Weekly Screenings......20% Final Screening30%

Bibliography:

Cinematography: Third Edition, by Kris Malkiewicz, M. David Mullen ASC

Date of Department Approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Feirstein Graduate School of Cinema

FILM 7432G: Film Development: From Script to Screen

60 hours; 3 credits

Bulletin Description: This course is designed to provide producers with the tools necessary to develop an intellectual property from initial concept to a feature film script. Using examples from the real world of film production, students will explore the development of several feature film projects from different media: magazine articles, plays, novels, short stories, and original story ideas, among others.

Prerequisite: Matriculation for the M.F.A. in Producing or permission of the Department Chair.

Frequency of offering: Every other semester.

Projected enrollment: 15 students

Clearances: None

Rationale: This is a required course for all producing students. Emphasis will be on the relationship between writers and producers, and how to effectively work to creatively "develop" a script, preparing students for the professional world of film development that involves an understanding of developing ideas into intellectual property.

Objectives of Course:

- 1. To teach producers how the process of development works in the entertainment industry.
- 2. To teach producers how to effectively work with writers and directors on the scripts of their films.
- 3. To illuminate the creative process in which producers take an idea and develop it into a feature film script.
- 4. To enable producers to actively "develop" a short film with a working writer/director.

Outcomes Anticipated for the Course:

At the conclusion of the course, students should be able to:

- 1. Have an example of a short film that they have developed with a working writer/director.
- 2. Have an understanding of the process of feature film development in the film and television industries.
- 3. Have a wide-ranging knowledge of how producers have optioned and developed projects from a variety of original formats: plays, original ideas,

Course Outline:

Week 1: Overview: The development process in Hollywood and Independent Film.

- Week 2: Working with Writers and Directors: Practical Examples.
- Week 3: Research and Development: Finding your Stories.
- Week 4: The Art of developing Theatrical Properties.

Week 5: The development of True-Life stories.

Week 6: Developing Short Stories.

Week 7: Remakes

Week 8: Case Study: multiple drafts.

Week 9: Developing from New Media/ Graphic Novels/Comic Books.

Week 10: Workshopping Scripts with actors.

Week 11: Readings: How to get he most out of public script readings.

Week 12: Pilots and Story Bibles.

Week 13: Creating a "Story World" beyond the script.

Week 14: Transposition: Foreign Film remakes in Film and Television.

Week 15: Final Presentations

Method of Evaluation

20% class participation 20% Midterm Exam 60% Final project

Methods of Assessment

- 1. Class participation will be analyzed to gauge student involvement with essential concepts.
- 2. A midterm exam, multiple choice and essay questions will measure retention and synthesis of material studied to date.
- 3. Final Project: Students will work with a writer/director on a short film and will hand in a minimum of three drafts that they have worked on with a writer, along with their producer notes on those films.

Required Textbook:

Linda Costanzo Cahir, *Literature into Film: Theory And Practical Approaches* McFarland, First Edition

Bibliography

Stephanie Harrison, Adaptations: From Short Story to Big Screen: 35 Great Stories That Have Inspired Great Films Three Rivers Press, 2005.

Linda Costanzo Cahir, Literature into Film: Theory And Practical Approaches McFarland, 2006

Date of Department Approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Feirstein Graduate School of Cinema

FILM 7461G: The Business of Film

60 hours; 3 credits

Bulletin Description: This course is designed to provide producing students with a systematic overview of the modern day filmed entertainment business. The course will not only cover the traditional "Hollywood System" operating out of Los Angeles but will examine the independent film model as well as worldwide approached to producing moving image works. The course will take a critical look at the financing, production, marketing, and distribution of filmed entertainment.

Prerequisite: Matriculation for the M.F.A. in Producing or permission of the Department Chair.

Frequency of offering: Every other semester

Projected enrollment: 15 students

Clearances: None

Rationale: By understanding many of the facets of the worldwide filmed entertainment industry, students in the concentration will gain a better understanding of where and how they can apply their skills in this sector. The course will also focus on the ways in which different sectors often overlap, how there is often a symbiotic relationship between different threads of the entertainment industry.

Objectives of Course:

- 1. To look at the entertainment industry through a practical lens.
- 2. To examine New York City's role as the center of independent production.
- 3. To explore the employment and internship opportunities that exist in the wide-raging entertainment Industry
- 4. To analyze the creative process within each of the different threads of the entertainment industry and how they relate to the business of filmmaking.
- 5. To demonstrate the business factors that drive each of the threads in the entertainment industry; to examine the differences and overlaps.
- 6. To bring in individuals from the entertainment industry to discuss with the students the complexities of their businesses as well as their own career paths.

Outcomes Anticipated for the Course:

At the conclusion of the course, students should be able to:

- 1. Write a paper on the symbiotic relationship between entertainment and industry.
- 2. Have an understanding of the current status of the worldwide filmed entertainment industry.
- 3. Have some under standing of the intersection of the different filmed entertainment industries worldwide.
- 4. Predict trends.
- 5. Have some understanding of the creative industry in NY (Magazines, Newspapers, Books, Theater etc...)
- 7. Understand how they might apply their skills in each of the above.

Course Outline

Week 1: Overview: The Current state of the International Film Business.

Week 2: The business of Development - how the different publishing and writing sectors interact

with the filmed entertainment business

Week 3: Packaging the Film

Week 4: The Current Hollywood System. Development, Financing and Packaging

Week 5: The Independent System. Development, Financing, and Packaging

- Week 6: The International System. Co-Productions, Foreign Financing
- Week 7: The Business of the Documentary Films
- Week 8: Commercials and Branded Entertainment
- Week 9: Hollywood Distribution
- Week 10: Independent Distribution
- Week 11: DIY Financing, Production and Distribution
- Week 12: New Models of Financing

Week 13: Hollywood Distribution

- Week 14: Independent/International Distribution
- Week 15: Final Presentations

Method of Evaluation

20% class participation 20% Midterm Exam 60% Final project

Methods of Assessment

- 1. Class participation will be analyzed to gauge student involvement with essential concepts.
- 2. A midterm exam, multiple choice and essay questions will measure retention and synthesis of material studied to date.
- 3. Final Project: Students will be asked to write an 8-10 page essay that addresses how entertainment and industry inform each other using specific examples from the class work, choosing one or two of the threads as a way of exploration. They will be asked to also make up a fictitious product (a film, a video game, a magazine, a production company) and discuss how it fits in to the Worldwide Entertainment Industry landscape. Each of these papers will be presented to the class and involve a class wide discussion.

Bibliography

Harold Vogel, *Entertainment Industry Economics*, Cambridge University Press, 1998. Jeff Ulin, *The Business of Media Distribution*, Focal Press, 2010.

Tim Wu, The Master Switch: The Rise and Fall of Information Empires, Vintage 2011 Lawrence Lessig, Remix: Making Art and Commerce thrive in the Hybrid Economy, Penguin 2008 Christine Vachon, David Edelstein, Shooting to Kill, William Morrow, 1998 Frank Rose. The Art of Immersion: How the Digital Generation Is Remaking Hollywood, Madison Avenue, and the Way We Tell Stories," Norton 2012 David Kushner. Jacked: the outlaw story of Grand Theft Auto Wiley 2012 Periodicals: Variety, The Hollywood Reporter, Screen International, The Wrap, Fast Company,

the verge.com, deadlinehollywood.com

Date of Department Approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Feirstein Graduate School of Cinema

FILM 7471G: Entertainment Law

60 hours; 3 credits

Bulletin Description: This course is designed to provide producing students with an overview of the Business and Legal aspects necessary to produce moving image work. The course will cover the basic concepts of the legal system as it relates the to film industry at large and also introduce students to the day to day legal and business affairs practices that producers confront as they produce filmed entertainment.

Prerequisite: Matriculation for the M.F.A. in Producing or permission of the Department Chair.

Frequency of offering: Every 2 semesters

Projected enrollment: 15 students

Clearances: None

Rationale: This class is intended to familiarize students with the legal precepts and principals that form the backbone of contractual relationships in the film industry.

Objectives of Course:

- 1. To introduce students to Entertainment Law
- 2. To become familiar with the everyday contracts involved in the making of feature films.
- 3. To gain an understanding of negotiating legal contracts
- 4. To gain a fundamental understanding of how legal and business affairs work in the entertainment industry and how they relate to the business of filmmaking.

Outcomes Anticipated for the Course:

At the conclusion of the course, students should be able to:

- 1. Negotiate basic film contracts used in the everyday production of feature films.
- 2. Have an understanding of the how legal and business affairs matters are conducted in the entertainment industry.
- 3. Understand the legal negotiations involved in the distribution and exhibition of feature films.

Course Outline

Week 1: Legal Concepts Primer: Right of Privacy, Right of Publicity, Estate Issues, Reps/Warranties/Indemnifications, Waivers of Injunctive Relief, Work for Hire, General Copyrights/Trademarks/Corporate and labor issues.

Week 2: Rights Issues: Options, WGA Registration, Copyright, negotiating life rights, dealing with and negotiating with agents.

Week 3: Setting up LLC's, Operating Agreements, Subscription agreements, Attachments, Crowdfunding and Fiscal Sponsors

Week 4: Completion Bonds, Tax Credits, Co-Production Deals, Negative Pick Ups and Pre-Sales

Week 5: Above the Line Legal: Above the Line: Actor Contracts, SAG, Agreements with Minors, Court Ratification.

Week 6: Above the Line Legal Part 2: Above The Line: Producers & PGA, Directors and DGA, Writers and WGA writing deals.

Week 7: Below the Line: IATSE Contracts, Labor agreements, Insurance

Week 8: Fair Use and Clearance Issues, Copyright infringement.

Week 9: Production Legal: Location Agreements, Payment of purchase price, Essential

Elements, Emergency Rights issues, Accidents, Contingencies

Week 10: Legal and the Documentary

Week 11: Post Production:Post- Production: Music, E&O , Clearances, Opinion Letters,

Copyright Registrations.

Week 12: Festivals and Distribution: Festival Rights, Step Deals, Distribution Deals, Delivery Schedule Legal.

Week 13: Expansion into Other Media: Digital, VR, TV and Games, Production Services deals with Youtube, TV Shopping Agreements, Web Rights, Game rights etc.

Week 14 Case Studies in Legal: Sample "out of the box" examples of legal issues in different film entertainment.

Week 15: Final Exam

Method of Evaluation

20% class participation 20% Midterm Exam 60% Final project

Methods of Assessment

- 1. Class participation will be analyzed to gauge student involvement with essential concepts.
- 2. A midterm exam, multiple choice and essay questions will measure retention and synthesis of material studied to date.
- 3. Final Examination.
- 4. Students will all present a "case study" in a legal issue that occurred on a feature film.

Bibliography

Dina Appleton, *Hollywood Dealmaking: Negotiating Talent Agreements for Film, TV and New Media*, Allworth Press, 2010.

Mark Litwak, *Contracts for the Film & Television Industry*, 3rd Edition, Silman-James Press, 2012.

Mark Litwak, *Dealmaking in the Film & Television Industry, 4th edition: From Negotiations to Final Contracts*, Silman-James Press, 2017

http://www.peterbroderick.com/writing/writing/welcometothenewworld.html

Date of Department Approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Feirstein Graduate School of Cinema

FILM 7515G: Sound Recording for Production and Post

60 hours; 3 credits

Bulletin Description: The fundamentals of sound recording for film and media production. The course will cover acoustics, psychoacoustics, microphones, recorders and other audio equipment, studio and location recording of dialogue, music, and effects. Hands-on use of audio equipment. Students will learn the fundamentals of practical scene analysis from an audio perspective. Students will also be introduced to industry standard post tools including Adobe Audition and ProTools to learn the basics of post production recording.

Prerequisite: Matriculation for the M.F.A. in Post Production or permission of the Department Chair.

Frequency of offering: One semester per year

Projected enrollment: 16 students

Clearances: none

Rationale: This course will introduce graduate students to the fundamentals of production and post production and post production. We will discuss the important role that location audio and postproduction sound play in the filmmaking process. This will include the storytelling capacities of sound, sound design theory, as well as the technical fundamentals of location sound recording.

Students will be introduced to both the theoretical and practical elements of location sound recording. Theoretical elements will include the physics of sound, human auditory capabilities, acoustics and psychoacoustics, audio terminology, how sound functions and its role in motion pictures and the media.

The technical portion of the course will cover various types of equipment, such as an array of microphones, recording devices, and mixers, and contemporary audio technology used in the film industry. Of particular emphasis will be how to assess dramatic scenes from an audio perspective, and how to record synchronous sound. The importance of crew collaboration will be emphasized.

Through a series of carefully designed incremental exercises, students will learn the fundamental and professional technical skills necessary to competently record dialogue and effects in a variety of settings to appropriately reflect the motion picture industry practices in field and studio audio acquisition.

Objectives of Course:

1. To develop an understanding of audio principles, production sound and sound design approaches and techniques, as well as appreciation of the storytelling capacities of sound.

- 2. To learn how to assess and make aesthetic as well as technical decisions regarding how to capture sound for specific scenes and shots.
- 3. To gain technical proficiency with audio equipment.
- 4. To learn the importance of collaboration in the production process through production workshop exercises.
- 5. To engage and collaborate in a film crew to record dialog, effects and sounds gathered from the field for broadcast-quality postproduction use.
- 6. To gain basic facility with Adobe Audition and ProTools for basic audio post production work. Including the ability to identify which tool to use when.

Outcomes Anticipated for Course:

To successfully complete this course, students will need to demonstrate technical proficiency with a wide variety of audio equipment and acquisition techniques. This will include the following:

- 1. To be familiar with sound's role in film, and to understand how both audio production and post-production sound design contribute to the filmmaking process.
- 2. To be familiar with the language of audio professionals and current industry practices used by sound recordists/mixers and boom operators. Fundamental best practices are emphasized.

Students will demonstrate technical proficiency with a wide variety of audio equipment and techniques, a useful preparation for professional audio production recordists/mixers and boom-operators.

Assignments:

- 1. Record audio for a project shot on the sound stage, using Timecode, Waveform and clapper slate sync. In conjunction with the directing workshop class.
- 2. Record audio for a project shot in the field. Sync determined by camera platform. In conjunction with PW2: Doc/Fiction workshop.
- 3. "Podcast" project. Conceptualize, record, edit and deliver a short (2-4) audio project, ideally suited to be a news segment, podcast, or clip. Be prepared to record multiple times, do more than one interview, and edit project to completion.

WEEK	CONTENT
1	Introduction to Location Sound principles; how sound works in film. Introduction to the hardware mixing unit, microphones, and wireless packs. LOCATION RECORDING ASSIGNMENTS INTRODUCED: EACH STUDENT REQUIRED TO RECORD AUDIO ON 1 STAGE SHOOT, 1 LOCATION SHOOT.
2	Functions of a sound recording team; sound terminology; microphone types and pick up patterns, basic principles of recording, hands-on-recording session.

Course Outline:

3	Understanding the recorder; practice recording and playback, reinforce applied skills in group recording exercises (single system + single mic setup); Mixer's duties. Proper slating protocol. Syncing via slate, timecode, and waveform.
4	Understanding microphones; Boom operator duties; practice recording and playback, reinforce applied skills in group recording exercises (single system + single mic setup)
5	Details of sound terminology (signal-noise, dynamic range, bit rate, 20-20K, vocal frequency, frequency response) INTRODUCTION OF THE PODCAST ASSIGNMENT. As students work on podcast there will be time every week to discuss assignment, listen to samples from interviews, and discuss progress.
6	Introduction to Audio Post Production with Adobe Audition. When audition is a good choice for audio. Using the clean-up tools for audio reapir.
7	Adobe audition week 2, editing functions and shaping audio.
8	Pro Tools Week 1. Introduction to protools, deep dive into interface, functions, getting projects in and out, discussion of when to use ProTools vs. when to use Audition. Hardware discussed.
9	ProTools Week 2. Special focus on roundtrip between ProTools and Premiere, ProTools and Avid, ProTools and Resolve. Further discussion of editing in ProTools.
10	ProTools Week 3. Sound design with ProTools.
11	The Headphone mix: using desktop tools for a simple mix for headphone quality for simple projects. Protools for finishing and mixing.
12	Podcast Review Week 1: rough edits of podcasts due for review from every student. Discussion is both content (more things you might record, etc.) and also technical (that audio doesn't match, needs more cleanup)
13	Podcast Review Week 2
14	Final podcast review week.1 Final Exam.

Method of evaluation:

Students will be assessed using in-class hands-on assignments (25%), a written assignment (25%), written exam (25%), and a final audio production project (25%).

Methods of assessment:

- 1. Evaluation of audio production assignments based on technical proficiency standards for audio acquisition.
- 2. Written exam based on class room lectures and reading assignments

Required Textbooks:

Tomlinson, H., *Sound for Digital Video*, Book & CDRom Edition Yewdall, Davd L., *Practical Art of Motion Picture Sound*, Focal Press, 3rd Edition

Date of Department Approval: 14 November 2017

Effective Date: Fall 2018

SECTION A-IV: NEW COURSES Feirstein Graduate School of Cinema

FILM 7541G: Color Grading

60 hours; 3 credits

Bulletin Description: To introduce the student to the skills involved in color timing for digital video, with a specific emphasis placed on hands on work with Da Vinci Resolve. The student will gain a working knowledge of color correction that can be applied to narrative, music video and commercial projects along with basic compositing and beauty work techniques. Additional time will be devoted to understanding the technical issues of color on set and in delivery.

Prerequisite: Matriculation for the M.F.A. in Post Production or permission of the Department Chair.

Frequency of offering: Every other semester

Projected enrollment: 15 students

Clearances: none

Rationale: Color grading has gone through a vast evolution in the last decade and it is now imperative that all post production and cinematography students understand how to properly oversee and execute color grades on their projects in order to compete in an intense marketplace. By offering a semester long examination of color grading, students gain the ability to ensure that all projects that they work on have a professional level of color grading.

Objectives: The primary objective of this course is to increase the literacy of students of current practices in post-production workflow and delivery, and also to increase the students' ability to execute the color grading needs of their own projects and projects of their peers. As such special attention will be paid in class to working on tight deadlines, collaborating with creative partners, and working on projects where other stakeholders have a vision for creative delivery.

Outcomes expected of course:

Students who successfully complete this course will acquire the following skills:

- 1. Demonstrate knowledge of the history and evolution of Color Correction
- 2. Demonstrate a fundamental understanding of how Color Correction works, including the different capture formats, film and digital
- 3. Demonstrate use of industry standard Da Vinci Resolve software for color grading, basic composites, shared media, and beauty.
- 4. Describe and use the post workflow from the locked picture to Color correction, and final output

Course Outline:

WEEK 1: OVERVIEW AND HISTORY Van Hurkman pages vii-108
Overview of what is meant by "Color Timing"
History of color manipulation, from early hand color techniques, three strip, Hazeltine, early telecine color timing
Where we are today: DI, Color, Da Vinci, etc.

DIT information, downloading to RAW drives, Shotput, Checksum. http://www.yedlin.net/DisplayPrepDemo/#

WEEK 2: TECHNICAL INFORMATION van hurkman page 109-188 -4:4:4 / 4:2:2 etc. 10bit vs. 8bit, resolution, etc., Film vs. Video latitude, Raw capture formats, First hands-on session with Da Vinci Resolve, ingesting footage.

WEEK 3: ONLINE & CONFORM Van Hurkman 189-237 Definition of both terms, exploration of the history of the process and continued need for offline/online workflow as formats change, tips and technques for successful ingest.

WEEK 4: WHEELS, KEYS, AND BURN Van Hurkamn 239-288 Controlling specified area's of the image through use of primaries and secondaries, shapes vs. keys, tonal ranges, tracking and auto-tracking. Plug-ins, noise correction, etc. IN CLASS: COLOR PASS ON 1 COMMERCIAL

WEEK 5: MID-TERM! DIT WORKFLOW Van Hurkman 289-381 Layer Nodes and Parallel Nodes and Conform Issues DIT job description, collaboration with "final" colorist, dailies colorist. Managing team expectations, checksum data verification, breakdown of a DIT cart. IN CLASS: PLAY COMMERCIAL, PRESENT NEXT PROJECT ASSIGN: final presentation projects on visual components

WEEK 6: CREATING A LOOK Van Hurkman 383- 417 The look development process in discussion with a client. How is the image found? What do you develop together? Introduction of footage for final projects. Lecture: COLOR, structure and analysis IN CLASS: work on DOCUMENTARY project first pass

WEEK 7: Van Hurkman 419-524 Lecture: depth IN CLASS: Present Documentary first pass, prepare for 2nd pass on documentary

WEEK 8: NARRATIVE/FEATURE WORK Crafting a narrative color grading plan for the project IN CLASS: 2nd pass of documentary, start work on narrative spots

WEEK 9: NARRATIVE WORK WEEK 2 Review first passes on previous narrative work, feedback given. Shaping "mood" and evaluating various looks created on famous feature film projects. IN DEPTH EXPLORATION: THE GRADE OF MAJOR FILMS

WEEK 10: NARRATIVE WORK WEEK 3 Evaluate final passes on narrative work. Lecture: Line, Shape, Movement & Rhythm

WEEK 11: MUSIC VIDEOS

WEEK 12: PROJECT REVIEW Project review of

WEEK 13: MUSIC VIDEOS

developing a look throughout the course of a video, different aeschetics for musical genre's, history of major grading movements in videos.

WEEK 14: WORK REVIEW

NOTES Look at your second passes at music videos, developing consisistancy in extreme looks, first passes of final project due.

WEEK 15: FINAL EXAM, FOLLOWED BY LAB TIME TO DO FINAL POLISH AND FINAL POLISH REVIEW FOR FINAL PROJECT

Methods of Evaluation WEEKLY COLOR GRADING PASS	35%	
MIDTERM		15%
FIRST PASS /FINAL PASS OF PROJECT	25%	
FINAL EXAM	25%	

Method of Assessment

Students will be assessed on their evolution of working knowledge of color grading and their ability to execute on the creative and technical needs of a color grade within the tight time constraints of post production.

REQUIRED TEXT: Van Hurkman, Alexis, *Color Correction Handbook: Professional Techniques for Video and Cinema* (Berkeley, CA: Peachpit Press, 2010)

Date of Department Approval: 14 November 2017

Effective Date: Fall 2018
SECTION A-IV: NEW COURSES Feirstein Graduate School of Cinema

FILM 7542G: Color Grading 2

60 hours; 3 credits

Bulletin Description: An advanced class in color grading techniques designed to build on the learning from color grading with an expansion into a variety of techniques and a more comprehensive examination of the historical processes that have lead us to where we are today, including lab printing. This is an elective class open to all students who have taken Color Grading.

Prerequisite: FILM 7541G or permission of the instructor.

Frequency of offering: Every other semester

Projected enrollment: 15 students

Clearances: none

Rationale: Color grading has gone through a vast evolution in the last decade and it is now imperative that all post production and cinematography professionals an understanding of how to properly oversee and execute color grades on their projects in order to compete in an intense marketplace. By offering a semester long study into more sophisticated and advanced color grading techniques students gain the ability to ensure that all projects that are worked on and realized at a professional level.

Objectives: The primary objective of this course is to increase the literacy of students of current practices in post production workflow and delivery, and also to increase the students ability to execute on the color grading needs of their own projects and projects of their peers. As such special attention will be paid in class to working on tight deadlines, collaborating with creative partners, and working on projects where other stakeholders have a vision for creative delivery. This class will prepare students for work as professional colorists.

Outcomes expected of course:

Students who successfully complete this course will acquire the following skills:

- 1. Demonstrate knowledge of the history and evolution of Color Correction
- 2. Demonstrate a fundamental understanding of how Color Correction works, including the different capture formats, film and digital
- 3. Demonstrate use of industry standard Da Vinci Resolve software for color grading, basic composites, shared media, and beauty.
- 4. Describe and use the post workflow from the locked picture to Color correction, and final output

WEEK-BY-WEEK

WEEK 1: REVIEW

Ensure all students are up to the same level of sophistication in their working knowledge of Resolve and color workflow.

WEEK 2: BEAUTY WORK WEEK 1

WEEK 3: BEAUTY WORK WEEK 2

WEEK 4: ALPHA CHANNELS AND ALPHA MATTES

WEEK 5: GREEN SCREEN KEY AND VFX WORKFLOWS

WEEK 6: MANAGING REMOTE GRADING SITUATIONS

WEEK 7: MANAGING ON SET COLOR, LUT BOXES, POMFORT

WEEK 8: DEEP DIVE INTO CALIBRATION Crafting a narrative color grading plan for the project IN CLASS: 2nd pass of documentary, start work on narrative spots

WEEK 9: THESIS GRADING

Each student will attach to a thesis project for a color grading pass. Directors and DPs will come in to talk about their hopes/vision for the work. Visual design plans will be created.

WEEK 12: THESIS FIRST PASS DUE FOR REVIEW

WEEK 13: THESIS SECOND PASS DUE developing a look throughout the course of a video, different aeschetics for musical genre's, history of major grading movements in videos.

WEEK 14: MASTERING THESIS TO DCP, REC. 2020, REC. 709

WEEK 15: FINAL EXAM, OTHER PROJECTS WILL BE REVIEWED

Methods of Evaluation

WEEKLY COLOR GRADING PASS	35%	
MIDTERM		15%
FIRST PASS /FINAL PASS OF PROJECT	25%	
FINAL EXAM	25%	

Method of Assessment

Students will be assessed on their evolution of working knowledge of color grading and their ability to execute on the creative and technical needs of a color grade within the tight time constraints of post production.

REQUIRED TEXT: Van Hurkman, Alexis, *Color Correction Handbook: Professional Techniques for Video and Cinema* (Berkeley, CA: Peachpit Press, 2010)

Date of Department Approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Conservatory of Music

Change in course description

FROM: MUSC 7203X Conducting for Recording Sessions 45 hours; 2 credits

Bulletin Description: Instruction in techniques for conducting musicians with sequencer materials during a live recording session with synchronization to visual media.

Prerequisite: Permission of director.

TO: MUSC 7203X Conducting for Recording Sessions

45 hours; 2 credits

Bulletin Description: Instruction in techniques <u>of</u> conducting <u>for recording sessions</u>. <u>Topics</u> include working with click, conducting to picture, and working with recording musicians.</u> Students also look at time management and balancing the needs of conductor, composer, orchestrator, engineer, contractor, and performer.

Prerequisite: Permission of director.

Rationale: Description amended to better reflect course content.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Conservatory of Music

Change in course description

FROM:

MUSC 7341X Scoring Composition Seminar 45 hours; 1 credit

Old Bulletin Description: Scoring short segments of video on a weekly basis. Weekly assignments viewed, critiqued, and discussed during class by the instructor and students.

Prerequisite: Permission of director.

TO: MUSC 7341X Scoring Composition Seminar

45 hours; 1 credit

Bulletin Description: Masterclass, critique, and discussion during class by the instructor and students.

Prerequisite: Permission of director.

Rationale: Description amended to better reflect course content.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Conservatory of Music

Change in course description

FROM:

MUSC 7370X Music Technology for Media

45 hours; 3 credits

Bulletin Description: Overview of an array of available software for the creation, documentation, and instruction of music. Designed for any graduate musician interested in computer-based tools to enhance musical life and career. Topics include digital audio, MIDI, music notation, music on the Internet, presentation of one's work, and pedagogical tools.

Prerequisite: Matriculation in a graduate visual, media, or performing arts program; or permission of instructor.

TO:

MUSC 7370X Music Technology for Media

45 hours; 3 credits

Bulletin Description: This course covers the technical and creative elements necessary to produce audio for media. Through hands-on projects, students will have the opportunity to experiment with sound editing, sound design, foley, adr, mixing, mastering, music editing, music production, audio recording, audio restoration, and syncing music and sound to picture. In some instances students will be given the opportunity to collaborate with peers, which is a crucial skill to attain for working in media. This course also looks at how audio transmission and standards affect our workflow and decisions throughout the post-production process. Through a combination of lectures, practice, and critiques, students will gain the skills to create and edit their own soundtracks, as well as look with a discerning eye and ear at their work and the work of others.

Prerequisite: Matriculation in a graduate visual, media, or performing arts program; or permission of instructor.

Rationale: Description amended to better reflect course content.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Conservatory of Music

Change in title and course description

FROM: MUSC 7378X Sequencing/Sampling

45 hours; 3 credits

Description: Instruction in the techniques of contemporary computer technology to create facsimiles of instrumental performances. Application of digital audio workstation (DAW) software to integrate musical ideas and audio into finished compositions.

Prerequisite: Permission of director.

TO: MUSC 7378X <u>Sequencing and Sampling</u>

45 hours; 3 credits

Description: This course covers what sequencing and sampling are and how they are used separately as well as in conjunction with one another in their historical context and in the present. Students will learn how and when to use ready-made samples versus creating original samples, as both are key to creating MIDI mockups and hybrid scores for media. Students will also have the opportunity to repurpose their own work and the work of others in a transformative manner. Students are encouraged to collaborate as this is a key part of the process of sequencing and sampling. Through the study of loop-based music and collage-based forms in a variety of genres, the course traces the early roots of western traditions in sampling and sequencing as a result of a confluence of influences as well as the role of technology in shaping these techniques and genres. In addition to mainstream and modern techniques, we will look at classical orchestration with MIDI. The course also touches on copyright issues as well as professional roles in media surrounding sequencing and sampling, such as producer, technologist, orchestrator, and MIDI preparation.

Prerequisite: Permission of director.

Rationale: Changed title to remove slash. Description amended to better reflect course content.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Conservatory of Music Change in course description

FROM: MUSC 7385X Sound Design I 45 hours; 3 credits

Description: Introduction to techniques of sound design for music and accompaniment to visual media. Topics include editing and mixing sound to video, digital signal processing to sculpt sounds, and sound synthesis.

Prerequisite: Permission of director.

TO: MUSC 7385X Sound Design I 45 hours; 3 credits

Description: Instruction in techniques of sound design for visual media. Topics include sound editing, ADR, foley, mixing, and sound synthesis. Special attention is given to bringing all elements of a soundtrack together into a completed and deliverable mix to a production.

Prerequisite: Permission of director.

Rationale: Description amended to better reflect course content.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Conservatory of Music Change in course description

FROM: MUSC 7386X Sound Design II 45 hours; 3 credits

Description: Further techniques of sound design for music and accompaniment to visual media. Topics include editing and mixing sound to video, digital signal processing to sculpt sounds, and sound synthesis.

Prerequisite: MUSC 7385X

TO: MUSC 7386X Sound Design II

45 hours; 3 credits

Description: Further instruction in techniques of sound design for visual media. Topics include sound editing, ADR, foley, mixing, and sound synthesis. Special attention is given to bringing all elements of a soundtrack together into a completed and deliverable mix to a production.

Prerequisite: MUSC 7385X

Rationale: Description amended to better reflect course content

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Conservatory of Music

Change in prerequisite and corequisite

FROM: MUSC 7871X Media Scoring Capstone I

45 hours; 3 credits

Development of Scoring for Media capstone project, to be completed in Media Scoring Capstone II. Close mentoring by faculty member-

Prerequisite: MUSC 7343G Corequisite: MUSC 7341G or the equivalent

TO: MUSC 7871X Media Scoring Capstone I 45 hours; 3 credits

Development of Scoring for Media capstone project, to be completed in Media Scoring Capstone II. Close mentoring by faculty member.

Prerequisite: MUSC 7343X

Rationale: Extraneous corequisite listed, and incorrect prerequisite course title number.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Department of Childhood Bilingual and Special Education Change in title and course description

FROM:

CBSE 7666T Special Issues in Education: Classroom and School-wide Learning Environments for Students with Low Incidence Disabilities

30 hours plus conference; 3 credits

Current issues in teaching students with severe and multiple disabilities, including autism spectrum disorders. Focus on emerging trends and research. Validated approaches in curriculum, instruction, life skills, functional behavioral assessment and positive behavioral supports. Examination of the politics of labeling, the constructs of disability, and the influence of school culture on inclusion, transenvironmental planning, and the development of least restrictive environments. Independent and small group study. This course is the same as SPEC 7316X.

TO:

CBSE 7666T Special Issues in Education: Classroom and School-wide Learning Environments for Students with <u>Autism Spectrum Disorders</u>

30 hours plus conference; 3 credits

Current issues in teaching students with autism spectrum disorders. Focus on emerging trends and research. Validated approaches in curriculum, instruction, life skills, functional behavioral assessment and positive behavioral supports. Examination of the politics of labeling, the constructs of disability, and the influence of school culture on inclusion, transenvironmental planning, and the development of least restrictive environments. Independent and small group study. This course is the same as SPEC 7316X.

Rationale: This revision is aligned with the revision of SPEC 7316T that is cross-listed with CBSE 7666.

Date of departmental approval: 27 November 2017

Change in hours and credit

FROM:

EESC 7150G Research Proposal

7.5 hours plus 2-hour lab, 1.5 credits

Development of independent research proposal; literature searches; literature reviews; development of hypotheses and methodologies.

Prerequisite: Permission of the chairperson

TO: EESC 7150G Research Proposal

15 hours plus 2-hour lab, 2 credits

Development of independent research proposal; literature searches; literature reviews; development of hypotheses and methodologies.

Prerequisite: Permission of the instructor

Rationale

- One-and-a-half credit required courses have resulted in MS students having to acquire 30.5 or 31.5 credits to fulfil degree requirements
- A half hour of weekly lecture time is insufficient to provide students with content, case studies, and examples, and so the lecture time has been increased to 1 hour per week
- The instructor is the person who confirms that a student has met the requirements for the course (engaged a faculty member as a mentor, formed a thesis committee, submitted an acceptable summary), and so is in the best position to provide permissions efficiently

Date of departmental approval: 14 November 2017

Change in hours and credits and prerequisites

FROM:

EESC 7151G Presenting Research in the Earth and Environmental Sciences

7.5 hours plus 2-hour lab, 1.5 credits

Principles and practices of presenting original scientific research at scientific meetings; concise technical writing; graphics (maps, graphs, photographs); Powerpoint presentation design; poster design.

Prerequisite: Earth and Environmental Sciences 7150, or permission of the chairperson.

TO:

EESC 7151G Presenting Research in the Earth and Environmental Sciences

15 hours plus 2-hour lab, 2 credits

Principles and practices of presenting original scientific research at scientific meetings; concise technical writing; graphics (maps, graphs, photographs); Powerpoint presentation design; poster design.

Prerequisite: None

Rationale

- One-and-a-half credit required courses have resulted in MS students having to acquire 30.5 or 31.5 credits to fulfil degree requirements
- A half hour of weekly lecture time is insufficient to provide students with content, case studies, and examples, and so the lecture time has been increased to 1 hour per week
- Developing effective communication skills is an expected outcome of both the MA and MS degree in EES. Removal of the prerequisite of EES 7150 allows for MA students to take this course

Date of departmental approval: 14 November 2017

Change in hours and credits

FROM:

EESC 7155X Professional Portfolios for Earth and Environmental Scientists

7.5 hours plus 2-hour lab, 1.5 credits

Purpose of a professional portfolio; design and format; selecting material; reflection on education and career preparedness and planning

Prerequisite: None

TO:

EESC 7155<u>G</u> Professional Portfolios for Earth and Environmental Scientists <u>15</u> hours plus 2-hour lab, <u>2</u> credits

Purpose of a professional portfolio; design and format; selecting material; reflection on education and career preparedness and planning

Prerequisite: None

Rationale

- One-and-a-half credit required courses have resulted in MS students having to acquire 30.5 or 31.5 credits to fulfil degree requirements
- A half hour of weekly lecture time is insufficient to provide students with content, case studies, and examples, and so the lecture time has been increased to 1 hour per week"
- The "G" designation refers to courses for MA or MS students

Date of departmental approval: 14 November 2017

Change in title

FROM: EESC 7835G Global Tectonics

45 hours lecture and two required field trips; 3 credits

Overview of plate tectonics settings; ocean ridges and transform faults, continental rifting margins, continental transforms, subductions zones, forearc and backarc basins and orogenic belts. Earthquakes and Earth internal structure, plate tectonic and magmatism, and measurements of plate motions. Prior courses knowledge of structural geology, petrology and stratigraphy are recommended. Prerequisite: None

TO:

EESC <u>7335</u>G Global Tectonics 45 hours lecture and two required field trips; 3 credits

Overview of plate tectonics settings; ocean ridges and transform faults, continental rifting margins, continental transforms, subductions zones, forearc and backarc basins and orogenic belts. Earthquakes and Earth internal structure, plate tectonic and magmatism, and measurements of plate motions. Prior courses knowledge of structural geology, petrology and stratigraphy are recommended.

Prerequisite: None

Rationale

The courses in EES are numbered by topic area, and so similar courses are grouped together in the bulletin. The 7800 series is associated with courses associated with natural resources. Global tectonics is a general Earth science topic and so should be within the 7200-7300 series.

Date of departmental approval: 14 November 2017

Change in title, description, and prerequisites

FROM:

EESC 7525X Advanced Geological Field Mapping

15 hours lecture, 60 hours supervised field and laboratory work; 3 credits

Approximately 10 days of supervised field and laboratory work in deformed sedimentary or metamorphic sequences. Field preparation of geologic maps and sections; data collection with Brunton compas and GPS units; map construction with GIS. Builds upon prior experience with geological mapping and ArcGIS. Travel and material expenses.

Prerequisite: Permission of chairperson

TO:

EESC 7525G Advanced Geological Field Mapping

15 hours lecture, 60 hours supervised field and laboratory work; 3 credits

Approximately 10 days of supervised field and laboratory work in deformed sedimentary or metamorphic sequences. Field preparation of geologic maps and sections; data collection with Brunton compass and GPS units; map construction with GIS. Builds upon prior experience with geological mapping and <u>mapping-related technology</u>. Travel and material expenses.

Prerequisite: Permission of instructor

Rationale

The "G" designation refers to courses for MA or MS students. The change makes it consistent with all other EES offerings

Change in prerequisites required because the instructor is the person who can best gauge a student's preparedness

ArcGIS changed to mapping-related technology because there are numerous platforms now available to facilitate field-based geological data collection and map production

Date of departmental approval: 14 November 2017

FROM:

EESC 7825X Ore Deposit Models

45 hours lecture; 3 credits

Examination of models for the formation of metallic ore deposits with relation to their environment of formation and primary mineralization processes. Prior familiarity with igneous petrology and geochemistry is required.

Prerequisites: None

TO: **EESC 7825G Ore Deposit Models** 45 hours lecture; 3 credits

Examination of models for the formation of metallic ore deposits with relation to their environment of formation and primary mineralization processes. Prior familiarity with igneous petrology and geochemistry is required.

Prerequisites: None

Rationale

The "G" designation refers to courses for MA or MS students. The change makes it consistent with all other EES offerings

Date of departmental approval: 14 November 2017

Change in title and prerequisites

FROM:

EESC 7830X Seminar in Advanced Ore Deposit Geology

45 hours seminar; 3 credits

Examination of the current issues and priorities in ore geology; emphasis on current methodologies, controversies in ore genesis, and current exploration priorities.

Prerequisites: EESC 7825

TO:

EESC 7830<u>G</u> Seminar in Advanced Ore Deposit Geology 45 hours seminar; 3 credits

Examination of the current issues and priorities in ore geology; emphasis on current methodologies, controversies in ore genesis, and current exploration priorities.

Prerequisites: EESC 7825 or permission of instructor

Rationale

- The "G" designation refers to courses for MA or MS students. The change makes it consistent with all other EES offerings
- Change in prerequisites allows for admission of students with adequate undergraduate preparation or strong backgrounds in geochemistry and/or petrology

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES Department of Kinesiology

Change in Title and Description

FROM:

KINS 7290X Internship in Exercise Science and Rehabilitation 45 hours seminar. 90 hours fieldwork: 3 credits

Development of skills in exercise science and rehabilitation in one or more approved settings (hospital, rehabilitation program, college research laboratory) under the direction and supervision of agency personnel and/or a member of the college faculty. Students in the Sport Science track may not enroll in this course. Not open to students who passed PEES/KINS 7265X.

TO:

KINS 7290X Practicum in Exercise Science and Rehabilitation

45 hours seminar; 3 credits

<u>Clinical skills for the Exercise Physiologist. Maximal exercise testing using various modes of exercise.</u> Physical examination. Monitoring of physiologic variables and the electrocardiogram. <u>Clinical decision making. Exercise prescription. Case studies</u>.

Rationale:

In keeping with the American College of Sports Medicine's (ACSM) learning objectives to become a Certified Clinical Exercise Physiologist we must provide in house training and documentation of competency in skills related to clinical exercise testing, cardiac rehabilitation and exercise prescription.

Date of Departmental Approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSES

Department of School of Psychology, Counseling and Leadership (SPCL)

Full-time status for interns.

From:

SPCL 7933X Internship in School Psychology I

Bulletin Description: 600 hours fieldwork, plus 15 hours supervision on campus; 3 credits Supervised experience in the clinical and educational functions of the school psychologist in diverse settings. Field experience provides context for supervised integration of previously acquired competencies and professional approaches to the functions of school psychology.

Prerequisite: matriculation in the school psychologist program, SPCL 7932T with a grade of B or better, and permission of the program head/coordinator.

To:

SPCL 7933X Internship in School Psychology I

Bulletin Description: 600 hours fieldwork, plus 15 hours supervision on campus; 3 credits Supervised experience in the clinical and educational functions of the school psychologist in diverse settings. Field experience provides context for supervised integration of previously acquired competencies and professional approaches to the functions of school psychology. <u>This course meets the requirement for full-time status.</u>

Prerequisite: matriculation in the school psychologist program, SPCL 7932T with a grade of B or better, and permission of the program head/coordinator.

Date of Department Approval: 17 October 2017

SECTION A-V: CHANGES IN EXISTING COURSES

Department of School of Psychology, Counseling and Leadership (SPCL)

From:

SPCL 7934X Internship in School Psychology II

Bulletin Description: 600 hours supervised fieldwork plus 15 hours supervision on campus; 3 credits Supervised experience in the clinical functions of the school psychologist in diverse settings. Field experience provides context for supervised integration of previously acquired competencies and professional approaches to the functions of school psychology.

Prerequisite: matriculation in the school psychologist program, SPCL 7932T with a grade of B or better, SPCL 7933X with a grade of B or better, and permission of the program head/coordinator.

To:

SPCL 7934X Internship in School Psychology II

Bulletin Description: 600 hours supervised fieldwork plus 15 hours supervision on campus; 3 credits Supervised experience in the clinical functions of the school psychologist in diverse settings. Field experience provides context for supervised integration of previously acquired competencies and professional approaches to the functions of school psychology. <u>This course meets the requirement for full-time status.</u>

Prerequisite: matriculation in the school psychologist program, SPCL 7932T with a grade of B or better, SPCL 7933X with a grade of B or better, and permission of the program head/coordinator.

Rationale:

Our students complete an internship in the last year of their training, which fulfills the standard mandated by our approval agency—the National Association of School Psychologists as well as is a requirement of the Council of Chairs of Training Counsels of the American Psychological Association. This field experience involves completing 1200 supervised hours in a school or appropriate agency, which is the equivalent of a full-time job for 10 months. In addition to this enormous time commitment in the field, interns take work home—as all professions must do. The overwhelming majority of, internship sites in our region do not compensate interns and only a few provide a meager stipend. In addition to their work in schools, interns come to the college for 1 hour per week for supervision from faculty. Considering the number of hours required to complete internship and college supervision, students should be considered a full-time in their last year in the program, even though they take 3-credits per semester.

Date of Department Approval: 17 October 2017

Effective Date: Fall 2018

Material located with strike-through is to be deleted and material underlined is to be added

SECTION A-V: CHANGES IN EXISTING COURSE

Department of Secondary Education (SEED)

Change in hours

FROM:

SEED 7500X Perspectives on Education: Teaching Children and Adolescents in Cultural Context

45 hours seminar, plus conference, 20-hours field experience; 3 credits

An introduction to the philosophy, psychology, sociology, culture, and history of educating all children and adolescents. Development of children and adolescents in different cultures within American society in relation to existing value systems, with emphasis on the manner in which biological and psychological factors are interpreted in accordance with prevailing values. Focus on relationship between theory and practice. Opportunities through class discussion, portfolio preparation, and field experience for reflection on oneself as teacher, interactions between school and community, teachers' roles, and issues of diversity and social justice. Not open to students who have taken EDUC 7500X.

TO:

SEED 7500X Perspectives on Education: Teaching Children and Adolescents in Cultural Context

45 hours seminar, plus conference, 25 hours field experience; 3 credits

An introduction to the philosophy, psychology, sociology, culture, and history of educating all children and adolescents. Development of children and adolescents in different cultures within American society in relation to existing value systems, with emphasis on the manner in which biological and psychological factors are interpreted in accordance with prevailing values. Focus on relationship between theory and practice. Opportunities through class discussion, portfolio preparation, and field experience for reflection on oneself as teacher, interactions between school and community, teachers' roles, and issues of diversity and social justice. Not open to students who have taken EDUC 7500X.

Rationale: While this course was originally designed to include 20 hours of field work, changes in New York State Department of Education require us to increase the number of hours to 25.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSE

Department of Secondary Education (SEED)

Change in hours and description

FROM:

SEED 7501X Analysis of Classroom Interaction and Curriculum

45 hours seminar, plus conference, 20 hours field work; 3 credits

Improving teaching methods through techniques of self analysis and analysis of classroom interactions. Analysis of the instructional settings and instructional strategies with focus on students with special needs and English language learners. Analysis of learning processes and modes of communication in the classroom. Examination of the specialized discourses of the subject disciplines in adolescent, middle, and childhood curricula. Analysis of uses of technology in the classroom. Not open to students who have taken EDUC 7501X. Prerequisite or corequisite: SEED 7500X [742X].

TO:

SEED 7501X Analysis of Classroom Interaction and Curriculum

45 hours seminar, plus conference, 25 hours field work; 3 credits

Improving teaching methods through techniques of self-analysis and analysis of classroom interactions. Analysis of the instructional settings and instructional strategies with focus on students with special needs and English language learners. Analysis of learning processes and modes of communication in the classroom. Examination of the specialized discourses of the subject disciplines in adolescent, middle, and childhood curricula. Analysis of uses of technology in the classroom. Not open to students who have taken EDUC 7501X. Prerequisite or corequisite: SEED 7500X.

Rationale: While this course was originally designed to include 20 hours of field work, changes in New York State Department of Education require us to increase the number of hours to 25. The 742X annotation is no longer necessary.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN AN EXISTING COURSE

Department of Secondary Education (SEED)

Change in prerequisite

FROM:

SEED 7539T Student Teaching of Mathematics: Seminar and Practicum II

15 hours plus 20 days or 150 hours of weekly supervised student teaching; 30 hours field observation; 3 credits

Course in student practice teaching with seminar hours to prepare for State mandated portfolio of student teaching. Opportunity for extensive and intensive participation in teaching and school activities at the middle childhood and adolescence levels. Student teaching hours to be arranged. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X, SEED 7501X, and permission of the appropriate program head and the chair of the major department.

TO:

SEED 7539T Student Teaching of Mathematics: Seminar and Practicum II

15 hours plus 20 days or 150 hours of weekly supervised student teaching; 30 hours field observation; 3 credits

Course in student practice teaching with seminar hours to prepare for State mandated portfolio of student teaching. Opportunity for extensive and intensive participation in teaching and school activities at the middle childhood and adolescence levels. Student teaching hours to be arranged. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X, SEED 7501X, and SEED 7538T and permission of the appropriate program head and the chair of the major department. <u>Students must complete SEED 7538T</u> with a B or higher to progress to SEED 7539T. Prerequisite or corequisite: SEED 7671X.

Rationale:

New York State Department of Education now requires that a course in special education be part of Initial Certification, which means it must come before or during student teaching. In response to New State Department of Education's insistence on raising the bar for teacher certification, we are requiring students earn a B or higher in the first semester of student teaching.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN AN EXISTING COURSE Department of Secondary Education (SEED)

Change in prerequisites

FROM:

SEED 7542T Student Teaching Practicum I

150 hours or twenty days of weekly supervised student teaching; 30 hours field observation; 2 credits Course in student practice teaching.

Opportunity for extensive and intensive participation in teaching and school activities. Hours to be arranged. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X [742X], SEED 7501X, and permission of the appropriate program head and the chair of the major department. Corequisite: SEED 7531T [763.01T] or 7532T [763.02T] or 7462T [763.03T] or 7312T [763.04T] or 7534T [763.11T] or 7535T [763.13T].

TO:

SEED 7542T Student Teaching Practicum I

150 hours or twenty days of weekly supervised student teaching; 30 hours field observation; 2 credits Course in student practice teaching.

Opportunity for extensive and intensive participation in teaching and school activities. Hours to be arranged. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X and SEED 7501X or (for science education majors) 7380, and permission of the appropriate program head and the chair of the major department. Corequisite: SEED 7531T or 7532T or 7534T or 7535T or 7381T or 7383T.

Rationale: In science education courses students must have taken or be taking a science seminar SEED 7381T or SEED 7383T. Old course number annotations are no longer relevant.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN AN EXISTING COURSE Department of Secondary Education (SEED)

Change in prerequisites

FROM:

SEED 7543T Student Teaching Practicum II

150 hours or 20 days of weekly supervised teaching, 30 hours of field experience; 2 credits

Advanced course in student practice teaching. Opportunity for more extensive and intensive participation in teaching and school activities. Hours to be arranged. Daily supervised student teaching in grades and subject areas appropriate for New York State certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X, SEED 7501X and permission of the appropriate program head and the chairperson of the major department. Prerequisite or corequisite: SEED 7531T or 7532T or 7462T or 7312T or 7534T. or 7535T or 7536T and 7542T. Corequisite: SEED 7514T or 7515T or 7470T or 7326T or 7516T or 7517T.

TO:

SEED 7543T Student Teaching Practicum II

150 hours or 20 days of weekly supervised teaching, 30 hours of field experience; 2 credits

Advanced course in student practice teaching. Opportunity for more extensive and intensive participation in teaching and school activities. Hours to be arranged. Daily supervised student teaching in grades and subject areas appropriate for New York State certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X, SEED 7501X and permission of the appropriate program head and the chairperson of the major department. Prerequisite or corequisite: <u>SEED 7671X and SEED 7531T or 7532T or 7534T or 7535T and 7542T or equivalent</u>. <u>Students must complete SEED 7542T with a B or higher to progress to SEED 7543T</u>. Corequisite: SEED 7514T or 7515T or 7516T or 7517T <u>or 7381T or 7383T</u>.

Rationale: New York State Department of Education now requires that a course in special education be part of Initial Certification, which means it must come before or during student teaching. In science education courses students must have taken or be taking a science seminar SEED 7381T or SEED 7383T. In response to New State Department of Education's insistence on raising the bar for teacher certification, we are requiring students earn a B or higher in the first semester of student teaching. SEED 7462, 7312, 7536, 7470, and 7326 are no longer offered.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN AN EXISTING COURSE Department of Secondary Education (SEED)

Change in hours and description

FROM:

SEED 7671X Children and Youth with Special Needs

45 hours; 3 credits

Characteristics of diverse student populations with a focus on English language learners and students with special needs, including the gifted. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports, and interventions for English language learners and students with special needs, including the gifted, in general education settings. Review of regulatory compliance. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences (20 hours) in special education and/or inclusive classrooms required.

TO:

SEED 7671X Children and Youth with Special Needs

45 hours; 25 hours field work; 3 credits

Characteristics of diverse student populations with a focus on English language learners and students with special needs, including the gifted. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports, and interventions for English language learners and students with special needs, including the gifted, in general education settings. Review of regulatory compliance. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences (<u>25</u> hours) in special education and/or inclusive classrooms required.

Rationale: While this course was originally designed to include 20 hours of field work, changes in New York State Department of Education require us to increase the number of hours to 25.

Date of departmental approval: 14 November 2017

Change in course description and prerequisites

FROM: FILM 7131G Advanced Directing Workshop 60 hours: 3 credits

Description: The purpose of this course is to provide students with a theoretical and practical understanding of the art and technique of directing. While the class covers a wide range of issues relevant to directing, the focus is on: script analysis, directing actors, and directing camera The goal is to learn to analyze a screenplay from a director's perspective, to work with actors to secure believable performances, and to design shots in service of the narrative.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director. Open only to 2nd Year Directing Students preparing to shoot their thesis film.

TO: FILM 7131G Advanced Directing Workshop

60 hours; 3 credits

Description: This class builds on two classes required by students in the Directing program: Directors Workshop and Directing the Actor. The purpose of the course is to provide students with a deeper understanding of the art and techniques of working with actors, from casting through auditions and performance to create believable performances on screen.

Prerequisite: FILM 7121G Directing Actors and FILM 7101 Directors Workshop

Rationale: The bulletin language better describes the content of this course. As directing students prepare to undertake the Thesis Project it is essential that they develop a deep understanding of the actor's creative process and how to work with actors to support and augment that process. The class also aims to develop creative collaborative relationships with actors in pursuit of authentic, believable performances.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSE

Feirstein Graduate School of Cinema Change in course title and description

FROM:

FILM 7141G Directors Symposium FILM 7303G Screenwriters Symposium FILM 7412G Producers Symposium 60 hours; 3 credits

Description:

FILM 7141G: This course is an opportunity for students to study the work of master directors and also meet guest directors and other film professionals who serve in key creative positions. <u>FILM 7303G</u>: This course allows students to gain an understanding of different aspects of a screenwriter's professional life and to examine the "real world" process of taking a project from initial idea to screen.

FILM 7412G: Examination of the producing career from the perspectives of a variety of industry professionals. Guest speakers from the film production community. Analysis of experience and techniques of legendary producers of historical importance as well as contemporary producers currently working in the industry.

Prerequisite:

For FILM: 7141G and 7303G: Matriculation in the M.F.A. in Cinema Arts and permission of the program director. For FILM: 7412G FILM 7401G or permission of the program director.

TO:

FILM 7141G: <u>Filmmakers</u> Symposium 60 hours; 3 credits

Description:

Examination of the film industry from the perspectives of a variety of industry professionals. The course will analyze the experience and techniques of an array of filmmakers. Students will learn to develop material and to pitch their projects.

Rationale: It is more effective to bring screenwriters, producers and directors together in one class providing greater opportunities for shared guests and collaboration. The combined sections under one course number allows students from different tracks to collaborate in one setting.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSE Feirstein Graduate School of Cinema Change in course title

FROM: FILM 7501G: Film-Editing 60 hours; 3 credits

Description: The art and craft of visual narrative editing in theory and practice. Principles of continuity, dramatic emphasis and clarity, aesthetics and visual style. Hands-on workshop where students edit a variety of scenes. Emphasis on peer critique, collaboration and professional practices.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the chairperson.

TO: FILM 7501G: Editing 1 60 hours; 3 credits

Description: The art and craft of visual narrative editing in theory and practice. Principles of continuity, dramatic emphasis and clarity, aesthetics and visual style. Hands-on workshop where students edit a variety of scenes. Emphasis on peer critique, collaboration and professional practices.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the chairperson.

Rationale: Name change better reflects content of the course.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSE

Feirstein Graduate School of Cinema Change in course title

FROM:

FILM 7502G: Sound Editing and Design-I

60 Hours; 3 Credits

Description: Introduction to sound editing and design for cinema arts. Practical approaches to sound editing, Foley, and Automated Dialogue Replacement (ADR). Culminates in a final group sound project.

Prerequisites: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

TO:

FILM 7502G: Sound Design and Mix

60 Hours; 3 Credits

Description: Introduction to sound editing and design for cinema arts. Practical approaches to sound editing, Foley, and Automated Dialogue Replacement (ADR). Culminates in a final group sound project.

Prerequisites: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

Rationale: The name change better reflects content of course.

Date of departmental approval: 14 November 2017

Change in course title, description, and prerequisites

FROM: FILM 7511G Visual Effects Editing 60 hours; 3 credits

Description: Workshop on post-production visual effects. Preparation and integration of visual effects into finished film sequences. Collaboration strategies for visual effects artists, cinematographers, animators, and post-production supervisors.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the chairperson.

TO: FILM 7511G Editing <u>2</u> 60 hours; 3 credits

Description: Intermediate workshop in editing tools and techniques. Exploration of media such as commercials, music videos, documentary and other forms. Working within traditional narrative structure, collaborating with musicians and graphic artists, and other related editing skills will be covered.

Prerequisite: <u>FILM 7501G</u> or permission of the chairperson.

Rationale: Course title changed to better reflect the post production course sequencing. Course bulletin revised to better reflect coverage of material.

Date of departmental approval: 14 November 2017

Change in course title, description, and prerequisites

FROM: FILM 7521G: Advanced Editing 60 hours; 3 credits

Description: Advanced workshop in editing tools and techniques. Emphasis on creative storytelling and technical mastery, including sound design, the use of titles and effects, color correction, media management and deliverables.

Prerequisite: Matriculation for the M.F.A in Cinema Arts and permission of the chairperson.

TO: FILM 7521G: Editing 3 60 hours; 3 credits

Description: Advanced workshop in editing tools and techniques. Emphasis on creative storytelling and technical mastery, including sound design, the use of titles and effects, color correction, media management and deliverables. <u>Class projects include editing second year films.</u>

Prerequisite: FILM 7511G (Editing 2) or permission of the chairperson.

Rationale: This is an advanced course required by all students in the post production_program. This advanced workshop combines technical instruction, screening and critique, and master classes with visiting professional editors. Students collaborate with directors and cinematographers to edit the short film projects produced in Production Workshop 3 and Cinematography 3.

Date of departmental approval: 14 November 2017

Change in course title and description

FROM: FILM 7523G Visual Effects 60 hours: 3 credits

Description: This course is an overview and introduction to visual effects techniques that are used in the film industry. The course will include the terminology, theory, and practice of Visual Effects, focusing on compositing techniques. The basics of industry-standard compositing software will be taught and used in the hands-on creation and execution of visual effects shots and sequences.

Prerequisite: FILM 7522G or permission of the program director

TO: FILM 7523G Visual Effects and Motion Graphics 60 hours: 3 credits

Description: This course is an overview and introduction to <u>motion graphics</u> techniques that are used in the film industry. The course will include the terminology, theory, and practice of <u>Motion</u> <u>Graphics</u>, focusing on composting techniques, <u>dynamic titling and informative graphics along</u> <u>with the beginnings of compositing and VFX</u>. The basics of industry-standard compositing and <u>motion graphics</u> software will be taught and used in the hands-on creation and execution of visual effects and <u>motion graphics</u> sequences.

Prerequisite: FILM 7522G or permission of the program director

Rationale:

This course is required for everyone in the Post-Production Program. The objective is to provide filmmakers and post-production specialists with a working knowledge of motion graphics and visual effects compositing, so they are conversant and knowledgeable about the common uses of motion graphics and visual effects in the industry, and can fully collaborate on the execution of shots and sequences that include motion graphics and visual effects compositing. Students should be capable at executing, planning, scheduling, budgeting, and troubleshooting projects that include visual effects and compositing after taking the course. This new title better captures the content of the class.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSE Feirstein Graduate School of Cinema Change in course title

FROM: FILM 7811G Production Workshop 2: Post 60 hours; 3 Credits

Description: Hands-on course that teaches students the art and techniques of editing picture, sound and music and offers an understanding of the post-production workflow.

Prerequisite: FILM 7801G

TO: FILM 7811G Post Workshop 60 hours; 3 Credits

Description: Hands-on course that teaches students the art and techniques of editing picture, sound and music and offers an understanding of the post-production workflow.

Prerequisite: FILM 7801G

Rationale: The name of the course is changed to avoid confusion with the production workshop series.

Date of departmental approval: 14 November 2017

SECTION A-V: CHANGES IN EXISTING COURSE Feirstein Graduate School of Cinema Change in credit hours

FROM: FILM 7953G Thesis Project 1: Post-Production 60 hours, 3 credits

Description: Under the mentorship of production professors, students in the Post-Production track will each be expected to prep and begin the first stages of editing on a 15-20 minute narrative film. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination.

Prerequisite: FILM 7942G

TO: FILM 7953G Thesis Project 1: Post-Production 120 hours, 6 credits

Description: Under the mentorship of production professors, students in the Post-Production track will each be expected to prep and begin the first stages of editing on a 15-20 minute narrative film. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination.

Prerequisite: FILM 7942G

Rationale: After going through the thesis production experience this year, it is apparent that post students are involved on the set as DIT (digital imaging technician) and sound recordists at a level equal to other production students, and it is appropriate to change credits from three to six in line with other thesis 1 students.

Date of departmental approval: 14 November 2017

Change in credit hours

FROM: FILM 7963G Thesis Project 2: Post-Production

120 hours, 6 Credits

Description: Under the mentorship of a post-production professor, students in Post Production track will complete post-production requirements on the films shot during the previous semester in FILM 7953G. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination. All production students will be expected to work in a collaborative manner on their projects, with an emphasis on their specialized discipline.

Prerequisite: FILM 7953G

TO: FILM 7963G Thesis Project 2: Post-Production 60 hours, 3 credits

Description: Under the mentorship of a post-production professor, students in Post Production track will complete post-production requirements on the films shot during the previous semester in FILM 7953G. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination. All production students will be expected to work in a collaborative manner on their projects, with an emphasis on their specialized discipline.

Prerequisite: FILM 7953G

Rationale:

With the Thesis 1 class being aligned with the other MFA thesis production classes, Thesis 2 is being reduced to 3 credits.

Date of departmental approval: 14 November 2017
Department of Speech Communication Arts and Sciences"

SECTION A-1: Special Actions

Whereas, the faculty in the Department of Speech Communication Arts and Sciences unanimously voted to formally change the name of the department to the Department of Communication Arts, Sciences, and Disorders (October 17, 2017); and

Whereas, the courses of the Department reflect varied dimensions of human communication including its interpersonal, intercultural, professional, creative, and clinical aspects which include the prevention, assessment, and intervention of communication disorders; and

Whereas, the fields of Communication Studies as well as Speech-Language Pathology, Audiology, and Hearing Sciences have become more grounded in recent years in the broader context of communication including the non-verbal, and that speech is subsumed under the broader context of communication; and

Whereas, students taking courses within the Department should be made more aware of and better educated in the relevance of the broader context of communication to the interpersonal, intercultural, professional, creative, and clinical aspects of the field; and

Therefore, Be It Resolved that the name of the existing "Department of Speech Communication Arts and Sciences" be formally changed to the "Department of Communication Arts, Sciences and Disorders on July 1, 2018; and, with the formal approval of this department name change by the CUNY Board of Trustees, that all courses at Brooklyn College heretofore offered under the rubric "Speech Communication Arts and Sciences" be changed to "Communication Arts, Sciences and Disorders;" and, that the abbreviated rubric "SCAS," used primarily for course scheduling, registration and Bulletin listings, be changed to "CASD," effective on the first official day of the 2018 Fall Semester.

Rationale: Since the faculty in the Department of Speech Communication Arts and Sciences voted unanimously to formally change the name of the department to the Department of Communication Arts, Science and Disorders (October 17, 2017) to be more accurately descriptive of the primacy of human communication to the disciplines taught in the department, it is logical to change the rubric under which courses are offered in the department from "Speech Communication Arts and Sciences" to "Communication Arts, Sciences and Disorders." The proposed departmental name change conforms to similar changes in this field nationwide. With approval at all levels of this proposal, the name of the department would be changed to "Communication Arts, Sciences and Disorders " on July 1, 2018 and the abbreviation "CASD" would replace "SCAS" in the Schedule of Classes for Fall 2018 and in online Undergraduate and Graduate Bulletins for 2018-2019. Certain references to Speech Communication Arts and Sciences will be retained in course prerequisites and exclusion clauses to accommodate students who completed the courses with a Speech

Communication Arts and Sciences designation and transfer students who have been given credit for Speech Communication Arts and Sciences courses.

Date approved by the Department of Speech Communication Arts and Sciences: 17 October 2017

Date approved by Master Planning: 14 November 2017

Effective Date: Fall 2018

Department of English

SECTION A-I: SPECIAL ACTIONS

Department of English

Graduate Certificate in Publishing

NYS SED program code:

Program Description:

The Graduate Certificate in Publishing prepares students for careers in the fields that comprise the contemporary publishing industry, including editorial, design, marketing, and publicity. The program features academic courses taught by industry professionals and internships that provide graduate and non-matriculating students the knowledge, professional skills, and contacts necessary to enter the publishing industry. Combining instruction with hands-on training, the program introduces students to every aspect of the book publishing process and allows students to sharpen skills developed in the classroom and test their interests and talents in workplace settings.

Matriculation requirements:

Applicants must have completed an undergraduate or graduate degree in English or a related field with an overall gpa of 3.3 or better. Additional coursework may be required to meet any matriculation deficiency.

Advanced Certificate requirements (15 credits):

Fifteen credits of coursework completed with a grade point average of B or better are required for the advanced certificate. No more than one course with a grade below B may be offered toward the completion of the certificate requirements. Students must complete all of the following courses. ENGL 7880x must be taken twice toward degree requirements.

- ENGL 7850X: The Future of Publishing
- ENGL 7860X: The Editor in the 21st Century
- ENGL 7870X: Publishing in the Digital Order
- ENGL 7880X: Publishing Internship

Rationale:

The Publishing Certificate seeks to introduce graduate and non-matriculating students to the editorial, publicity, marketing, and sales components of the industry. Elements of print and digital publication are addressed, from planning, writing, and design, to marketing, promotion and distribution. Lectures, student collaboration, guest speakers, and regular assignments ensure that students acquire the skills to enter the publishing industry, whether in a traditional

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firm, a small independent press, or in an online magazine or literary website. Industry professionals teach all courses and evaluate all assignments. The internships place students in active learning environments in which interaction with writers, agents, illustrators, and advertisers fosters the practical knowledge and experience to propel their careers.

Many Brooklyn College students seek employment in publishing but lack knowledge of the required technical skills, awareness of the fields that comprise contemporary publishing, and/or the social capital to access industry networks. The latter issue of access is one in which a Brooklyn College program stands to make a significant impact because we can be a pipeline for students from under-represented groups to an industry in which lack of diversity is recognized as a long-standing problem. Many local industry professionals with whom the English Department spoke while developing the Publishing Certificate curriculum expressed keen interest in a program that would provide outstanding academic training to its students and provide the industry a stream of talent that reflected New York City in all dimensions of diversity. With respect to racial diversity, for example, *Publisher's Weekly* found in 2013 that 89 percent of publishing employees self-identified as white, and 61 percent believe that the publishing industry "suffers" from this homogeneity.

Brooklyn College is well positioned geographically and institutionally to draw on an untapped pool of applicants. Surveying existing local institutions, we find that three privates offer a publishing certificate or degree, Columbia University, Pace University, and New York University; and one public institution, the City College of New York, offers a publishing certificate. Columbia charges \$5,355, exclusive of room and board, for a six-week "immersive" summer Publishing Course. NYU offers a 42-credit MS in Publishing and a six-week Summer Publishing Institute. tuition for which is \$5,650, exclusive of room and board. Pace charges \$41,508 for a 36-credit MS degree (\$1,153/credit). When the Columbia course ends, "representatives from a wide range of publishing companies meet with graduates to discuss employment opportunities." At a completion reception, students are introduced to the course's "active alumni network." Similarly, NYU touts a capstone Career Fair "which provides students with the opportunity to meet and interview with representatives from book, magazine, and digital media companies" and offers resources to support "the process of finding jobs, exploring and pursing leads, and seeking out networking opportunities in the industry." These are precisely the networks from which CUNY students are generally excluded, not because of deficiencies in talent but because of lack of opportunity and access. At 15 credits, the English Department's advanced certificate in Publishing will provide students with a more extensive, in-depth academic experience than any single course, will develop their network of professionals, and will do so at a tremendous value: three academic courses and two semester-long internships the total tuition for which is only slightly higher than the NYU and Columbia one-off publishing courses. The only comparable existing program in existence is at City College, where, notably, the goal of diversifying the industry is also central to the mission. But because New York City is the publishing center of North America, and because Brooklyn's burgeoning publishing and arts sectors have drawn the industry decidedly across the East River, the opportunity is now for Brooklyn College to undertake a program of its own.

Students will complete the program in two semesters plus one summer, as follows. Semester 1: ENGL 7850 and either ENGL 7860 or ENGL 7870 Semester 2: ENGL 7880 and either ENGL 7860 or ENGL 7870 Summer: ENGL 7880 (second time)

Date of approval by the department: 17 October 2017

Material located with strike-through is to be deleted and material underlined is to be added

Date of approval by Master Planning: 14 November 2017

Effective date: Fall 2018

SECTION A-VI: OTHER CHANGES Department of History

Reactivation of a Course, Change in Title, and Change in Course Description

FROM:

HIST 7730X Colloquium in Modern and Recent European History

30 hours plus conference; 3 credits

Critical readings, discussions, and analytical student papers on significant works in political, intellectual, social, and cultural history from the end of the eighteenth century to the end of the twentieth century.

TO:

HIST 7730X <u>Themes in European History</u> 30 hours plus conference; 3 credits

<u>Readings</u>, discussions, and analyses of significant themes in European history. Topics vary each semester. Students may take this course for credit twice, but may not repeat topics.

Rationale: The Department of History originally created its 7700-level colloquia as required courses for all majors. When that requirement changed, the Department of History withdrew all colloquia. However, the Department has since realized that the colloquia had served a second invaluable function: as courses covering more general historical topics rather than highly specialized ones like the program's electives. The Department has therefore decided to reinstate four of the original courses, with new titles and descriptions designed to map over the program's distribution requirements, making it easier for students to plot their paths through the program and for the Registrar's Office to determine whether students have met the program's distribution requirements. History 7730X serves as the reinstated course for the European history requirement.

Department of History

Reactivation of a Course, Change in Title, and Change in Course Description

FROM:

HIST 7740X Colloquium in Early American History

30 hours plus conference; 3 credits

Critical readings, discussions, and analytical student papers on significant works in political, intellectual, and socioeconomic history from the colonial to the antebellum periods. Three short essays and a final examination.

TO:

HIST 7740X <u>Themes in United States History</u> 30 hours plus conference; 3 credits

Readings, discussions, and analyses of significant themes in United States history. Topics vary each semester. Students may take this course for credit twice, but may not repeat topics.

Rationale: The Department of History originally created its 7700-level colloquia as required courses for all majors. When that requirement changed, the Department of History withdrew all colloquia. However, the Department has since realized that the colloquia had served a second invaluable function: as courses covering more general historical topics rather than highly specialized ones like the program's electives. The Department has therefore decided to reinstate four of the original courses, with new titles and descriptions designed to map over the program's distribution requirements, making it easier for students to plot their paths through the program and for the Registrar's Office to determine whether students have met the program's distribution requirements. History 7740X serves as the reinstated course for the United States history requirement.

Department of History

Reactivation of a Course, Change in Title, and Change in Course Description

FROM:

HIST 7770X Colloquium in Asian History

30 hours plus conference; 3 credits

Critical readings, discussions, and analytical papers on significant works and/or research papers in comparative Asian history.

TO: HIST 7770X <u>Themes in Non-Western History</u> 30 hours plus conference; 3 credits

Readings, discussions, and analyses of significant themes in African, Asian, Caribbean, Latin American, or Middle Eastern history. Topics vary each semester. Students may take this course for credit twice, but may not repeat topics.

Rationale: The Department of History originally created its 7700-level colloquia as required courses for all majors. When that requirement changed, the Department of History withdrew all colloquia. However, the Department has since realized that the colloquia had served a second invaluable function: as courses covering more general historical topics rather than highly specialized ones like the program's electives. The Department has therefore decided to reinstate four of the original courses, with new titles and descriptions designed to map over the program's distribution requirements, making it easier for students to plot their paths through the program and for the Registrar's Office to determine whether students have met the program's distribution requirements. History 7770X serves as the reinstated course for the non-Western history requirement.

Department of History

Reactivation of a Course, Change in Title, and Change in Course Description

FROM:

HIST 7780X Colloquium in Middle Eastern History

30 hours plus conference; 3 credits

Critical readings, discussions, and analytical papers on significant works and/or research papers in Middle Eastern History.

TO: HIST 7780X <u>Themes in World History</u> 30 hours plus conference; 3 credits

<u>Readings, discussions, and analyses of significant themes in transnational, comparative, or</u> <u>international history. Topics vary each semester. Students may take this course for credit twice,</u> but may not repeat topics.

Rationale: The Department of History originally created its 7700-level colloquia as required courses for all majors. When that requirement changed, the Department of History withdrew all colloquia. However, the Department has since realized that the colloquia had served a second invaluable function: as courses covering more general historical topics rather than highly specialized ones like the program's electives. The Department has therefore decided to reinstate four of the original courses, with new titles and descriptions designed to map over the program's distribution requirements, making it easier for students to plot their paths through the program and for the Registrar's Office to determine whether students have met the program's distribution requirements. History 7780X serves as the reinstated course for a transnational, comparative, or international history option.

Feirstein Graduate School of Film

Withdrawal of a Course

From:

FILM 7303G Screenwriters Symposium 60 hours; 3 credits

This course allows students to gain an understanding of different aspects of a screenwriter's professional life and to examine the "real world" process of taking a project from initial idea to screen. Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts, or permission of the program director.

Rationale: FILM 7303G and FILM 7412G have had their content folded into a refurbished FILM 7141G. FILM 7303G is therefore no longer relevant.

Date of departmental approval: 14 November 2017.

Effective date: Fall 2018

SECTION A-VI: WITHDRAWAL OF A COURSE

Feirstein Graduate School of Film

Withdrawal of Courses

From:

FILM 7412G Producing Symposium 60 hours; 3 credits

This course offers an opportunity for students to study the work of both industry insiders and mavericks and to meet guest producers who will talk about their approach to producing.

Prerequisite: FILM 7401G or permission of the program director.

Rationale: FILM 7303G and FILM 7412G have had their content folded into a refurbished FILM 7141G. FILM 7412G is therefore no longer relevant.

Date of departmental approval: 14 November 2017.

Effective date: Fall 2018

APPENDIX: SPECIAL TOPICS

The Faculty Council Graduate Curriculum Committee Approved the Following Special Topics for Spring 2018:

CISC 7940X—Seminar in Computer Science I; MUSC 7365X—Advanced Electronic Music Instrument Creation; PSYC 7709G—Psychology of Emotions TVRA 7797X—MFA Project Post Production;

The Committee and Faculty Council previously approved FILM 7031G and HIST 7600X for Spring 2018.