BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE
AGENDA
Friday June 5, 2020 at 9:30 a.m.
Conducted via Remote Participation (Audio Only)
Call in Toll-Free Number 1-877-668-4493
Meeting Number (Access Code): 120 183 1968 # #

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CT BOARD OF REGENTS FOR HIGHER EDUCATION

ACADEMIC & STUDENT AFFAIRS COMMITTEE

Meeting – May 1, 2020
9:30 a.m. – via teleconference

MINUTES

Regents Present:	Aviva Budd, Naomi Cohen, Merle Harris, Holly Howery, Colena Sesanker
Regents Absent:	None
Staff Present:	Ben Barnes, Jane Gates, Ken Klucznik, David Levinson, Lesley Mara, Mike Stefanowicz, Fran Roselli-Navarra, Pat Ryiz
Other Attendees:	Missy Alexander (WCSU), Nidal Al-Masoud (CCSU), Peter Baumann (CCSU), Stavros Christofi (WCSU), Jodi Clark (QVCC), Dauwalder, David (CCSU), Marianne Fallon (CCSU), Amy Feest (TxCC), Ju Kim (CCSU), Miah LaPierre Dreger (CCC), John Lewis (QVCC), Elsa Núñez (ECSU), Bill Salka (ESCU), Mat Spinelli (TxCC), Jakob Spjut (QVCC), Ravindra Thamma (CCSU), Karen Wosczyna-Birch (TxCC - Next Generation Manufacturing)

The meeting was called to order at 9:30 a.m. by Chair Merle Harris.

Chair Harris noted that a revision to the Academic and Student Affairs Committee agenda packet was distributed on April 29, 2020, and a document, Item 4.a. Guidelines for Board Approved Programs, was added to the agenda on April 30, 2020. The Guidelines for Board Approved Programs document is included as an attachment to the minutes of the May 1, 2020 Academic and Student Affairs Committee Meeting.

1. Approval of Minutes
   a. April 3, 2020
   On a motion by A. Budd and seconded by H. Howery, the minutes from the April 3, 2020 BOR ASA Committee meeting were approved.

Chair Harris called upon Ben Barnes, CSCU Chief Financial Officer, to address questions that the Regents had on academic program budget submissions and making changes to the Pro Forma Budget Form included in academic program documentation. Chair Harris asked Committee members for their comments regarding the budget form. Regent Budd noted that total revenue is represented on the form, but expenditures are presented for a particular program. Mr. Barnes noted that the

institutions need to be careful about identifying revenue and cost for a particular program. Chair Harris asked if tuition and fees or only tuition should be included in the program revenue. Cost per student should probably be just tuition. Regent Howery noted that one issue that has been discussed is at what point a program coordinator is required for a new program. Mr. Barnes responded that we could hire Education Assistants and part time administrators, as necessary. He recommended that for new programs an institution may use adjuncts as a starting place and hire full-time faculty to fill ongoing roles in established programs. Regent Cohen asked Mr. Barnes to share what we are seeing in the system with enrollment in general. Mr. Barnes noted that the community colleges are showing positive signs for Fall 2020. Interest in the PACT program is strong. CSU enrollments are mixed. A national survey shows that some four-year universities may experience a 20% drop in enrollments. Mr. Barnes anticipates having a new Pro Forma Budget Form by the end of May. The deadline for institutional responses to the proposed new Pro Forma Budget Form is May 15.

2. Academic Continuity: Financial Resilience in the Face of Economic Downturn

Provost Jane Gates presented an historical and national overview of student enrollments in hard times. She stated that demand for enrollment increases during a domestic downturn and higher education must respond quickly to workforce needs. Institutions must be able to move forward innovative new programs in an accountable and responsive way. Provost Gates stated that she appreciates the support of the Regents in approving and moving forward new programs. A copy of this paper is included with the Minutes of the May 1, 2020 Academic and Student Affairs Committee Meeting.

3. Consent Items
   a. Discontinuations
      i. Computer Information Systems: Mobile Application Developer - AS Option – Capital CC
      ii. Computer Information Systems: Web Publishing - AS Option – Capital CC
      iii. Computer Support Specialist – AS – Capital CC
      iv. Computer Support Specialist: Hardware - AS Option – Capital CC
      v. Computer Hardware Support Specialist – Certificate – Capital CC

   On a motion by A. Budd seconded by H. Howery, the consent items were approved.

4. Action Items
   a. Guidelines for Starting BOR Approved New Programs

   Chair Harris noted that these guidelines, sent yesterday, April 30, 2020, are for new programs that have been approved by the BOR but have not yet started.

   Chair Harris called for a motion to approve the Guidelines for Starting BOR Approved New Programs. The motion was moved by N. Cohen and seconded by H. Howery.

   Chair Harris noted that the institutions should use these guidelines to review new programs after they have been approved by the BOR but before they are launched. Institutions should forward the results of their review to the Provost of Academic and Student Affairs. If the Provost approves the institution's review, the new program can be launched on the start date. If the Provost does not approve the institution's review, the program will be sent back to the institution for further review.

Regent Cohen had questions on Guidelines #2 and #5.
Guideline #2 is:

2. If goals cannot be met in the first two years, the institution can make adjustments without damaging program quality.

Provost Gates noted that the institution can delay the launch, increase funds for the marketing of the program, elaborate on the program description, or put the program on hold. Chair Harris noted that the guideline suggests that if an institution starts a program will it be able to delay hiring to the second or third year or later and can institutions use adjuncts instead of full-time employees.

Guideline #5 is:

5. The institution can provide the support to ensure the retention rate will not be jeopardized.

Chair Harris responded that the institution needs to ensure that advisement and tutoring are in place for students. If not, this could jeopardize the retention rate.

Regent Cohen recommended that both Guidelines #2 and #5 be expanded and proposed the following revisions:

5. The institution can provide the **student-facing** support to ensure the retention rate will not be jeopardized.
2. If goals cannot be met in the first two years, the institution can make **hiring or other financial** adjustments without damaging program quality.

Chair Harris called for a substitute motion to approve the changes to the Guidelines for Starting BOR Approved New Programs specifically the revisions to Guideline #2 and Guideline #5. The substitute motion was moved by A. Budd and seconded by N. Cohen. A vote was taken on the revised Guidelines for Starting BOR Approved New Programs and the vote was unanimous.

b. Suspensions
   i. Computer Software Support Specialist – Certificate – Capital CC

   Chair Harris called for a motion to approve the suspension of the Capital CC Computer Software Support Specialist Certificate. The motion was moved by H. Howery and seconded by A. Budd. A vote was taken and the suspension of the Capital CC Computer Software Support Specialist Certificate was unanimously approved.

   ii. Mobile Application Developer – Certificate – Capital CC

   Chair Harris called for a motion to approve the suspension of the Capital CC Mobile Application Developer Certificate. The motion was moved by A. Budd and seconded by H. Howery. A vote was taken and the suspension of the Capital CC Mobile Application Developer Certificate was unanimously approved.

c. Modifications

i. Robotics and Mechatronics Engineering Technology – BS - Central CT State University [Includes an approval for an exception to the Credit Normalization Policy]

Chair Harris called for a motion to approve the modification of the Central CT State University BS in Robotics and Mechatronics Engineering Technology. The motion was moved by N. Cohen and seconded by H. Howery.

Dr. Marianne Fallon, Interim AVP for Academic Affairs, Dr. Ravinda Thamma, Professor and Department Chair, Manufacturing and Construction Management, and Dean Ju Kim, School of Engineering, Science and Technology, presented the modifications to the CCSU 130-credit BS degree in Robotics and Mechatronics Engineering Technology. The modifications to the program were made based on the recommendations of CCSU's Industry Advisory Board and to align with changing ABET (the Accreditation Board for Engineering and Technology, Inc.) standards to give students the opportunity to specialize in higher-level robotics. An exception to the normalization policy for this program was approved. The modifications to the program include an industrial internship.

Questions/Recommendations from the Committee included:

a) Is the graduation rate acceptable? Response: The graduation rate of 10 conferrals per year is increasing every year.

b) Because of the low graduation rate, how is CCSU supporting students in the program academically? Response: Students receive tutoring, specialized tutoring and academic advising which is flexible to support students' needs.

Chair Harris called for a vote to approve the modifications to the Central CT State University BS in Robotics and Mechatronics Engineering Technology. A vote was taken and approval of the modifications to the BS in Robotics and Mechatronics Engineering Technology was unanimous.

d. New Programs

i. Mechanical Engineering - MS with OCPs in Advanced Manufacturing Technology and in Additive Manufacturing Technology – Central CT State University

Chair Harris called for a motion to approve the new Central CT State University MS in Mechanical Engineering. The motion was moved by N. Cohen and seconded by A. Budd.

Dr. Marianne Fallon, Dr. Nidal Al-Masoud, Professor and Department Chair, Engineering, and, Dr. Peter Baumann, Professor, Engineering, presented the proposed new Mechanical Engineering 30-credit MS program for CCSU which includes two embedded Official Certificate Programs (OCPs), 12-credits each, the first in Additive Manufacturing Engineering and the second in Advanced Manufacturing Engineering. The proposed new program satisfies ABET accreditation requirements. The new program will eventually include three concentrations. The first concentration, Mechanical Design, Materials, and Manufacturing, will be included at the program's inception and the other two will be added later. The start date of the new program is Fall 202l. The new MS in Mechanical Engineering will draw students from CCSU's BS in Mechanical Engineering, in-state graduates of similar programs, and professionals holding a BS in Mechanical Engineering.

Questions/Recommendations from the Committee included:

a) What is the incentive for a graduate of the BS in Mechanical Engineering Program to get an MS in Mechanical Engineering rather than to get a job? Response:

28.2% of graduates from the BS in Mechanical Engineering program indicated that they are likely to pursue an MS in Mechanical Engineering.

b) *What kind of jobs are available with an MS in Mechanical Engineering degree?* Response: Graduates of the MS in Mechanical Engineering program are likely to make $10,000 to $15,000 more in salary than graduates with a BS in Mechanical Engineering who are employed directly after graduation. Graduates of the MS in Mechanical Engineering program are likely to go into design work which requires high-caliber graduates. In industry, promotion to higher level positions is based on educational level. Many companies have tuition reimbursement for employees who pursue advanced degrees.

c) *Professional Engineering (PE) License* – In some states, graduates with an MS degree are exempted from some things that BS graduates are required to have to get a PE licenses. CT does not require additional credits to acquire a PE license, but continuing education credits are required to maintain the license.

Regent Cohen proposed a substitute motion for new programs that amends the Resolution as follows "…and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020."
Chair Harris called for a motion on the substitute motion. The motion was moved by N. Cohen and seconded by A. Budd. Chair Harris called for a vote to approve the substitute motion for the new Central CT State University MS in Mechanical Engineering including the amendment to the resolution. The vote to approve the new MS in Mechanical Engineering was unanimous

Regent Cohen noted that this language will be added for resolutions for all new programs being approved.

ii. Civil Engineering – MS – Central CT State University

Chair Harris called for a motion to approve the new Central CT State University MS in Civil Engineering with the amendment to the Resolution as follows "…and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020." The motion was moved by N. Cohen and seconded by H. Howery.

The presenters for the new program were the same as for the MS in Mechanical Engineering with the addition of Dean Ju Kim, School of Engineering, Science and Technology. The proposed CCSU MS in Civil Engineering will be launched in Fall 2021. It will eventually offer three concentrations: 1) Structures; 2) Transportation; and, 3) Environmental and Water Resources Engineering. The first concentration, Structures, will be available at the program's inception. The other two concentrations will be added later. The proposed new program satisfies ABET accreditation requirements. The MS in Civil Engineering will share foundational courses with the MS in Mechanical Engineering. The BS in Civil Engineering is a strong program which is averaging 25 graduations per year. Questions/Recommendations from the Committee included:

a) *Regent Budd expressed concerns regarding enrollments for the MS in Civil Engineering.* Response: The enrollment projections are realistic and conservative. 43% of the graduates of the BS in Civil Engineering are looking out of state for

graduate programs. Graduates of the MS in Civil Engineering will do more in-depth designs of bridges, roads, and water resources. The Professional Engineering License for Civil Engineers is a must.

b) *What are the requirements to sit for a PE licensure exam in CT?* Response: CT does not have a continuing education requirement to sit for the PE licensure exam.
c) *What is the reason for the decrease in graduates of the MS in Civil Engineering at UCONN and the University of Hartford in the 2018-2019 Academic Year?* Response: We can't determine or infer the reason for the decline in graduates.

Regent Budd noted that the aggregate number of graduates in CT from the BS in Civil Engineering is about ten times that of the aggregate number of graduates from the CT MS in Civil Engineering programs. She stated that she doesn't see the need right now for an MS in Civil Engineering program under these circumstances. She would like to see what happens with the MS in Mechanical Engineering program first.

Chair Harris called for a vote to approve the new Central CT State University MS in Civil Engineering with the amendment to the resolution. A vote was taken. Chair Harris and Regent Budd voted "no" and Regent Cohen voted "yes". Regent Howery did not respond to the vote. The proposed new Central CT State University MS in Civil Engineering was not approved.

Chair Harris stated that CCSU can resubmit the proposal for the new MS in Civil Engineering in the future with more data showing interest in the new program.

iii. Applied and Computational Mathematics – BS – Western CT State University

Chair Harris called for a motion to approve the new Western CT State University BS in Applied and Computational Mathematics with the amended resolution for new programs as follows "…and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020." The motion was moved by N. Cohen and seconded by A. Budd.

Provost Missy Alexander and Dr. Stavros Christofi, Associate Professor and Dept. Chair, Mathematics, presented the proposed new BS in Applied and Computational Mathematics for WCSU. Provost Alexander noted that it is WCSU's tradition to support professional education programs with a Liberal Arts base. WCSU has seen a drop in enrollments in the traditional BA in Mathematics. The program will launch in Fall 2020 with three options: 1) Data Science; 2) Actuarial Science; and, 3) Applied Differential Equations and Scientific Computing. The new program has been designed to maximize WCSU's existing resources with 70% of its curriculum comprised of existing courses. In the third year of the program there is a potential to hire faculty if the enrollment supports it.

Questions/Recommendations from the Committee included:

a) *Why aren't you considering part time students?* Response: Although the program was modeled on full time students, WCSU will accept part time students. The program is aligned with TAP for easy transfer to graduate programs.
b) *Are you hiring administrators and faculty?* Response: Administrative costs in Years 1 and 2 will be reassigned time to set up the program; in Year 3 we will hire new full-time faculty only if the program yields real growth.

Chair Harris called for a vote to approve the new Western CT State University BS in Applied and Computational Mathematics and the vote to approve the new BS in Applied and Computational Mathematics was unanimous.

e. Application for Continued Accreditation

i. Mechatronics Automation Technician – C2 Certificate - Quinebaug Valley CC

Chair Harris called for a motion to approve the continued accreditation of the Quinebaug CC Mechatronics Automation Technician C2 Certificate. The motion was moved by N. Cohen and seconded by H. Howery.

John Lewis, Interim Dean of Academic Affairs and Student Services; Jakob Spjut, Program Coordinator and Assoc. Professor of Engineering Science; and, Jodi Clark, Assistant Director of QVCC's Advanced Manufacturing Center, presented this program for Quinebaug CC. The program was part of a number of programs presented to the Academic and Student Affairs Committee last year that were licensed but never accredited. The program was accredited through May 2020 and QVCC is now applying for continued accreditation. The program, still in its infancy, promotes and supports local industry in Eastern CT.

Questions/Recommendations from the Committee included:

a) *Why was there a drop in students in the third year?* Response: QVCC's CNC Machinist program is very successful and well known. The Mechatronics program is newer and not as well known. The reputation of the program and its graduates is growing. QVCC plans to market the Mechatronics Automation Technician program by soliciting testimonials from graduates and developing a marketing piece which states how the program has benefited graduates.

b) *Do any of the courses in the program overlap with courses in other programs?* Response: The Mechatronics program piggybacks with the Advanced Manufacturing CNC Machinist Program. In the Machinist program students learn how a machine operates and in the Mechatronics program students learn how to fix it. Professor Spjut is working with CCSU on an agreement that will transfer 4-5 Mechatronics courses to CCSU's BS in Mechatronics.

c) *Regent Budd expressed concerns about the program not reaching its projected enrollment.* Response: A graph, included in the program documentation, indicates the number of students coming from QVCC's industry partners, the target audience. Dr. Karen Wosczyna-Birch, Executive Director, College of Technology, Regional Center for Next Generation Manufacturing, noted that the courses have been approved by the ARM Institute and the CT Dept. of Labor is funding an apprenticeship program in Mechatronics.

Chair Harris called for a vote to approve the accreditation of the Quinebaug Valley CC Mechatronics Automation Technician C2 Certificate. A vote was taken and the approval of the accreditation of the Quinebaug Valley CC Mechatronics Automation Technician C2 Certificate was unanimous.

f. Application for Continued Licensure and Accreditation
   i. Computer Networking – AS – (Parent Program) – Capital CC
      a) Computer Networking: Cybersecurity - AS Option
      b) Computer Networking – Certificate
      c) Cybersecurity – Certificate
      d) Cisco Certified Networking Associate – Certificate

Before the motion, Chair Harris asked Regent Budd to comment and ask questions about this agenda item. Regent Budd stated that the term "parent program" is confusing and why are there two AS degrees in this item. Dr. Miah LaPierre Dreger, Dean of Academic and Student Affairs, responded to Regent Budd and enumerated the options under the parent degree, each requiring accreditation approval.

Questions/Recommendations from the Committee included:

a) Can a student get a Computer Networking degree without Cybersecurity? Response: Yes. Dr. LaPierre Dreger noted only four courses in Levels 1 and 2 are required for Cybersecurity.

b) If a student took just the Computer Networking AS degree, what type of jobs are available? Response: Networking Specialist and CCNA Cisco Networking Associate. The courses are aligned to attain the networking credential, the Cisco CCNA Certificate and other certifications. In the Cybersecurity Option, the first half of the curriculum is networking courses. Later in the curriculum, there is a much stronger focus on Cybersecurity. A student interested in general computer networking wouldn't need specialized cybersecurity knowledge.

c) There are many certificates in specialties for computer work. There is a concern that a graduate with an AS degree in Networking would not be able to get a job. Certificates in specific software/programs would be more useful to professionals in the workforce. If Capital CC had no AS degree in Computer Networking, can the institution still provide the certificates in 6-12 months? Response: Yes. We could have standalone certificates and continuing education. Certificates are for working professionals who are already in the field. Industry certificates are the gold standard, plus, professionals need BS, MS, and, PhDs in computer networking to advance in the profession. The AS in Computer Networking is the vehicle to transfer into the CCSU BS in Computer Networking. There is a great need for a broad networking degree. In addition, many jobs don't require a cybersecurity degree.

d) *Why is the enrollment so low in the AS in Computer Networking program?* Response: Students enter Capital CC for the AS in Networking Degree, but Cybersecurity is the buzz now and has three times the enrollments. Students need the broad AS in Computer Networking degree to get into non-cybersecurity jobs.

e) *What kind of jobs are there for graduates with an AS in Computer Networking?* Response: Network administrators and network engineers do the back-end work on a company's computer network.

f) *A note in the documentation shows that the total revenue plus expenditures for the program bundle is cost effective.* Response: The net gain for three years is estimated at $334,000.

Chair Harris called for a motion to approve the accreditation of Capital CC's five programs taken together: f.i. the AS in Computer Networking (Parent Program); f.i.a) Computer Networking: Cybersecurity-AS Option; f.i.b) Computer Networking

Certificate; f.i.c) Cybersecurity Certificate; and, f.i.d) Cisco Certified Networking Associate. On a motion by N. Cohen seconded by A. Budd, a vote was taken and the accreditation of Capital's five programs f.i. the AS in Computer Networking (Parent Program); f.i.a) Computer Networking: Cybersecurity-AS Option; f.i.b) Computer Networking Certificate; f.i.c) Cybersecurity Certificate; and, f.i.d) Cisco Certified Networking Associate was approved unanimously.

After the vote, Regent Cohen recommended that the five programs be reorganized under one heading for the BOR. Each program will need to have separate motions. The program documentation moved to the BOR should include one resolution and one staff report which shows five separate motions.

g. Replication of a College of Technology (COT) Program
   i. Technology Studies: Data Science Option – AS – Tunxis CC
   ii. Data Science – C2 Certificate – Tunxis CC

Chair Harris called for a motion to approve the Tunxis CC Technology Studies: Data Science Option AS Degree and the Data Science C2 Certificate (Replication of a College of Technology (COT) Program). The motion was moved by N. Cohen and seconded by H. Howery.

Amy Feest, Interim Dean Academic Affairs, and, Mat Spinelli, Director of STEAM and Advanced Manufacturing, presented these programs for Tunxis CC. These programs are replicated from the Northwestern CT CC COT Programs. Tunxis CC added two courses to the programs which require no additional faculty.

Chair Harris called for a vote to approve the Tunxis CC Technology Studies: Data Science Option AS Degree and the Data Science C2 Certificate (Replication of a College of Technology (COT) Program). A vote was taken and the approval of the Tunxis CC Technology Studies: Data Science Option AS Degree and the Data Science C2 Certificate (Replication of a College of Technology (COT) Program) was unanimous.

h. CSU Promotions and Tenures
   i. Southern CT State University
   ii. Western CT State University
   iii. Central CT State University
   iv. Eastern CT State University

Chair Harris called for a motion to approve the CSU Promotions and Tenures. The motion was moved by H. Howery and seconded by N. Cohen.

Provost Gates explained that the CSU Promotions and Tenures are the recommendations of the Presidents of the CT State Universities in compliance with the AAUP Collective Bargaining Agreement.

Chair Harris called for a vote to approve the CSU Promotions and Tenures. A vote was taken and the CSU Promotions and Tenures were approved.

i. General Education Core for the Single Community College

Chair Harris called for a motion to approve the General Education Core for the Single Community College. The motion was moved by N. Cohen and seconded by H. Howery.

Mike Stefanowicz, Interim AVP for Academic and Student Affairs, and Dr. Fran Rosselli-Navarra, Professor of Psychology, Manchester CC, presented this item. Provost Gates noted that this policy, if approved by the BOR, will move forward to NECHE in June 2020. The General Education Core for the Single Community College was recommended by the Students First Academic and Student Affairs Consolidation Committee (SF ASA CC) and the College Consolidation Implementation Committee (CCIC). The General Education Core for the Single Community College is made up of 21-25 credits and will be adopted as the statewide single General Education Core curriculum. In May 2018, the SF ASA CC was formed consisting of 12 elected members, one from each community college, and 6 members from the SF ASA CC. The SF ASA CC developed a General Education Core proposal and solicited feedback from the colleges. Changes were made to the proposal based on the feedback from the colleges and are as follows:

1) Two separate options, Art and Humanities, were combined into one category, Art and Humanities;
2) History was moved to Social and Behavioral Science;
3) Oral and Written Communication were combined into one category; and,
4) The Student Success - College and Career Planning category was removed and replaced with options.

AVP Stefanowicz noted that, in the General Education Core the minimum requirement is 21 credits. Program Coordinators can build on the General Education Core and add additional courses. The General Education Workgroup of the SF ASA CC collaborated with the TAP FIRC to align the proposed General Education Core for the Single Community College with the TAP FIRC FRAMEWORK30 (credit) Core.

The final General Education Core Policy was sent out to the colleges for feedback and endorsement with the following results: two colleges approved, one college rejected the proposal and voting process, and the remaining nine colleges resolved not to vote.
The SF ASA CC met on April 24, 2020 after the community colleges' endorsement vote and approved the General Education Core without the diversity course requirement. The CCIC added back the diversity course requirement into the General Education Core and approved the General Education Core on April 27, 2020.

Chair Harris noted she was happy to see that general education courses must be approved by discipline groups and can only be one category and the two-thirds emphasis on one discipline. The General Education Core will help students to understand methods of inquiry and analysis in different disciplines.

Questions/Recommendations from the Committee included:

a) *Regent Cohen noted that the General Education Core must go forward to the BOR. The SF ASA CC met with the campuses and solicited comments and votes on the proposal. Comments from the community colleges covered a number of issues, but there were no comments from the community colleges about the substance of the General Education Core.*
b) *Will it be clear that a course meets the criteria to qualify as a diversity course? How will counselors know that a course is a diversity course so that they can advise students?* Response: There are two ways to identify diversity courses, 1) Courses that meet the outcomes for diversity courses will be indicated with a

designator, or, 2) Courses in the Social and Behavioral category will meet a single outcome for a diversity course. Faculty members or advisors will ensure that students meet the diversity course requirement.

c) *Are courses going to be changed to meet the diversity requirement?* Response: Diversity courses will be well defined in the learning objectives. Some courses may change. The Diversity Committee, which will be convened in the Fall, will develop a broad definition of a diversity course.

d) *Is FIRC revising its learning outcomes and when will this be complete?* Response: FIRC is working on simplifying its learning outcomes and the work is ongoing this year.

e) *There is a plan to offer honoraria to faculty through 2020, but the learning outcomes will not be final.* Response: The 21-25 credit General Education Core does have learning outcomes for the courses. As FIRC revises its learning outcomes, it will honor the General Education and the Discipline Category learning outcomes. The timing is good to align the General Education and FRAMEWORK30 learning outcomes.

f) *Referring to the chart on the Results of the Endorsement Vote, there are two columns, one on the endorsement vote and the second, the date. What is stated above the chart is that only two colleges voted. Should the chart only contain the two colleges? The Committee should reestablish and make explicit the levels of governance expected for the curriculum going forward. What standard of governance does the Committee find acceptable?* Response: The table represents what happened at each college and the results of the endorsement vote. The SF ASA CC followed the same process as for TAP which included all twelve colleges and those that did not vote. In 2012, FIRC asked for guidance as to whether the Committee needed a quorum or a minimum level of votes. The advice to FIRC was that no quorum or minimum level of votes was required. There is a lot of opportunity for participation. The categories are defined and are similar to NECHE and other institutions. Faculty will have a continuing role in determining learning outcomes and the specifics of the curriculum. SF ASA CC will need the involvement of the CSUs to develop transfer outcomes to allow students to take courses at any campus.

g) *A concern was expressed about changing majors and the variability between programs in the General Education Core.* Response: We have encouraged program coordinators not to designate a specific course within a category unless it's absolutely necessary. This was a concept brought over from FRAMEWORK 30 for Transfer Pathways.

Chair Harris called for a vote to approve the General Education Core for the Single Community College. A vote was taken and was unanimous.

j. Appointment of CSU Professor

i. Dr. Elliott Horch – Southern CT State University

Chair Harris called for a motion to approve the appointment of Dr. Elliott Horch to the position of CSU Professor at Southern CT State University. The motion was moved by N. Cohen and seconded by H. Howery.

Provost Gates noted that CSCU can have up to 12 CSU Professors. A CSU Professor is appointed under the terms of the union agreement and on the recommendation of the CSU President. The candidate for CSU Professor must meet the three categories of excellence. **Chair Harris called for a vote to approve the appointment of Dr. Elliott Horch to the position of CSU Professor at Southern CT State University. A vote was taken and was unanimous.**

k. Faculty Research Grants
   i. Central CT State University
   ii. Eastern CT State University
   iii. Southern CT State University
   iv. Western CT State University

   Chair Harris noted that over $1 million in Faculty Research Grants were available this year. Committees are formed on each campus and candidate proposals are vetted and judged at each campus.
   Chair Harris called for a motion to approve the CSU Faculty Research Grants. The motion was moved by N. Cohen and seconded by H. Howery.
   Chair Harris called for a vote to approve the CSU Faculty Research Grants. A vote was taken and was unanimous.

l. <u>BOT 3.5.1 – Criteria for Granting an Incomplete for the CSU Community Colleges</u>
   Chair Harris called for a motion to approve the revisions to the BOT 3.5.1 Policy – Criteria for Granting an Incomplete for the CSU Community Colleges. The motion was moved by N. Cohen and seconded by H. Howery.
   Dr. Ken Klucznik explained the revisions to the BOT 3.5.1 Policy – Criteria for Granting an Incomplete for the CSU Community Colleges. He stated that most of the work for a course must be completed before an incomplete is granted. This semester, students in courses with clinicals or internships completed all work online; but, onsite clinicals or internships may not be able to be completed because of the COVID-19 pandemic. Chief Academic Officers of the CSU community college are granted flexibility in cases of incomplete courses. This is not a permanent change. The modification will be in place just for the current COVID-19 epidemic
   Chair Harris called for a vote to approve the revisions to the BOT 3.5.1 Policy – Criteria for Granting an Incomplete for the CSU Community Colleges. A vote was taken and was unanimous.

5. <u>Informational Items</u>
   a. Below Threshold
      i. Medical Assisting – AS – Quinebaug Valley CC
      ii. Detective Certificate – Certificate - Central CT State University [New Offering]
      iii. Astrobiology – Minor - Central CT State University [Modification]
      iv. Astronomy – Minor - Central CT State University [Modification]
      v. Biomolecular Sciences – BS - Central CT State University [Modification]
      vi. Computer Science - BS, Alternative - Central CT State University [Modification]
      vii. Computer Science - BS, Honors - Central CT State University [Modification]
      viii. Computer Science - Minor - Central CT State University [Modification]
      ix. Cybersecurity – BS - Central CT State University [Modification]

x. Earth Science – BS – Planetary Geology Specialization - Central CT State University [Modification]
xi. Manufacturing Engineering Technology – BS - Central CT State University [Modification]
xii. Mechanical Engineering Technology – BS - Central CT State University [Modification]

On a motion by A. Budd and seconded by N. Cohen, the Committee voted unanimously to adjourn the meeting of the BOR Academic and Student Affairs Committee at 1:00 p.m.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Discontinuation

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the immediate discontinuation of a program concentration in General Studies: Biology Concentration (CIP Code: 24.0102 / OHE # 240101) leading to a Bachelor of Science Charter Oak State College.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Discontinuation of a program concentration in General Studies: Biology Concentration leading to a Bachelor of Science Charter Oak State College.

BACKGROUND

As part of the program review process and the College's strategic plan, the College has been evaluating the concentrations it offers as part of the General Studies majors (BS and BA). As a result, Charter Oak is systematically discontinuing several concentrations. The Biology concentration is being discontinued because enrollment, although never strong, has declined significantly over the last 10 years. Since 2010, 30 students have graduated with a BS degree with a concentration in biology. In 2015, 3 students graduated and in 2016 through 22019, 1 student graduated each year.

Charter Oak does not offer most of the courses that are required to meet the learning outcomes of the concentration thus requiring students to take the courses elsewhere and transfer them back to complete their degree. This is difficult for students. Most of the students who graduated with this concentration matriculated with most, if not all, of the biology courses completed and only needed to complete general education or elective course requirements. New students will still be able to have biology as part of the BS general studies degree with a concentration in Individualized Studies.

There is currently one student in the program. The student has an approved plan of study outlining what is required to complete the degree. The advisor will continue to work with the student to ensure she meets her educational goal. The advisor will work with the student to find the courses needed in the major at other regionally accredited institutions. The remainder of the courses, the student can take at Charter Oak.

RECOMMENDATION

It is the recommendation of the System's Provost and Senior Vice President for Academic and Student Affairs that the Board of Regents approve the discontinuation of this Bachelor of Science concentration.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Date of Submission to CSCU Office of the Provost: 4/20/2020

Discontinued Program: Concentration in Biology that is part of the General Studies Major CIP: 24.0102 OHE#: 240101
BOR Accreditation Date:

Phase Out /Teach Out Period Fall 2022 Expected Date of Program Termination Fall 2020

Program Characteristics

Name of Program: Biology Concentration

Degree: Title of Award *(e.g. Master of Arts)* BS in General Studies (concentration in biology only, not the BS in General Studies)

Degree Certificate: *(specify type and level)*

Stand-Alone Certificate: *(specify type and level)*

Modality of Program: On ground X Online Combined
Locality of Program: On Campus Off Campus Both

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* offering the Program:

Institutional Contact for this Proposal: Shirley M. Adams	Title: Provost	Tel.: 860-515-3836 e-mail: sadams@charteroak.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative*:* As part of the program review process and the College's strategic plan, the College has been evaluating the concentrations it offers as part of the General Studies majors (BS and BA). As a result, Charter Oak is systematically discontinuing several concentrations. The Biology concentration is being discontinued because enrollment, although never strong, has declined significantly over the last 10 years. Since 2010, 30 students have graduated with a BS degree with a concentration in biology. In 2015, 3 students graduated and in 2016 through 2019, 1 student graduated each year. Currently there is one student in the concentration.

Charter Oak does not offer most of the courses that are required to meet the learning outcomes of the concentration thus requiring students to take the courses elsewhere and transfer them back to complete their degree. This is difficult for students. Most of the students who graduated with this concentration matriculated with most, if not all, of the biology courses completed and only needed to complete general education or elective course requirements.

New students will still be able to have biology as part of the BS general studies degree with a concentration in Individualized Studies.

Phase Out/Teach Out Strategy

Describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g. enrollments, any special resources needed, etc.)

There is currently one student in the program. The student has an approved plan of study outlining what is required to complete the degree. The advisor will continue to work with the student to ensure she meets her educational goal.

The advisor will work with the student to find the courses needed in the major at other regionally accredited institutions. The remainder of the courses, the student can take at Charter Oak.

SECTION 3: RESOURCES

Close Out

What resources/costs would be employed and/or expended to discontinue program? What would be the total cost?

There is no cost to discontinue the biology concentration. The College will continue to offer the 7 biology courses it currently offers because they support other majors and general education. We will only eliminate the capstone course.

SECTION 4: LESSONS LEARNED

(A debriefing exercise):

NOTE: Lessons Learned is knowledge or understanding gained from experience(s) that might be positive or negative, that might underscore strengths or weaknesses of an undertaking's preparation, design or implementation.

As the student body of the College is changing, more students are coming with fewer credits and are therefore looking to take their entire degree from the College.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Discontinuation

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the immediate discontinuation of a program concentration in General Studies: Mathematics Concentration (CIP Code: 24.0102 / OHE # 240101) leading to a Bachelor of Science Charter Oak State College.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Discontinuation of a program concentration in General Studies: Mathematics Concentration leading to a Bachelor of Science Charter Oak State College.

BACKGROUND

The concentration in Mathematics, an option in the BS in General Studies degree, is being recommending for discontinuance due to lack of enrollment. In the last 10 years, only 11 students have graduated with this concentration. In the last 5 years, 4 students have graduated with this concentration.

The Mathematics concentration requires students to take most of their courses elsewhere and to transfer them to Charter Oak. This concentration, and other concentrations, were developed when students were coming to Charter Oak with most of their major completed and when Charter Oak offered fewer courses. Over the years, the student body has changed--more students are matriculating with fewer credits and are looking to complete the remainder of their degree with Charter Oak courses.

Since many mathematics courses are difficult to offer online, Charter Oak has decided through its program review and strategic planning process to eliminate this concentration. Students will still be able to use their mathematics courses to complete a BS in General Studies with a concentration in Individualized Studies.

There is one student currently enrolled in the Mathematics concentration. Charter Oak has already outlined what the student needs to do to complete the concentration. Charter Oak will inform the student of the teach out period and work with her to meet that deadline. The student can continue to take her general education and free electives from Charter Oak. The student is aware that she will need to take her mathematics courses at another regionally accredited institution.

RECOMMENDATION

It is the recommendation of the System's Provost and Senior Vice President for Academic and Student Affairs that the Board of Regents approve the discontinuation of this Bachelor of Science concentration.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Date of Submission to CSCU Office of the Provost: 4/20/2020

Discontinued Program: BS in General Studies with a concentration in Mathematics CIP: 24.0102 OHE#: 240101 BOR Accreditation Date:

Phase Out /Teach Out Period Fall 2022 Expected Date of Program Termination Fall 2020

Program Characteristics

Name of Program: BS in General Studies with a concentration in Mathematics (discontinuing the concentration only)

Degree: Title of Award *(e.g. Master of Arts)* BS in General Studies

Degree Certificate: *(specify type and level)*

Stand-Alone Certificate: *(specify type and level)*

Modality of Program: On ground X Online Combined

Locality of Program: On Campus Off Campus Both

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* offering the Program:

Institutional Contact for this Proposal: Shirley M. Adams	Title: Provost	Tel.: 860-515-3836 e-mail: sadams@charteroak.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

The concentration in Mathematics, an option in the BS in General Studies degree, is being recommending for discontinuance due to lack of enrollment. In the last 10 years, only 11 students have graduated with this concentration. In the last 5 years, 4 students have graduated with this concentration and there is one student currently enrolled in the Mathematics concentration.

The Mathematics concentration requires students to take most of their courses elsewhere and to transfer them to Charter Oak. This concentration, and other concentrations, were developed when students were coming to Charter Oak with most of their major completed and when Charter Oak offered fewer courses. Over the years, the student body has changed--more students are matriculating with fewer credits and are looking to complete the remainder of their degree with Charter Oak courses.

Since many mathematics courses are difficult to offer online, Charter Oak has decided through its program review and strategic planning process to eliminate this concentration. Students will still be able to use their mathematics courses to complete a BS in General Studies with a concentration in Individualized Studies.

Phase Out/Teach Out Strategy

Describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g. enrollments, any special resources needed, etc.)

Charter Oak has already outlined what the student needs to do to complete the concentration. Charter Oak will inform the student of the teach out period and work with her to meet that deadline. The student can continue to take her general education and free electives from Charter Oak. The student is aware that she will need to take her mathematics courses at another regionally accredited institution.

SECTION 3: RESOURCES

Close Out

What resources/costs would be employed and/or expended to discontinue program? What would be the total cost?

Eliminating this concentration results in staff cost savings—admissions staff no longer have to explain to students that they can earn the concentration from Charter Oak, but they can't take the courses from Charter Oak, academic advisors no longer have to try to help students find courses to take at other colleges, and the registrar's office no longer has to build the concentration requirements into the student information system or catalog. We will eliminate the math capstone course but continue to offer the other math courses that meet general education, free electives, and requirements of other majors.

SECTION 4: LESSONS LEARNED

(A debriefing exercise):

NOTE: Lessons Learned is knowledge or understanding gained from experience(s) that might be positive or negative, that might underscore strengths or weaknesses of an undertaking's preparation, design or implementation.

Are there lessons learned – experiences distilled from: (a) circumstances that precipitated this program discontinuation, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s); that can be beneficially shared with / taken into account by current and future programs?

The discontinuance of this concentration is part of the College's strategic planning process to ensure that the College is continually evaluating its programs and focusing on programs that drive enrollment.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Discontinuation

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the immediate discontinuation of a program concentration in General Studies: Chemistry Concentration (CIP Code: 24.0102 / OHE # 240101) leading to a Bachelor of Science Charter Oak State College.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Discontinuation of a program concentration in General Studies: Chemistry Concentration leading to a Bachelor of Science Charter Oak State College.

BACKGROUND

The concentration in Chemistry, an option in the BS in General Studies degree, is being recommending for discontinuance due to lack of enrollment. In the last 10 years, only 6 students have graduated with this concentration. In the last 5 years, no students have been enrolled in this concentration and there is no one currently enrolled in the Chemistry concentration. The Chemistry concentration requires students to take most of their courses elsewhere and to transfer them to Charter Oak. This concentration, and other concentrations, were developed when students were coming to Charter Oak with most of their major completed and when Charter Oak offered fewer courses. Over the years, the student body has changed—more students are matriculating with fewer credits and are looking to complete the remainder of their degree with Charter Oak courses.

Since many chemistry courses are difficult to offer online, Charter Oak has decided through its program review and strategic planning process to eliminate this concentration. Students will still be able to use their chemistry courses to complete a BS in General Studies with a concentration in Individualized Studies.

The Chemistry Concentration will be eliminated from the 2000-21 catalog and from the admission application.

RECOMMENDATION

It is the recommendation of the System's Provost and Senior Vice President for Academic and Student Affairs that the Board of Regents approve the discontinuation of this Bachelor of Science concentration.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Date of Submission to CSCU Office of the Provost: 4/20/2020

Discontinued Program: BS General Studies with a Concentration in Chemistry CIP: 24.0202 OHE#: 240101 BOR Accreditation Date:

Phase Out /Teach Out Period: Summer 2020 Expected Date of Program Termination: Fall 2020

Program Characteristics

Name of Program: BS General Studies with a concentration in Chemistry (concentration only not the BS degree)

Degree: Title of Award *(e.g. Master of Arts)* BS in General Studies

Degree Certificate: *(specify type and level)*

Stand-Alone Certificate: *(specify type and level)*

Modality of Program: On ground X Online Combined

Locality of Program: On Campus Off Campus Both

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* offering the Program:

Institutional Contact for this Proposal: Shirley M. Adams	Provost	Tel.: 860-515-3836 e-mail: sadams@charteroak.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative .

The concentration in Chemistry, an option in the BS in General Studies degree, is being recommending for discontinuance due to lack of enrollment. In the last 10 years, only 6 students have graduated with this concentration. In the last 5 years, no students have been enrolled in this concentration and there is no one currently enrolled in the Chemistry concentration.

The Chemistry concentration requires students to take most of their courses elsewhere and to transfer them to Charter Oak. This concentration, and other concentrations, were developed when students were coming to Charter Oak with most of their major completed and when Charter Oak offered fewer courses. Over the years, the student body has changed--more students are matriculating with fewer credits and are looking to complete the remainder of their degree with Charter Oak courses.

Since many chemistry courses are difficult to offer online, Charter Oak has decided through its program review and strategic planning process to eliminate this concentration. Students will still be able to use their chemistry courses to complete a BS in General Studies with a concentration in Individualized Studies.

Phase Out/Teach Out Strategy

Describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g. enrollments, any special resources needed, etc.)

There are no students in the concentration in Chemistry. The Chemistry Concentration will be eliminated from the 2000-21 catalog and from the admission application.

SECTION 3: RESOURCES

Close Out

What resources/costs would be employed and/or expended to discontinue program? What would be the total cost?

There will be no cost to discontinue the program beyond the cost of staff time to remove the concentration from the website and application.

Eliminating this concentration results in staff cost savings—admissions staff no longer have to explain to students that they can earn the concentration from Charter Oak, but they can't take the courses from Charter Oak, academic advisors no longer have to try to help students find courses to take at other colleges, and the registrar's office no longer has to build the concentration requirements into the student information system or catalog. We will eliminate the chemistry capstone course but continue to offer the chemistry course that meets the general education requirement.

SECTION 4: LESSONS LEARNED

(A debriefing exercise):

NOTE: Lessons Learned is knowledge or understanding gained from experience(s) that might be positive or negative, that might underscore strengths or weaknesses of an undertaking's preparation, design or implementation.

Are there lessons learned – experiences distilled from: (a) circumstances that precipitated this program discontinuation, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s); that can be beneficially shared with / taken into account by current and future programs?

The discontinuance of this concentration is part of the College's strategic planning process to ensure that the College is continually evaluating its programs and focusing on programs that drive enrollment.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Discontinuation

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the immediate discontinuation of a program concentration in General Studies: Technology Studies Concentration (CIP Code: 24.0102 / OHE # 240101) leading to a Bachelor of Science Charter Oak State College.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Discontinuation of a program concentration in General Studies: Technology Studies Concentration leading to a Bachelor of Science Charter Oak State College.

BACKGROUND

The concentration in Technology studies, an option in the BS in General Studies degree, is being recommending for discontinuance due to lack of enrollment. In the last 10 years, only 8 students have graduated with this concentration. In the last 5 years, 2 students have graduated with this concentration and there are no students currently enrolled in the Technology Studies concentration.

The Technology Studies concentration requires students to take most of their courses elsewhere and to transfer them to Charter Oak. This concentration, and other concentrations, were developed when students were coming to Charter Oak with most of their major completed and when Charter Oak offered fewer courses. Over the years, the student body has changed--more students are matriculating with fewer credits and are looking to complete the remainder of their degree with Charter Oak courses.

Since many Technology Studies courses are difficult to offer online, Charter Oak has decided through its program review and strategic planning process to eliminate this concentration. Students will still be able to use the courses to complete a BS in General Studies with a concentration in Individualized Studies.

Charter Oak recognizes that technology is a workforce designated area, but as the enrollment indicates, this concentration is not meeting the needs of the workforce. As part of its strategic planning process, Charter Oak will continue to examine other options to meeting this need.

There are no students in this concentration. The concentration will be eliminated from the 2020-21 catalog and the admission application.

RECOMMENDATION

It is the recommendation of the System's Provost and Senior Vice President for Academic and Student Affairs that the Board of Regents approve the discontinuation of this Bachelor of Science concentration.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Date of Submission to CSCU Office of the Provost: 4/20/2020

Discontinued Program: BS in General Studies with a concentration in Technology Studies CIP: 24.0102 OHE#: 240101
BOR Accreditation Date:

Phase Out /Teach Out Period Summer 2020 Expected Date of Program Termination Fall 2020

Program Characteristics

Name of Program: BS in General with a Concentration in Technology Studies

Degree: Title of Award *(e.g. Master of Arts)* BS in General Studies with a Concentration in Technology Studies (eliminating the concentration only)

Degree Certificate: *(specify type and level)*

Stand-Alone Certificate: *(specify type and level)*

Modality of Program: On ground X Online Combined
Locality of Program: On Campus Off Campus Both

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* offering the Program:

Institutional Contact for this Proposal: Shirley M. Adams	Title: Provost	Tel.: 860-515-3836 e-mail: sadams@charteroak.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

The concentration in Technology studies, an option in the BS in General Studies degree, is being recommending for discontinuance due to lack of enrollment. In the last 10 years, only 8 students have graduated with this concentration. In the last 5 years, 2 students have graduated with this concentration and there are no students currently enrolled in the Technology Studies concentration.

The Technology Studies concentration requires students to take most of their courses elsewhere and to transfer them to Charter Oak. This concentration, and other concentrations, were developed when students were coming to Charter Oak with most of their major completed and when Charter Oak offered fewer courses. Over the years, the student body has changed--more students are matriculating with fewer credits and are looking to complete the remainder of their degree with Charter Oak courses.

Since many Technology Studies courses are difficult to offer online, Charter Oak has decided through its program review and strategic planning process to eliminate this concentration. Students will still be able to use the courses to complete a BS in General Studies with a concentration in Individualized Studies.

Charter Oak recognizes that technology is a workforce designated area, but as the enrollment indicates, this concentration is not meeting the needs of the workforce. As part of its strategic planning process, Charter Oak will continue to examine other options to meeting this need.

Phase Out/Teach Out Strategy

Describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g. enrollments, any special resources needed, etc.)

There are no students in this concentration. The concentration will be eliminated from the 2020-21 catalog and the admission application.

SECTION 3: RESOURCES

Close Out

What resources/costs would be employed and/or expended to discontinue program? What would be the total cost?

Eliminating this concentration results in staff cost savings—admissions staff no longer have to explain to students that they can earn the concentration from Charter Oak, but they can't take the courses from Charter Oak, academic advisors no longer have to try to help students find courses to take at other colleges, and the registrar's office no longer has to build the concentration requirements into the student information system or catalog. The capstone course will be eliminated. The college offers no other courses with the TEC designation.

SECTION 4: LESSONS LEARNED

(A debriefing exercise):

NOTE: Lessons Learned is knowledge or understanding gained from experience(s) that might be positive or negative, that might underscore strengths or weaknesses of an undertaking's preparation, design or implementation.

Are there lessons learned – experiences distilled from: (a) circumstances that precipitated this program discontinuation, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s); that can be beneficially shared with / taken into account by current and future programs?

The discontinuance of this concentration is part of the College's strategic planning process to ensure that the College is continually evaluating its programs and focusing on programs that drive enrollment

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Suspension

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the suspension of a program in Environmental Sciences (CIP Code: 03.0104 / OHE # 01710) leading to an Associate of Science at Middlesex Community College for a period of 3 years.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Suspension of a program in Environmental Sciences leading to an Associate of Science at Middlesex Community College for a period of 3 years.

BACKGROUND

The Environmental Sciences program was coordinated by a full-time faculty member who resigned effective Fall 2019. The college currently does not have a full-time replacement. Unsuccessful attempts were made to consolidate this program with another sister college to keep the program in active status. This program that requires discipline-focused coordination due to the evolution of this field to meet both employers' demands and changes in the field that would affect program curriculum inclusive of internships and other experiential learning opportunities. Current curriculum is out dated, not reflective of emerging trends of interest and employer need and missing a strong transfer pipeline to the CSUs.

The college will explore the vitality of this program in our region using data obtain from labor market data, area high school interests and budget-determined faculty staffing. If the data does not present favorably a need for this program and the college is unable to hire a full-time faculty replacement, the program will be requested to be terminated.

As of Fall 2019, the number of program specific classes has been reduced due to the resignation of the full-time faculty member who coordinated this program. Students who are not graduating are being advised to enroll in the following program:

- TAP Chemistry
- TAP Physics
- TAP Biochemistry
- Liberal Arts & Sciences

Graduating students who need a class not offered are being granted applicable course waivers for courses that have comparable learning outcomes.

Fall 2019:

- 25 enrolled students total enrolled in the program to date
- 7 registered for Fall 2019 (earned 45 credits or less)

A physics full-time faculty member and a temporary full-time lecturer (contract to end Spring 2020) are coordinating and teaching out the program.

RECOMMENDATION

It is the recommendation of the System's Provost and Senior Vice President for Academic and Student Affairs that the Board of Regents approve the suspension of this Associate of Science.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities System Office
*APPLICATION FOR **SUSPENSION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Middlesex Community College	Date of Submission to CSCU Office of the Provost:

Program: Environmental Sciences CIP: 030104 OHE#: 01710 BOR Accreditation Date: 11/01/1974
Date Program will be reinstated or deleted (one, two, or three years maximum): 3

Program Characteristics

Name of Program: Environmental Sciences

Degree: Title of Award *(e.g. Master of Arts)* **Associate** Associated Certificate(s) (if any) **11/01/1974**

Stand-Alone Certificate: *(specify type and level)*

Modality of Program: X On ground Online Combined
Locality of Program: X On Campus Off Campus Both

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* offering the Program: Main Campus

Institutional Contact for this Proposal: Sharale W. Mathis	Title: Dean of Academic & Student Affairs	Tel.: 860.343.5745 e-mail: SMathis@mxcc.commnet.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM SUSPENSION

Narrative

Please provide reason for requested suspension and plans for follow-up including the sunset date as indicated above.

The Environmental Sciences program was coordinated by a full-time faculty member who resigned effective Fall 2019. The college currently does not have a full-time replacement. Unsuccessful attempts were made to consolidate this program with another sister college to keep the program in active status. This program that requires discipline-focused coordination due to the evolution of this field to meet both employers' demands and changes in the field that would affect program curriculum inclusive of internships and other experiential learning opportunities. Current curriculum is out dated, not reflective of emerging trends of interest and employer need and missing a strong transfer pipeline to the CSUs.

The college will explore the vitality of this program in our region using data obtain from labor market data, area high school interests and budget-determined faculty staffing. If the data does not present favorably a need for this program and the college is unable to hire a full-time faculty replacement, the program will be requested to be terminated.

Phase Out/Teach Out Strategy

Please describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g. enrollments, any special resources needed, etc.)

As of Fall 2019, the number of program specific classes has been reduced due to the resignation of the full-time faculty member who coordinated this program. Students who are not graduating are being advised to enroll in the following program:

- TAP Chemistry
- TAP Physics
- TAP Biochemistry
- Liberal Arts & Sciences

Graduating students who need a class not offered are being granted applicable course waivers for courses that have comparable learning outcomes.

Fall 2019:

- 25 enrolled students total enrolled in the program to date
- 7 registered for Fall 2019 (earned 45 credits or less)

Coordination and teaching out of the program is being down by a physics full-time faculty member and temporary full-time lecturer (contract to end Spring 2020).

SECTION 3: RESOURCES

Close Out

What resources/costs would be employed and/or expended to suspend program:

There are no expected costs to suspend the program.

SECTION 4: LESSONS LEARNED

(A debriefing exercise):

NOTE: Lessons Learned is knowledge or understanding gained from experience(s) that might be positive or negative, that might underscore strengths or weaknesses of an undertaking's preparation, design or implementation.

Are there lessons learned – experiences distilled from: (a) circumstances that precipitated this program suspension, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s); that can be **beneficially** shared with / taken into account by current and future programs?

The Environmental Sciences program requires a full-time faculty to coordinate this program. Professional development and training to assist the coordinator in their efforts to market, recruit and build partnerships with area high schools. In addition, this program must have a dedicated lab space to run curriculum that incorporates up-to-date technology in the lab. All these are essential in building, running and growing a successful Environmental Science program to meet employer demand and student career interest.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Suspension

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the suspension of a program in Accounting (CIP Code: 52.0301 / OHE # 19351) leading to an OCP at Central Connecticut State University until May 2023.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Suspension of a program in Accounting leading to an OCP at Central Connecticut State University until May 2023.

BACKGROUND

Low student enrollment since the inception of the program is the main reason for suspension at this time. Enrollment was 6 students in Fall 2018 and 13 students in 2019. Five students have completed the program since its inception. The program will be revisited in 2022; market conditions and marketing strategies will be studied for program viability.

In general, students with degrees other than in accounting enroll in the OCPA to gain entrance into the MSA. Another option for entrance is through foundational courses in accounting; hence, the suggestion is for students who have not started coursework in the OCPA to follow the foundational coursework option. OCPA students who have not completed the program and seek to complete it will be given options to complete the program through alternative means. As of April 20, 2020, only one student who has not started the program but took the prerequisite AC 500 has decided to continue with foundational courses.

A formal email will be sent to all students to state the suspension of the OCPA with an invitation to discuss their options for completing the program, including the alternative option (foundational courses) to gain entrance into the MSA. The school will consider completion of OCPA courses during the suspension period through summer courses and/or through independent studies.

RECOMMENDATION

It is the recommendation of the System's Provost and Senior Vice President for Academic and Student Affairs that the Board of Regents approve the suspension of this OCP.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities System Office
*APPLICATION FOR **SUSPENSION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University	Date of Submission to CSCU Office of the Provost: April 22, 2020

Program: Accounting OCP CIP: 52.0301 OHE#: 19351 BOR Accreditation Date: 09/19/2017
Date Program will be reinstated or deleted (one, two, or three years maximum): May 2023

Program Characteristics

Name of Program: Accounting

Degree: Title of Award *(e.g. Master of Arts)* Associated Certificate(s) (if any)

Stand-Alone Certificate: *(specify type and level)* **OCP**

Modality of Program: On ground **X** Online Combined

Locality of Program: X On Campus Off Campus Both

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* offering the Program: School of Business; main campus

Institutional Contact for this Proposal: Dr. Joseph Farhat	Title: Interim-Dean of the School of Business	Tel.: 860-832-3187 e-mail: josephfarhat@ccsu.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM SUSPENSION

Narrative

Please provide reason for requested suspension and plans for follow-up including the sunset date as indicated above.

Low student enrollment since the inception of the program is the main reason for suspension at this time. Enrollment was 6 students in Fall 2018 and 13 students in 2019. Five students have completed the program since its inception. The program will be revisited in 2022; market conditions and marketing strategies will be studied for program viability.

Phase Out/Teach Out Strategy

Please describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g. enrollments, any special resources needed, etc.)

Seven students are enrolled in Spring 2020, and 19 students are on our roster as accepted or with some degree of activity within the program. Three are students are expected to complete the program by the end of Summer 2020. Five students have six or fewer credits to complete. Five students completed a prerequisite course for the program (AC 500 or the equivalent); however, they have not started any coursework in the OCP. One student took the prerequisite (AC 500); however, did not receive the necessary grade ("B" or higher). Five other students were accepted and have not taken any coursework, except for three students who took the prerequisite course, and one of those three is switching to foundational courses as a gateway into the MS in Accounting (MSA). In March 2020, students received emails and phone calls by the MSA Director for advising and for course availability for Summer 2020; this included students who were idled or had not started coursework in the program. Only a few students were reached successfully; the majority did not return emails nor phone calls.

In general, students with degrees other than in accounting enroll in the OCPA to gain entrance into the MSA. Another option for entrance is through foundational courses in accounting; hence, the suggestion is for students who have not started coursework in the OCPA to follow the foundational coursework option. OCPA students who have not completed the program and seek to complete it will be given options to complete the program through alternative means. As of April 20, 2020, only one student who has not started the program but took the prerequisite AC 500 has decided to continue with foundational courses.

A formal email will be sent to all students to state the suspension of the OCPA with an invitation to discuss their options for completing the program, including the alternative option (foundational courses) to gain entrance into the MSA. The school will consider completion of OCPA courses during the suspension period through summer courses and/or through independent studies.

SECTION 3: RESOURCES

Close Out

What resources/costs would be employed and/or expended to suspend program:

No costs above those to service the instructional obligations we have to students who wish to complete the OCPA.

SECTION 4: LESSONS LEARNED

(A debriefing exercise):

NOTE: Lessons Learned is knowledge or understanding gained from experience(s) that might be positive or negative, that might underscore strengths or weaknesses of an undertaking's preparation, design or implementation.

Are there lessons learned – experiences distilled from: (a) circumstances that precipitated this program suspension, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s); that can be **beneficially** shared with / taken into account by current and future programs?

Students in the OCPA program need to pay for the courses out of pocket; that is, student do not have access to financial aid normally available for college degrees. Many of the students that applied and were accepted did not enroll for this reason. The program is used by most students as a gateway into the MSA; however, this benefit needs to be explained to potential students. Educating students about the benefits of the OCPA as a gateway into the MSA requires a concerted marketing campaign. Unfortunately, there was no real marketing campaign for the OCPA and the program was launched with no funds dedicated for marketing. This is likely the real reason why the program failed to gain adequate enrollment.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Suspension

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the suspension of a program in Music Education (CIP Code: 13.1312 / OHE # 00063) leading to a Master of Science at Central Connecticut State University until December 1, 2021.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Suspension of a program in Music Education leading to a Master of Science at Central Connecticut State University until December 1, 2021.

BACKGROUND

This program is accredited by the National Association of Schools of Music (NASM). During its recent accreditation visit, NASM representatives recommended programmatic revisions to this graduate program. NASM will transmit its formal review later this spring, but in anticipation, the Ammon College of Liberal Arts & Social Sciences requests permission to suspend admission to the program. During 2020-2021, the Department of Music will seek approval for revisions that will strengthen the program and increase enrollments. We anticipate re-opening the program to admission by the end of Spring 2021. Given the current uncertainty about the ability of colleges and universities to re-open this fall, we have allowed for the possibility that the program may not be able to re-open until Fall 2021.

NASM's principle concern was that the graduate program was too heavily intertwined with a Summer Music Institute for in-service K-12 educators. What was once seen as a synergy between the two programs began to compromise the quality of the graduate education in the MS Music Education. Drawing bright lines between programs that serve different audiences is the clear lesson here.

As designed, courses in this program are primarily offered in the summer. There are currently 31 students in the program, although not all have been active recently. The Department will offer online courses this summer, and ensure that continuing students remain on track through 2020-2021. No special resources are needed to facilitate the program revision.

RECOMMENDATION

It is the recommendation of the System's Provost and Senior Vice President for Academic and Student Affairs that the Board of Regents approve the suspension of this Master of Science.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities System Office
APPLICATION FOR ***SUSPENSION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION		
Institution: Central Connecticut State University	Date of Submission to CSCU Office of the Provost: April 22, 2020	
Program: Music Education MS CIP: 13.1312 OHE#: 00063 BOR Accreditation Date: January 1, 1976 Date Program will be reinstated or deleted (one, two, or three years maximum): December 1, 2021		
Program Characteristics Name of Program: Music Education Degree: Title of Award *(e.g. Master of Arts)* **MS** Associated Certificate(s) (if any) Stand-Alone Certificate: *(specify type and level)* Modality of Program: X On ground Online Combined Locality of Program: X On Campus Off Campus Both		
Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* offering the Program: Ammon College of Liberal Arts and Social Sciences; main campus		
Institutional Contact for this Proposal: Dr. Robert Wolff	Title: Dean, Ammon College of Liberal Arts and Social Sciences	Tel.: 860-832-2807 e-mail: wolffr@ccsu.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM SUSPENSION

Narrative

Please provide reason for requested suspension and plans for follow-up including the sunset date as indicated above.

This program is accredited by the National Association of Schools of Music (NASM). During its recent accreditation visit, NASM representatives recommended programmatic revisions to this graduate program. NASM will transmit its formal review later this spring, but in anticipation, the Ammon College of Liberal Arts & Social Sciences requests permission to suspend admission to the program. During 2020-2021, the Department of Music will seek approval for revisions that will strengthen the program and increase enrollments. We anticipate re-opening the program to admission by the end of Spring 2021. Given the current uncertainty about the ability of colleges and universities to re-open this fall, we have allowed for the possibility that the program may not be able to re-open until Fall 2021.

Phase Out/Teach Out Strategy

Please describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g. enrollments, any special resources needed, etc.)

As designed, courses in this program are primarily offered in the summer. There are currently 31 students in the program, although not all have been active recently. The Department will offer online courses this summer, and ensure that continuing students remain on track through 2020-2021. No special resources are needed to facilitate the program revision.

SECTION 3: RESOURCES

Close Out

What resources/costs would be employed and/or expended to suspend program:

None.

SECTION 4: LESSONS LEARNED

(A debriefing exercise):

NOTE: Lessons Learned is knowledge or understanding gained from experience(s) that might be positive or negative, that might underscore strengths or weaknesses of an undertaking's preparation, design or implementation.

Are there lessons learned – experiences distilled from: (a) circumstances that precipitated this program suspension, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s); that can be **beneficially** shared with / taken into account by current and future programs?

NASM's principle concern was that the graduate program was too heavily intertwined with a Summer Music Institute for in-service K-12 educators. What was once seen as a synergy between the two programs began to compromise the quality of the graduate education in the MS Music Education. Drawing bright lines between programs that serve different audiences is the clear lesson here.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Modification of a Program

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the modification of a degree program, Civil Engineering (CIP Code: 14.0801 / OHE #15032), leading to a Bachelor of Science at Central Connecticut State University.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Modification of a degree program in Civil Engineering leading to a Bachelor of Science at Central Connecticut State University.

BACKGROUND

To respond to the rapid changes in technology and needs of the profession, the civil engineering curriculum is dynamic, and consequently undergoes both major and minor revisions as needed. The proposed changes respond to workforce needs in the following industries: Construction engineering, Construction Materials Engineering, Environmental/sanitary engineering, Geotechnical engineering, Hydraulics/hydrology/water resources engineering, Structural engineering, Surveying/measurements, and Transportation engineering. The curriculum updates reflect our continuous improvement plan to address concerns and observations that arise throughout the program assessment processes. The proposed curriculum will strengthen and raise our students' competitiveness in Civil Engineering profession and job placement.

The BS in Civil Engineering currently was exempted from the BR#14-111 credit normalization policy and currently stands at 130 credits. The proposed modifications streamline and focus offerings which reduce the total credit requirement for the degree to 128 credits. Other BS Civil Engineering programs within the State of Connecticut range between 126 and 132 credits: Quinnipiac University (126 credits), US Coast Guard Academy (n/a), University of Connecticut (128 credits), University of Hartford (132 credits), and University of New Haven (130 credits).

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic Council that the Board of Regents approve this program modification. The System's Provost and Senior Vice President for Academic and Student Affairs concurs with this recommendation.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 14.0801 Title of CIP Code Civil Engineering
Name of Program: Civil Engineering
Degree: Title of Award *(e.g. Master of Arts)* **BS**
Stand-Alone Certificate: *(specify type and level)*
Date Program was Initiated: Fall 2009 OHE#: 15032
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 42-49
Credits in Program Core Courses: 55
Credits of Electives in the Field: 9
Credits of Free Electives: 0
Cr Special Requirements *(include internship, etc.):* 24-25
Total # Cr in the Program *(sum of all #Cr above)*: 130
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **130**

Type of Program Modification Approval Being Sought (mark all that apply):

X Significant Modification of Courses/Course Substitutions*
Offering of Program at Off-Campus Location (specify new location)
Offering of Program Using an Alternate Modality (e.g. from on ground to online)
Change of Degree Title or Program Title

***Significant** is defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program.

Modified Program Characteristics

Name of Program: Civil Engineering
Degree: Title of Award *(e.g. Master of Arts)* **BS**
Certificate[1]: *(specify type and level)*
Program Initiation Date: Fall 2020
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Modified Program Credit Distribution

Credits in General Education: 42-49
Credits in Program Core Courses: 64
Credits of Electives in the Field: 6
Credits of Free Electives: 0
Cr Special Requirements *(include internship, etc.):* 16
Total # Cr in the Program *(sum of all #Cr above)*: 128
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **105**

Total Number of courses and course credits to be modified by this application: **15 courses; 46 credits**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):
Program Discontinued: CIP: OHE#: Accreditation Date:
Phase Out Period Date of Program Termination

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional license, please identify: The program prepares students to become a licensed Professional Engineer: "PE licensure is the engineering profession's highest standard of competence, a symbol of achievement and assurance of quality" https://www.nspe.org/resources/licensure

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

[1] If creating a Stand-Alone Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information about that program in the "Original Program" section.

Institutional Contact for this Proposal: Nidal Al-Masoud Title: Chair Tel.: 860-832-1825 e- mail: almasoudn@ccsu.edu

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: School of Engineering, Science, and Technology. Main campus in New Britain

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION

(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

The BS in CCSU Civil Engineering provides students with a broad and thorough education that prepares them for the practice of civil engineering at the professional level with the skills necessary to meet the technical and social challenges of the future.

To respond to the rapid changes in technology and needs of the profession, the civil engineering curriculum is dynamic, and consequently undergoes both major and minor revisions as needed. The proposed changes respond to workforce needs in the following industries: Construction engineering, Construction Materials Engineering, Environmental/sanitary engineering, Geotechnical engineering, Hydraulics/hydrology/water resources engineering, Structural engineering, Surveying/measurements, and Transportation engineering. The curriculum updates reflect our continuous improvement plan to address concerns and observations that arise throughout the program assessment processes. The proposed curriculum will strengthen and raise our students' competitiveness in Civil Engineering profession and job placement.

The BS in Civil Engineering currently was exempted from the BR#14-111 credit normalization policy and currently stands at 130 credits. The proposed modifications streamline and focus offerings which reduce the total credit requirement for the degree to 128 credits. Other BS Civil Engineering programs within the State of Connecticut range between 126 and 132 credits: Quinnipiac University (126 credits), US Coast Guard Academy (n/a), University of Connecticut (128 credits), University of Hartford (132 credits), and University of New Haven (130 credits).

The proposed modifications include:

(1) increasing a 400-level course in Foundation Engineering from 2 to 3 credits;

(2) shifting three ENGR/CE courses from Special Requirements to Core;

(3) replacing a single introductory Core course in Transportation Engineering with two courses in Traffic Engineering and Highway Design and Construction;

(4) shifting two Core courses to Electives in the Field;

(5) adding two options Electives in the Field specializing in Concrete Design;

(6) removing four courses from the list of options in Electives in the Field.

As applicable, please describe:

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

State of Connecticut market feasibility – According to the *State of Connecticut Occupational Projections: 2016-2026,* employment of civil engineers is strong and is projected to grow over the next decade. Their data ranked civil engineering as in high demand.

Table 1: State of Connecticut Occupational Projections: 2016-2026

Occupational Title	Estimated Employment 2016	Projected Employment 2026	10 Year Net Change	10 Year Percent Change	Annual Growth Openings	Annual Total Openings	Median Annual Wage	Minimum Education
Civil Engineers	3,441	3,776	335	9.7	34	290	$90,915	Bachelor's degree
https://www1.ctdol.state.ct.us/lmi/projections2016.asp								

National market feasibility – The federal Employment Projections program in the U.S. Department of Labor (DOL)'s Bureau of Labor Statistics provides the national data on civil engineering employment and forecasts for future hiring needs. As shown in Table 2, these projections include growth and replacement openings. The growth is expected to be 10.6% in civil engineering.

Table 2: National Occupational Employment and Job Openings Data: 2016 and 2026 (in thousands)

Occupational Title	Employment		Employment Change, 2016-26		Average annual job openings due to growth and replacements, 2016-26	Typical education needed for entry
	2016	2026	Number	Percent		
Civil Engineers	303.5	335.7	32.2	10.6	25.9	BS
https://projectionscentral.com/Projections/LongTerm						

- How does the program make use of the strengths of the institution (*e.g. curriculum, faculty, resources)* and of its distinctive character and/or location?

The BS in Civil Engineering will make use of the strengths of our institution. CCSU is the only university in the CSCU System offering a BS in Civil Engineering. All full-time faculty members possess an engineering doctorate and 75% are Professional Engineers (PE). CCSU is conveniently located close to the l greater Hartford region, a hub for employers requiring a workforce with highly technical skills, such as the Connecticut Department of Transportation. In addition, our program offers both day and evening courses to accommodate needs of both traditional full-time students and working professionals.

In Fall 2021, a new engineering building is scheduled to open with facilities that will support the continued growth of engineering programs at CCSU. The following civil engineering and general engineering laboratories will be available for use by students studying Civil Engineering: Computation Space, Concrete Lab, Engineering Materials Lab, Materials Science Lab, Engineering Mechanics Lab, Structures Lab, Fluids and Thermal Science Lab, Survey & Transportation Lab, and Civil Design Lab.

- Please describe any transfer agreements with CSCU institutions that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

Current articulation agreements will continue.

- Please indicate what similar programs exist in other institutions within the CSCU System, and how unnecessary duplication is being avoided

No other institutions within the CSCU system offer a BS in Civil Engineering.

- Please provide a description/analysis of employment prospects for graduates of this proposed program.

Our recent graduates have been very successful in securing employment. Among graduates in 2018-2019, all had a job offer before graduation and approximately one third had two or more offers.

According to JobsEQ Connecticut added 182 jobs in civil engineering over the past 3 years since Q3 of 2019. Over the last 180 days from January 30, 2020, Jobs EQ reported 199 job postings in Connecticut for occupations related to civil engineering. The State of Connecticut tends to import civil engineers, reflecting a need for a more highly trained workforce.

In a post-pandemic economy, civil engineers should fare well. Indeed, the American Society for Civil Engineers considers coronavirus a "wake-up call". The foundations of global health hinge on appropriate water, sanitation, and hygiene systems. Civil engineers are also contributing to the design of reusable PPE and are at the heart of building and rebuilding infrastructure.

Present side-by-side listing of curricular modification: (From **Original** to **Modified**)

Original Course	Course Type	Credits	Modified	Course Type	Credits
CHANGE CE 452: Foundation Engineering	Core	2	**TO** CE 452: Foundation Engineering	Core	2+1
MOVE ENGR 240: Spreadsheet & Prob. Solv. Tools	Special Requirements	3	**TO** ENGR 240: Spreadsheet & Prob. Solv. Tools	Core	3
MOVE CE 222: CAD App. In CE	Special Requirements	3	**TO** CE 222: CAD App. In CE	Core	3
MOVE CE 356: Civil Engr. Materials	Special Requirements	3	**TO** CE 356: Civil Engr. Materials	Core	3
REMOVE CE 454: Introduction to Transportation Engineering	Core	3	**ADD** CE 360: Traffic Engineering	Core	3
			ADD CE 460: Highway Design and Construction	Core	3
MOVE CE 357: Advanced Surveying	Core	3	**TO** CE 357: Advanced Surveying	Electives in the Field	3
MOVE CE 458: Introduction to GPS for Engineering	Core	3	**TO** CE 458: Introduction to GPS for Engineering	Electives in the Field	3
REMOVE ET 495: Topics in Engineering Technology	Electives in the Field	3	**ADD** CE 473: Reinforced Concrete Design II	Electives in the Field	3
REMOVE ENGR 490: Fundamentals of Engineering (FE)	Electives in the Field	3	**ADD** CE 474: Prestressed Concrete Design	Electives in the Field	3
REMOVE ETM 467: Applied Finite Element Analysis	Electives in the Field	3			
REMOVE MATH 222: Calculus III	Electives in the Field	4			

Description of Related Modification *(Provide a summary of other changes necessitated by curricular modification such as admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.)*

None

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*

No additional resources are required to implement this program modification. Details are located in the pro forma budget narrative.

Other Considerations

The total number of credits in our proposed Civil Engineering program will be reduced from 130 to 128. Such reduction can make our program more competitive among other similar programs and more attractive to future students.

Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	Fall Term, Year 2017____		Fall Term, Year _2018___		Fall Term, Year _2019___	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Transfers In						
New Students	14	3	16	1	24	2
Returning Students	81	15	72	26	50	20
ACTUAL Headcount Enrollment	113		115		96	
Fall FTE accounted for by Program Majors	101.4		95.9		82.1	
Size of Credentialed Group(s) for Given Year	20		22		27	

Curriculum Details for a Program Modification *(to be used as appropriate for specific modification request)*[2]

Course Number and Name [3]	**L.O. #**	**Pre-Requisite**	**Cr Hrs**	**Course Number and Name**	**L.O. #**	**Cr Hrs**
Program Core Courses				**Other Related/Special Requirements**		
ENGR 150 Intro. to Engineering	1,5,6	None	3	CHEM 161 & 162 Gen. Chemistry I with Lab.	1,2,3,5	4
ENGR 240 Spreadsheet & Prob. Solv. Tools	**1,5,11**	**ENGR 150, MATH 135 or MATH 152**	**3**	MATH 226 Linear Algebra and Prob. for Engr.	1,5	4
ENGR 251 Engr. Mech. I - Statics	1,5	ENGR 150 or PHYS 220, PHYS 125, MATH 221	3	MATH 355 Intro. to Differential Equations	1	4
ENGR 252 Engr. Mech. II - Dynamics	1,5,11	ENGR 251	3	BIO/BMS/GSCI Additional Science Elective	1,2,4, 11	4
ENGR 357 Mechanics of Materials	1,5	ENGR 251	3			
ME 354 Fluid Mechanics	1,2,5	ENGR 251, ME 258 or CE 376, MATH 355	3			
CE 222 CAD App. in CE	**1,11**	**ENGR 150**	**2**			
CE 253 Intro. to Engr. Surveying	1,2,4,5,11	ENGR 150, MATH 152	3			
CE 301 CE Fundamental Computations	1	ENGR 240, ENGR 251, ME	1			

[2] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**

[3] Make any detailed annotations for individual courses as needed to understand the curricular modifications taking place

		258, CE 253, ENGR 357				
CE 356 Civil Engr. Materials	**1,2,7**	**CHEM 161, CHEM 162; ENGR 251**	**3**			
CE 360 Traffic Engineering	**1,2,3**	**ENGR 240, MATH 226**	**3**			
CE 375 Hydraulic Engineering	1,3,5,11	MATH 221, ME 354	3			
CE 376 Environmental Engineering	1,5	CHEM 161, CHEM 162, PHYS 126, MATH 221	3			
CE 397 Structural Analysis I	1,5	MATH 221, ENGR 357, CE 301	3			
CE 407 Structural Analysis II	1,5	CE 301, CE 397	3			
CE 451 Soil Mechanics /w Lab.	2,4,11	ENGR 357, CE 301	3			
CE 452 Foundation Engineering	**2,3,11**	**CE 397, CE 451**	**3**			
CE 460 Highway Design and Construction	**1,8,10**	**CE 222, CE 253, CE 360**	**3**			
CE 470 Structural Steel Design	3,5,11	CE 397	3			
CE 471 Reinforced Concrete Structures	3,5,11	CE 301, ENGR 357, CE 397	3			
CE 475 Hydrology and Storm Drainage	1,3,5,11	ME 354, CE 375	3			
CE 497 Prof. Practice & Sr. Project Research	3,4,6,9,11	CE 301, CE 375, CE 452, CE 460, CE 470, CE 475	2			
CE 498 Senior Design Project (Capstone)	3,4,6,9,11	CE 497	2			
Core Course Prerequisites				**Elective Courses in the Field**		
MATH 135 Applied Engineering Calculus I			3	CE 402 Inquiry and Research in Civil Engineering	2,11	1
MATH 152 Calculus I			4	**CE 357 Advanced Surveying**	**1,2**	**3**
MATH 221 Calculus II			4	**CE 458 Introduction to GPS for Engineering**	**1,2,4, 5,11**	**3**
PHYS 125 University Physics I			4	CE 472 Timber Structures	3,5,11	3
PHYS 126 University Physics II			4	**CE 473 Reinforced Concrete Design II**	**3,5,11**	**3**
PHYS 220 Mechanics I			3	**CE 474 Prestressed Concrete Design**	**3,5,11**	**3**
ME 258 Engineering Thermodynamics			3	CE 477 Environmental Engineering Treatment Processes	1,5	3
				CE 490 NCEES Fundamental Civil Engineering Subjects	1,5	2
				CE 491 NCEES Advanced Civil Engineering Subjects		1
				CE 495 Topics in Civil Engineering		3
Total Other Credits Required to Issue Modified Credential						

Bolded courses indicate new offerings.

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. an ability to apply knowledge of mathematics, science, and engineering
2. an ability to design and conduct experiments, as well as to analyze and interpret data
3. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
4. an ability to function on multidisciplinary teams
5. an ability to identify, formulate, and solve engineering problems
6. an understanding of professional and ethical responsibility
7. an ability to communicate effectively
8. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
9. a recognition of the need for, and an ability to engage in lifelong learning
10. a knowledge of contemporary issues
11. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

Cost Effectiveness and Availability of Adequate Resources

(Complete the PRO FORMA Budget – Resources and Expenditure Projections on page 6 and provide a narrative below regarding the cost effectiveness and availability of adequate resources for the proposed program. Add any annotations for the budget form below, as well.)

[i]Projected enrollments are conservatively based on Fall 2019 enrollments and assume no growth.

[ii]AY2020-21 tuition revenue is calculated using the AY2020-21 Fee schedule for in-state tuition. For full-time undergraduates, tuition was estimated at $3,081 per term plus the University General Fee less accident insurance ($1,992). We assumed that PT students would take seven credits per semester, resulting in $3,969 of revenue per student ($257 tuition per credit, $310 general fee per credit, and $58 registration fee). Conservative tuition increases of 4% were built into each subsequent year.

[iii]Program-specific fees include lab fees which were estimated at $60 for full-time students and $20 for part-time students.

[iv]Full-time instructional cost projections were based on Fall 2019 actual instruction. FT faculty taught the equivalent of 30 credits. We estimated FT salary using the median of current faculty teaching within the program, and then projected a 5.5% increase and added a fringe rate of 75.28%. Yearly increases of 5% in salary and 2% in fringe were applied.

[v]Part-time instructional cost projections were based on Fall 2019 actual instruction. PT faculty taught the equivalent of 15 credits. We estimated PT salary using the Class B lecturer rate for AY2020-21 ($1,764 per credit). Yearly increases of 5% in salary and 2% in fringe were applied.

[vi]An administrative professional is anticipated to spend approximately 5% of their time in direct support of the BS in Civil Engineering. With 75.28% fringe and a 3% COLA added each year, expected expenses range from $5,479 to $5,812. In addition, a computer technician is expected to support the program approximately 5% of the time. With 75.28% fringe and 3% yearly COLA, anticipated expenses range from $7,748 to $8,220.

[vii]Replacement costs for non-capital equipment are covered by the program fees collected as revenue.

[viii]Other costs include an estimated $100 per FTE student in licensing fees for specialized software. CCSU already supports all of the software for this program.

PRO FORMA Budget - Projected Revenues and Expenditures
(Whole Dollars Only)

PROJECTED Program Revenue[i]	Fall 2020	Fall 2021	Fall 2022
[ii]Tuition (do not include internal transfers)	$ 468,876	$ 487,385	$ 506,634
[iii]Program-Specific Fees	$ 4,880	$ 4,880	$ 4,880
Other Revenue (Annotate in narrative)	$ -	$ -	$ -
Total Estimated Program Revenue	**$ 473,756**	**$ 492,265**	**$ 511,514**

PROJECTED Program Expenditures*	Fall 2020	Fall 2021	Fall 2022
Administration (Chair or Coordinator)	$ -	$ -	$ -
[iv]Faculty (Full-time, total for program)	$ 224,433	$ 238,344	$ 253,084
[v]Faculty (Part-time, total for program)	$ 34,663	$ 36,150	$ 37,706
[vi]Support Staff	$ 13,227	$ 13,624	$ 14,032
Library Resources Program	$ -	$ -	$ -
[vii]Equipment (List as needed)	$ 4,880	$ 4,880	$ 4,880
[i]Other (e.g. student services)	$ 8,200	$ 8,200	$ 8,200
Estimated Indirect Costs (e.g. student services, operations, maintenance)	$ -	$ -	$ -
Total Estimated Program Expenditures	**$ 285,403**	**$ 301,197**	**$ 317,903**

*Note: Capital outlay costs, institutional spending for research and services, etc. can be excluded.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Modification of a Program

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the modification of a degree program, English (CIP Code: 23.0101 / OHE #00079), leading to a Bachelor of Arts at Central Connecticut State University.

A True Copy:

_____

Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Modification of a degree program in English leading to a Bachelor of Arts at Central Connecticut State University.

BACKGROUND

The Department of English believes that students should begin work in their major with 200-level surveys and that the primary emphasis in the major is on literature written in English: British and American. For this reason, we have reconfigured the curriculum to ensure that students complete one of the two-course surveys in either British or American literature, plus take at least one of the surveys from the other tradition. But there are other 200-level courses that previously have not counted toward the major at all. Many students who become English majors have first taken one of these courses and we want students who have worked hard in them to be able to count the class should that student choose the major after an experience in one of these classes. This flexibility will also be of great help to students who transfer in 200-level classes that do not correspond to one of our own offerings. The only other change is to delete three WRT courses from the list of possible electives as these courses have been deleted from the curriculum.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic Council that the Board of Regents approve this program modification. The System's Provost and Senior Vice President for Academic and Student Affairs concurs with this recommendation.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 23.0101 Title of CIP Code English Language and Literature, General

Name of Program: **English**

Degree: Title of Award *(e.g. Master of Arts)* **BA**

Stand-Alone Certificate: *(specify type and level)*

Date Program was Initiated: January 01, 1976 OHE#: 00079

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 38-40

Credits in Program Core Courses: 15

Credits of Electives in the Field: 27

Credits of Free Electives: 17-22

Cr Special Requirements *(include internship, etc.):* 18-21 (minor)

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Type of Program Modification Approval Being Sought (mark all that apply):

X Significant Modification of Courses/Course Substitutions*

Offering of Program at Off-Campus Location (specify new location)

Offering of Program Using an Alternate Modality (e.g. from on ground to online)

Change of Degree Title or Program Title

***Significant** is defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program.

Modified Program Characteristics

Name of Program: English

Degree: Title of Award *(e.g. Master of Arts)* **BA**

Certificate[1]: *(specify type and level)*

Program Initiation Date: Fall 2020

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Modified Program Credit Distribution

Credits in General Education: 38-40

Credits in Program Core Courses: 18

Credits of Electives in the Field: 24

Credits of Free Electives: 17-22

Cr Special Requirements *(include internship, etc.):* 18-21

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Total Number of courses and course credits to be modified by this application: **11 courses; 33 credits**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):

Program Discontinued: CIP: OHE#: Accreditation Date:

Phase Out Period Date of Program Termination

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional license, please identify:

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

Institutional Contact for this Proposal: Dr. Mary Anne Nunn Title: Associate Professor, English Tel.: 860.832.2778 e- mail: nunnm@ccsu.edu

[1] If creating a Stand-Alone Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information about that program in the "Original Program" section.

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Ammon College of Liberal Arts and Social Sciences; main campus

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION

(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

The Department of English believes that students should begin work in their major with 200-level surveys and that the primary emphasis in the major is on literature written in English: British and American. For this reason, we have reconfigured the curriculum to ensure that students complete one of the two-course surveys in either British or American literature, plus take at least one of the surveys from the other tradition. But there are other 200-level courses that previously have not counted toward the major at all. Many students who become English majors have first taken one of these courses and we want students who have worked hard in them to be able to count the class should that student choose the major after an experience in one of these classes. This flexibility will also be of great help to students who transfer in 200-level classes that do not correspond to one of our own offerings. The only other change is to delete three WRT courses from the list of possible electives as these courses have been deleted from the curriculum due to a change in the curriculum that now has students complete the writing sequence with a Capstone course. Students can still choose among four writing courses to satisfy 3 of 9 required credits from 300/400-level electives.

As applicable, please describe:

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

  Abilities to read complex texts in order to understand them accurately and completely, as well as to analyze them critically and report that analysis effectively, are all primary workforce skills.

- How does the program make use of the strengths of the institution (*e.g. curriculum, faculty, resources)* and of its distinctive character and/or location?

  The faculty in CCSU's English department are active scholars who can not only guide students to the most current discipline discussions, but also to participate in those discussions themselves. Many English faculty also regularly teach courses abroad.

- Please describe any transfer agreements with CSCU institutions that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

  n/a

- Please indicate what similar programs exist in other institutions within the CSCU System, and how unnecessary duplication is being avoided

  It is a rare institution of higher education that does not have an English program, but that is wealth, not duplication.

- Please provide a description/analysis of employment prospects for graduates of this proposed program.

  CCSU's recent English graduates have been very successful in beginning impressive careers in fields as varied as pharmaceuticals, university assessment, non-profits at both the local and national levels, library science, and publishing. According to the CT Department of Labor's Higher Education/Workforce Report Card, 74.1% of 2015-2018 CCSU

graduates from English Language and Literature/Letters found employment within Connecticut. Notably, the percentage across all Connecticut State Universities is lower at 70.4%.

Present side-by-side listing of curricular modification: (From **Original** to **Modified**)

Original Course	Course Type	Credits	Modified	Course Type	Credits
CHANGE requirement to take ENG 205 and 210	Core	6	**TO** requirement to complete **either** ENG 205-6 **or** 210-11	Core	6
CHANGE requirement to take either ENG 203 or 204	Core	3	**TO** requirement to take one more from among ENG 205, 206, 210, and 211	Core	3
CHANGE requirement to take an additional course from among ENG 203, 204, 206 or 211	Core	3	**TO** requirement to take one more 200-level course, excluding ENG 298	Core	3
REMOVE WRT 483, WRT 484, and WRT 485 from potential electives in the field because these courses were deleted from the curriculum when the Capstone course was developed. (Four writing courses remain as a potential elective.)	Electives in the Field	3			

Description of Related Modification *(Provide a summary of other changes necessitated by curricular modification such as admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.)*

n/a

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*

None. All courses are already offered and have additional capacity should enrollments increase.

Other Considerations

None.

Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	Fall Term, Year 2017		Fall Term, Year 2018		Fall Term, Year 2019	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Transfers In						
New Students	16		12	1	13	1
Returning Students	79	28	82	24	69	26
ACTUAL Headcount Enrollment	123		119		109	
Fall FTE accounted for by Program Majors	104		101.3		90.5	
Size of Credentialed Group(s) for Given Year	42		52		56	

Curriculum Details for a Program Modification *(to be used as appropriate for specific modification request)*[2]

Course Number and Name [3]	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
ENG 298 Introduction to Literary Studies	1,2,3,4	WRT 105 or WRT 110 (C- or higher) or equivalent.	3	Depending on its topic, ENG 398 may count as one of the 300-400 level required or elective literature courses.	--	
ENG 398 Topics in Literary Theory and Research	1,2,4,5,6	ENG 298	[0]3	All variable-topic courses (ENG 348, ENG 358, ENG 388, ENG 448, ENG 458, ENG 449, and ENG 488) may be taken twice under different topics.	--	
ENG 205 Survey in British Literature: Middle Ages to the 18th Century or ENG 206 Survey of British Literature: Romanticism to the Present or ENG 210 Survey of American Literature: Pre-Civil War or ENG 211 Survey of American Literature: Civil War to the Present	2,5	WRT 105 or WRT 110 (may be taken concurrently)	9	ENG 220 may be used to satisfy the British pre-1798 requirement or as one of the literature electives.	--	
The remaining British or American Survey course or any 200-level literature course, excluding 298	2,5	WRT 105 or WRT 110 (may be taken concurrently)	3	Students' 24 credits in 300/400 level courses must include at least nine credits in literature courses at the 300 level and at least six credits in literature courses at the 400 level	--	
LING 200 Introduction to Linguistics Or LING 230 The Study of Language Or LING 400 Linguistics Analysis Or LING 430 Topics in Applied Linguistics Or LING 431 The History of the English Language	5		3			
Core Course Prerequisites				**Elective Courses in the Field**		
WRT 105 or WRT 110 (C- or higher) or equivalent.				6 credits in British literature, at least one in a period preceding 1798 and at least one in a period following 1798;	Various	6

[2] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**

[3] Make any detailed annotations for individual courses as needed to understand the curricular modifications taking place

ENG 298		6 credits in American literature, one in a period preceding 1865 and one in a period following 1865	Various	6
		3 credits in world literature	Various	3
		9 credits of 300/400-level electives drawn from English literature or film courses or selected writing courses (WRT 372, WRT 374, WRT 375, WRT 401, only one writing course may be used as an elective).	Various	9
Total Other Credits Required to Issue Modified Credential				

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Students will closely read such literary genres as poetry, prose fiction, and drama in order to interpret them not only in terms of content, but also in terms of literary style.
2. Students will develop a substantive claim about works of literature.
3. Students will support a substantive claim about works of literature using literary-critical techniques.
4. Students will quote primary sources effectively in support of a critical argument.
5. Students will, when appropriate, effectively analyze and integrate secondary source material into their own arguments.
6. Students will situate works of literature in terms of the cultural, literary, historical, and/or biographical context in which they were produced.

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

Cost Effectiveness and Availability of Adequate Resources

(Please complete the Pro-Forma Budget – Projected Revenues and Expenditures on the following page. Provide any necessary annotations for the Pro-Forma Budget and other commentary regarding the cost effectiveness and availability of adequate resources for the proposed modification below:

[i]Projected enrollments are conservatively based on Fall 2019 enrollments and assume no growth.

[ii]AY2020-21 tuition revenue is calculated using the AY2020-21 Fee schedule for in-state tuition. For full-time undergraduates, tuition was estimated at $3,081 per term plus the University General Fee less accident insurance ($1,992). We assumed that PT students would take seven credits per semester, resulting in $3,969 of revenue per student ($257 tuition per credit, $310 general fee per credit, and $58 registration fee). Conservative tuition increases of 4% were built into each subsequent year.

[iii]Full-time instructional cost projections were based on Fall 2019 actual instruction. FT faculty taught the equivalent of 51 credits. We estimated FT salary using the median of current faculty teaching within the program plus anticipated increases of 5.5% in salary and average fringe rate of 75.28%. Yearly increases of 5% in salary and 2% in fringe were applied.

[iv]Part-time instructional cost projections were based on Fall 2019 actual instruction. PT faculty taught the equivalent of 9 credits. We estimated PT salary using the Class C lecturer rate for AY2020-21 ($1,833 per credit) and 33% in fringe. Yearly increases of 5% in salary and 2% in fringe were applied.

[v]An administrative professional is anticipated to spend approximately 25% of their time in direct support of the BA in English.

With 75.28% fringe and a 3% COLA added each year, expected expenses range from $25,986 to $27,546.

PRO FORMA Budget - Projected Revenues and Expenditures
(Whole Dollars Only)

PROJECTED Program Revenue[i]	Fall 2020	Fall 2021	Fall 2022
[ii]Tuition (do not include internal transfers)	$ 594,691	$ 618,414	$ 643,085
Program-Specific Fees	$ -	$ -	$ -
Other Revenue (Annotate in narrative)	$ -	$ -	$ -
Total Estimated Program Revenue	**$ 594,691**	**$ 618,414**	**$ 643,085**

PROJECTED Program Expenditures*	Fall 2020	Fall 2021	Fall 2022
Administration (Chair or Coordinator)	$ -	$ -	$ -
[iii]Faculty (Full-time, total for program)	$ 378,630	$ 402,098	$ 426,966
[iv]Faculty (Part-time, total for program)	$ 21,611	$ 22,538	$ 23,509
[v]Support Staff	$ 25,965	$ 26,744	$ 27,546
Library Resources Program	$ -	$ -	$ -
Equipment (List as needed)	$ -	$ -	$ -
Other (e.g. student services)	$ -	$ -	$ -
Estimated Indirect Costs (e.g. student services, operations, maintenance)	$ -	$ -	$ -
Total Estimated Program Expenditures	**$ 426,207**	**$ 451,380**	**$ 478,021**

*Note: Capital outlay costs, institutional spending for research and services, etc. can be excluded.

This PRO FORMA Budget provides reasonable assurance that the proposed program modification can be established and is sustainable. Some assumptions and/or formulaic methodology may be used and annotated in narrative on page 4 of Application.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Modification of a Program

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the modification of a degree program, Mathematics (CIP Code: 27.0101 / OHE #00084), leading to a Bachelor of Arts at Central Connecticut State University.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Modification of a degree program in Mathematics (CIP Code: 27.0101 / OHE #00084), leading to a Bachelor of Arts at Central Connecticut State University.

BACKGROUND

CCSU proposes two main changes to the Mathematics BA. First, CCSU is making a minor change to the 6 credits of electives in the field by adding three courses between 1 and 4 credits to the list of alternatives.

The major modification is establishing a concentration in Pure Mathematics. Based on feedback from recent graduates and students who opt to take far more than the minimum of 38 mathematics credits required for the Mathematics BA, there is demand for a concentration in "pure mathematics". The proposed concentration will require 58 credits of mathematics and no minor, providing our students with much stronger preparation for graduate school or for careers involving more advanced mathematics.

In addition to the Mathematics BA and BS for postsecondary certification, we offer concentrations in Statistics and Actuarial Science. Further, we offer graduate programs in Mathematics (MS) and in Data Science (OCP and MS). Forming a Mathematics BA with a concentration in Pure Mathematics is a logical next step that could produce a pathway for accelerated options into the Mathematics MS.

Students with training in pure mathematics advance to multiple industries including medicine and law enforcement, and are critical for developing predictive models including those involving the spread of disease.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic Council that the Board of Regents approve this program modification. The System's Provost and Senior Vice President for Academic and Student Affairs concurs with this recommendation.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 27.0101 Title of CIP Code Mathematics, General

Name of Program: Mathematics

Degree: Title of Award *(e.g. Master of Arts)* **BA**

Stand-Alone Certificate: *(specify type and level)*

Date Program was Initiated: 01/01/1976 OHE#: 00084

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 38-40

Credits in Program Core Courses: 32

Credits of Electives in the Field: 6

Credits of Free Electives: 21-26

Cr Special Requirements *(include internship, etc.):* 18-21

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Type of Program Modification Approval Being Sought (mark all that apply):

X Significant Modification of Courses/Course Substitutions*

Offering of Program at Off-Campus Location (specify new location)

Offering of Program Using an Alternate Modality (e.g. from on ground to online)

X Change of Degree Title or Program Title

***Significant** is defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program.

Modified Program Characteristics

Name of Program: Mathematics

Degree: Title of Award *(e.g. Master of Arts)* **BA**

Certificate[1]: *(specify type and level)*

Program Initiation Date: Fall 2020

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Other: Adding a concentration in Pure Mathematics.

Modified Program Credit Distribution

Credits in General Education: 38-40

Credits in Program Core Courses: 43

Credits of Electives in the Field: 15

Credits of Free Electives: 22-24

Cr Special Requirements *(include internship, etc.):*

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Total Number of courses and course credits to be modified by this application: **21 courses; 65 credits**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):

Program Discontinued: CIP: OHE#: Accreditation Date:

Phase Out Period Date of Program Termination

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional license, please identify:

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

Institutional Contact for this Proposal: Dr. Marian Anton Title: Associate Professor of Mathematics Tel.: 860-832-1941 e- mail: anton@ccsu.edu

[1] If creating a Stand-Alone Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information about that program in the "Original Program" section.

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: School of Engineering, Science, and Technology, main campus

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION

(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

We propose two main changes to the Mathematics BA. First, we are making a minor change to the 6 credits of electives in the field by adding three courses between 1 and 4 credits to the list of alternatives.

The major modification is establishing a concentration in Pure Mathematics. Based on feedback from recent graduates and students who opt to take far more than the minimum of 38 mathematics credits required for the Mathematics BA, there is demand for a concentration in "pure mathematics". The proposed concentration will require 58 credits of mathematics and no minor, providing our students with much stronger preparation for graduate school or for careers involving more advanced mathematics.

As applicable, please describe:

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

  Students with training in pure mathematics advance multiple industries including medicine, law enforcement, and are critical for developing predictive models including those involving the spread of disease.

- How does the program make use of the strengths of the institution (*e.g. curriculum, faculty, resources)* and of its distinctive character and/or location?

  The department of Mathematical Sciences at CCSU houses 30 full-time faculty. Our faculty have expertise in geometry and topology, setting our program apart from others.

  In addition to the Mathematics BA and BS for postsecondary certification, we offer concentrations in Statistics and Actuarial Science. Further, we offer graduate programs in Mathematics (MS) and in Data Science (OCP and MS). Forming a Mathematics BA with a concentration in Pure Mathematics is a logical next step that could produce a pathway for accelerated options into the Mathematics MS.

- Please describe any transfer agreements with CSCU institutions that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

  n/a

- Please indicate what similar programs exist in other institutions within the CSCU System, and how unnecessary duplication is being avoided

  All other state universities have Mathematics programs. As mathematics is foundational to an institution of higher education, offering a concentration to satisfy the needs of current students does not produce unnecessary duplication. In addition, capitalizing on our faculty's expertise in geometry and topology sets our concentration in pure mathematics apart from other offerings.

- Please provide a description/analysis of employment prospects for graduates of this proposed program

Mathematicians are in demand. According to the CT Department of Labor, occupations in the mathematical sciences are projected to grow 27.4% between 2016-2026. Nationally, the employment of mathematicians and statisticians is projected to grow 30% from 2018 to 2028. Of the top best jobs of 2019 on CareerCast, Data Scientist was #1, Statistician was #2, and Mathematician was #8.

Present side-by-side listing of curricular modification: (From **Original** to **Modified**)

Mathematics BA

Original	Course Type	Credits	Modified	Course Type	Credits
			ADD MATH 422: Introduction to Mathematical Software MATH 483: Introduction to Topology; MATH 485: Introduction to Differential Geometry	Electives in the Field	1 or 4

Mathematics BA with Concentration in Pure Mathematics

Original in Mathematics BA	Course Type	Credits	Modified in Mathematics BA with Concentration in Pure Math	Course Type	Credits
MOVE STAT 315: Mathematical Statistics I	Electives in the Field	3	**TO** STAT 315: Mathematical Statistics I	Core	3
MOVE MATH 355: Introduction to Differential Equations with Applications	Electives in the Field	4	**TO** MATH 355: Introduction to Differential Equations with Applications	Core	4
			ADD MATH 483: Introduction to Topology OR MATH 485: Introduction to Differential Geometry	Core	4
REMOVE nine courses from list of potential electives in the field	Electives in the Field		**ADD** nine courses (MATH 422, 483, 485, 515, 516, 519, 520, 523, 526)	Electives in the Field	9

Description of Related Modification *(Provide a summary of other changes necessitated by curricular modification such as admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.)*

None.

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*

None. All courses are already offered at CCSU.

Other Considerations

None.

Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	Fall Term, Year 2017		Fall Term, Year 2018		Fall Term, Year 2019	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time

Transfers In						
New Students	12	3	16	3	21	2
Returning Students	62	24	49	23	55	27
ACTUAL Headcount Enrollment	102		91		105	
Fall FTE accounted for by Program Majors	85.7		74.7		85.1	
Size of Credentialed Group(s) for Given Year	28		20		19	

Curriculum Details for a Program Modification
MATHEMATICS BA

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
MATH 152: Calculus I	1		4			
MATH 218: Discrete Mathematics	2		4			
MATH 221: Calculus II	1		4			
MATH 222: Calculus III	1		4			
MATH 228: Introduction to Linear Algebra	2		4			
MATH 366: Introduction to Abstract Algebra	2, 3		4			
MATH 377: Introduction to Real Analysis	1, 3		4			
MATH 450: Seminar in Proof	3		4			
Core Course Prerequisites				**Elective Courses in the Field**		
MATH 152: MATH 115 (C- or higher) and MATH 116 (C- or higher), or MATH 119 (C- or higher).				6 Credits from:		
				MATH 300: Mathematics Internship	various	3
MATH 218, 221: MATH 152 (C- or higher).				MATH 355: Introduction to Differential Equations with Applications	1	4
MATH 222: MATH 221 (C- or higher).				MATH 383 College Geometry		3
				MATH 398 Independent Study in Mathematics	various	1-3
MATH 228: MATH 152 and MATH 218 both with grades of C- or higher.				MATH 400 Introduction to Mathematica		4
STAT 315: MATH 221; and MATH 218 or permission of department chair.				MATH 421 History of Mathematics		3
MATH 366: MATH 218 (C- or higher).				**MATH 422 Introduction to Mathematical Software**		**1**
MATH 377: MATH 218 (C- or higher) and MATH 221 (C- or higher)				MATH 440 Selected Topics in Mathematics		1-3
MATH 450: MATH 366 and MATH 377 (both with grades of C- or higher), one of which may be taken concurrently.				MATH 455 Introduction to Partial Differential Equations with		4

		Applications		
MATH 450: MATH 366 and MATH 377 (both with grades of C- or higher), one of which may be taken concurrently.		MATH 465 Introduction to Fractal Geometry and Chaos		3
		MATH 468 Symbolic Logic		3
		MATH 469 Number Theory		3
		MATH 477 Numerical Analysis		3
		MATH 483 Introduction to Topology		**4**
		MATH 485 Introduction to Differential Geometry		**4**
		MATH 491 Advanced Vector Calculus		3
		STAT 315: Mathematical Statistics I	2	3
		STAT 416 Mathematical Statistics II		3
		STAT 425 Loss and Frequency Distributions and Credibility Theory		3
		STAT 455 Experimental Design		3
		STAT 456 Statistical Computation		3
		STAT 465 Nonparametric Statistics		3
		ACTL 335 Financial Mathematics I		3
		ACTL 465 Long Term Actuarial Models		4
		ACTL 481 Review-SOA/CAS Course I		3
		ACTL 482 Financial Mathematics II		3
Total Other Credits Required to Issue Modified Credential				

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Understand basic analytic arguments using common notions as epsilon/delta, infinite sums, and limits.
2. Understand basic algebraic and discrete notions, such as facts about vector spaces and counting arguments.
3. Be able to independently investigate more advanced topics in mathematics and present their results to others in a clear way.

Curriculum Details for a Program Modification
MATHEMATICS BA WITH CONCENTRATION IN PURE MATHEMATICS

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
MATH 152: Calculus I	1		4			
MATH 218: Discrete	2		4			

Mathematics						
MATH 221: Calculus II	1		4			
MATH 222: Calculus III	1		4			
MATH 228: Introduction to Linear Algebra	2		4			
STAT 315: Mathematical Statistics I	**2**		**3**			
MATH 355: Introduction to Differential Equations with Applications	**1**		**4**			
MATH 366: Introduction to Abstract Algebra	2, 3		4			
MATH 377: Introduction to Real Analysis	1, 3		4			
MATH 450: Seminar in Proof	3		4			
MATH 483: Introduction to Topology Or MATH 485: Introduction to Differential Geometry	**2, 3**		**4**			
Core Course Prerequisites				**Elective Courses in the Field**		
MATH 152: MATH 115 (C- or higher) and MATH 116 (C- or higher), or MATH 119 (C- or higher).				**15 Credits from**:		
MATH 218, 221: MATH 152 (C- or higher).				MATH 383 College Geometry		3
MATH 222: MATH 221 (C- or higher).				MATH 400 Introduction to Mathematica		4
MATH 228: MATH 152 and MATH 218 both with grades of C- or higher.				MATH 421 History of Mathematics		3
STAT 315: MATH 221; and MATH 218 or permission of department chair.				MATH 422 Introduction to Mathematical Software		1
MATH 355: MATH 221 and either MATH 226 or MATH 228 (C- or higher).				MATH 440 Selected Topics in Mathematics		1-3
MATH 366: MATH 218 (C- or higher).				MATH 455 Introduction to Partial Differential Equations with Applications		4
MATH 377: MATH 218 (C- or higher) and MATH 221 (C- or higher)				MATH 465 Introduction to Fractal Geometry and Chaos		3
MATH 450: MATH 366 and MATH 377 (both with grades of C- or higher), one of which may be taken concurrently.				MATH 468 Symbolic Logic		3
MATH 483: MATH 377 with a C- or better, or permission of instructor.				MATH 469 Number Theory		3
MATH 485: MATH 222, and either MATH 226 or MATH 228 (all with a grade of C- or higher). Admission to a Master's program is also an acceptable prerequisite.				MATH 477 Numerical Analysis		3
				MATH 483 Introduction to Topology		4
				MATH 485 Introduction to Differential Geometry		4
				MATH 491 Advanced Vector		3

		Calculus		
		MATH 515 Abstract Algebra I		4
		MATH 516 Abstract Algebra II		4
		MATH 519 Principles of Real Analysis I		4
		MATH 520 Principles of Real Analysis II		4
		MATH 523 General Topology		4
		MATH 526 Complex Variables		4
		STAT 416 Mathematical Statistics II		3
		ACTL 335 Financial Mathematics I		3
Total Other Credits Required to Issue Modified Credential				

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Understand basic analytic arguments using common notions as epsilon/delta, infinite sums, and limits.
2. Understand basic algebraic and discrete notions, such as facts about vector spaces and counting arguments.
3. Be able to independently investigate more advanced topics in mathematics and present their results to others in a clear way.

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

Cost Effectiveness and Availability of Adequate Resources

(Please complete the Pro-Forma Budget – Projected Revenues and Expenditures on the following page. Provide any necessary annotations for the Pro-Forma Budget and other commentary regarding the cost effectiveness and availability of adequate resources for the proposed modification below:

[i]Projected enrollments are conservatively based on Fall 2019 enrollments and assume no growth.

[ii]AY2020-21 tuition revenue is calculated using the AY2020-21 Fee schedule for in-state tuition. For full-time undergraduates, tuition was estimated at $3,081 per term plus the University General Fee less accident insurance ($1,992). We assumed that PT students would take seven credits per semester, resulting in $3,969 of revenue per student ($257 tuition per credit, $310 general fee per credit, and $58 registration fee). Conservative tuition increases of 4% were built into each subsequent year.

[iii]Generally, only full-time faculty teach advanced mathematics. Full-time instructional cost projections were based on Fall 2019 actual instruction. FT faculty taught the equivalent of 28 credits for Mathematics BA students. We estimated FT salary using the median of current faculty teaching within the program plus anticipated increases of 5.5% salary and average fringe rate of 75.28%. Yearly increases of 5% in salary and 2% in fringe were applied.

[iv]An administrative professional is anticipated to spend approximately 35% of their time in direct support of the BS in Mathematics. With 75.28% fringe and a 3% COLA added each year, expected expenses range from $61,656 to $65,411.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM***
PRO FORMA Budget - Projected Revenues and Expenditures
(Whole Dollars Only)

PROJECTED Program Revenue[i]	Fall 2020	Fall 2021	Fall 2022
Tuition (do not include internal transfers)[ii]	$ 502,331	$ 522,357	$ 543,184
Program-Specific Fees	$ -	$ -	$ -
Other Revenue (Annotate in narrative)	$ -	$ -	$ -
Total Estimated Program Revenue	**$ 502,331**	**$ 522,357**	**$ 543,184**

PROJECTED Program Expenditures*	Fall 2020	Fall 2021	Fall 2022
Administration (Chair or Coordinator)	$ -	$ -	$ -
Faculty (Full-time, total for program)[iii]	$ 201,486	$ 213,974	$ 227,208
Faculty (Part-time, total for program)	$ -	$ -	$ -
Support Staff[iv]	$ 61,656	$ 63,506	$ 65,411
Library Resources Program	$ -	$ -	$ -
Equipment (List as needed)	$ -	$ -	$ -
Other (e.g. student services)	$ -	$ -	$ -
Estimated Indirect Costs (e.g. student services, operations, maintenance)	$ -	$ -	$ -
Total Estimated Program Expenditures	**$ 263,142**	**$ 277,480**	**$ 292,619**

*Note: Capital outlay costs, institutional spending for research and services, etc. can be excluded.

This PRO FORMA Budget provides reasonable assurance that the proposed program modification can be established and is sustainable. Some assumptions and/or formulaic methodology may be used and annotated in narrative on page 4 of Application.

Southern Connecticut State University

Office of the Provost and Vice President of Academic Affairs

Memorandum

To: Provost Gates
From: Trudy Milburn
CC: Robert Prezant, Stephen Hegedus
Date: May 29, 2020

We would like to request to change the date of the scheduled review of the Masters of Arts and Teaching (MAT) for continued licensure and accreditation from Fall 2020 to Fall 2021 due to the change in the start date of the program. Thank you for your consideration.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Replication of a College of Technology Program

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the replication of a College of Technology Program in Technology Studies: Data Science Option (CIP Code: 30.7001) – leading to an Associate of Science at Capital Community College; and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020.

A True Copy:

_____

Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Approval of the replication of an Associate of Science: College of Technology Program in Technology Studies: Data Science Option at Capital Community College.

BACKGROUND

Per Board of Regents Policy, Community colleges may replicate a College of Technology's Engineering Science or Technology Studies academic program (Associate of Science degree, Certificate, and Program Option) or modification previously approved by the Board of Regents for another Community College. Capital Community College intends to create a Technology Studies: Data Science Option that mirrors the program and curriculum at Northwestern Community College approved by the Board of Regents on September 19, 2019.

Capital Community College (CCC) seeks to replicate the Technology Studies: Data Science A.S. Option developed by Northwestern Community College so CCC students can pursue careers and academic pathways in Data Science, and CCC can leverage its faculty expertise in this area to expand its course and program offerings in science and technology. As was stated in the original program proposal by NCCC, the Technology Studies: Data Science A.S. degree option provides exposure and essential applications in key elements of data science including data structures and data sources, programming languages, statistical principles, computing and analytics, data management, machine learning tools, and data science applications.

Since Data Science is an emerging field, it does not yet appear on national or state occupational outlook projection tables; however related computer science and mathematics occupations show significant growth projected both nationally and regionally.

The Technology Studies: Data Science A.S. degree option will provide CCC students the opportunity to acquire an entry-level position in this growing field or transfer to a baccalaureate institution to obtain a B.S. in Data Science, Mathematics, or Computer Science. In particular, several CT State Universities have recently started to offer programs in Data Science in addition to other programs in Data Analytics at the University of St. Joseph, University of Hartford, and UCONN where CCC students often transfer.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic Council that the Board of Regents approve the replication of this College of Technology Program. The System's Provost and Senior Vice President for Academic and Student Affairs concurs with this recommendation.

April 16, 2020

Dr. Karen Wosczyna-Birch
State Director, College of Technology
Connecticut State College and Universities
271 Scott Swamp Road
Farmington, CT 06032

Dear Dr. Wosczyna-Birch,

As Chief Academic Officer of Capital Community College, I am requesting approval from the College of Technology (COT) and the Connecticut Board of Regents for Higher Education (BOR) for the implementation of a COT program at Capital Community College using the BOR resolution for the expedited replication of COT programs that was approved on February 1, 2018. This A.S. degree option was previously approved by the BOR and is currently offered at Northwestern CT Community College and fits a local need at Capital Community College.

The specific COT options under the Technology Studies Associate Degree that is being requested for approval for implementation at Capital Community College is Technology Studies: Data Science Option.

Sincerely,

Miah LaPierre-Dreger, EdD
Dean of Academic and Student Affairs
Capital Community College
mlapierre-dreger@capitalcc.edu

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR NEW **PROGRAM APPROVAL – REPLICATION OF A COT PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Capital Community College	Date of Submission to CSCU Office of the Provost: **Spring 2020**

Most Recent NECHE Institutional Accreditation Action and Date: **Continued Accreditation 2016-17 (10-year)**

Program Characteristics

Name of Program: **Technology Studies: Data Science Option**

Degree: Title of Award *(e.g. Master of Arts)* **Associate of Science**

Degree Certificate**:** *(specify type and level)*

Stand-Alone Certificate: *(specify type and level)*

Anticipated Program Initiation Date: **Fall 2021**

Anticipated Date of First Graduation: **Spring 2023**

Modality of Program: On ground Online **X** Combined

If "Combined", % of fully online courses? 71-76%?

Locality of Program: **X** On Campus Off Campus Both

Program Credit Distribution

Credits in General Education: **21**

Credits in Program Core Courses: **28**

Credits of Electives in the Field: **18**

Credits of Other Electives: **0**

Cr Special Requirements *(include internship, etc.):* **0**

Total # Cr in the Program *(sum of all #Cr above)*: **67**

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **58**

Replicated College of Technology Program Characteristics

Name of Program: **Technology Studies: Data Science Option**

Institution: **Capital Community College**

CIP Code No. **30.7001** Title of CIP Code: **Data Science, General**

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program: **N/A**

Program Discontinued: CIP: OHE#: BOR Accreditation Date:

Phase Out Period Date of Program Termination

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional license, please identify:

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

Institutional Contact for this Proposal: Andre Freeman	Title: Professor, Math	Tel.: 860-906-5177 e-mail: afreeman@capitalcc.edu

Institution's Unit *(e.g. School of Business):* Science & Mathematics Department

Location *(e.g. main campus)* **Offering the Program**: Main Campus, 950 Main St. Hartford, CT

Background and Rationale: (Provide the context for and need for the proposed replication)

Capital Community College (CCC) seeks to replicate the ***Technology Studies: Data Science A.S. Option*** developed by Northwestern Community College so CCC students can pursue careers and academic pathways in Data Science, and CCC can leverage its faculty expertise in this area to expand its course and program offerings in science and technology. As was stated in the original program proposal by NCCC, the Technology Studies: Data Science A.S. degree option provides exposure and essential applications in key elements of data science including data structures and data sources, programming languages, statistical principles, computing and analytics, data management, machine learning tools, and data science applications.

Since Data Science is an emerging field, it does not yet appear on national or state occupational outlook projection tables, however related computer science and mathematics occupations show significant growth projected both nationally and regionally (see Tables 1 and 2):

Table 1: Data Science Related Occupations: Occupational Outlook Handbook, U.S. Bureau of Labor Statistics, 2018-2028

Occupation	Job Outlook, 2018-28	Number of Jobs, 2018	Education Level
Computer and Information Research Scientists	16% (Much faster than average)	31,700	Bachelor's Degree and Master's degree
Database Administrators	9% (Faster than average)	116,900	Bachelor's Degree
Operations Research Analysts (Math)	26% (Much faster than average)	109,700	Bachelor's Degree
Mathematicians and Statisticians	30% (Much faster than average)	47,300	Bachelor's Degree and Master's Degree

Table 2: Data Science Related Occupations: Employment Projections, CT Department of Labor, 2016-2026

Occupation	Job Outlook, 2018-28	Number of Jobs, 2018	Education Level
Computer and Mathematical Occupations	13% (Much faster than average)	58,775	Varies
Database Administrators	8.9% (Faster than average)	1,558	Bachelor's Degree
Operations Research Analysts (Math)	29.6% (Much faster than average)	1,910	Bachelor's Degree
Statisticians	36.5% (Much faster than average)	1,166	Bachelor's Degree and Master's Degree

Moreover, according to Monster.com, in April 2020 there were 5,307 job postings in CT related to "data" with 180 of them related to "data science" and 233 related to 'data analyst" openings (https://www.monster.com/jobs/).

The Technology Studies: Data Science A.S. degree option will provide CCC students the opportunity to acquire an entry-level position in this growing field or transfer to a baccalaureate institution to obtain a B.S. in Data Science, Mathematics, or Computer Science. In particular, several CT State Universities have recently started to offer programs in Data Science in addition to other programs in Data Analytics at the University of St. Joseph, University of Hartford, and UCONN where CCC students often transfer.

SECTION 2: PROGRAM QUALITY ASSESSMENT

Cost Effectiveness and Availability of Adequate Resources

(Please complete the PRO FORMA Budget – Resources and Expenditure Projections on page 6 and provide a narrative below regarding the cost effectiveness and availability of adequate resources for the proposed program. Add any annotations for the budget form.)

There will be minimal costs associated with this program since all but three courses are already taught at CCC as part of other programs and curriculum offerings. Also, due to potential disruptions to on-campus activities that may occur at the College during the 2020-21 academic year due to COVID-19, the start date for this new program will be delayed until Fall 2021. This will provide more time to advertise this new program and help increase initial program enrollment. Additionally, through new leadership at the college and a new Director of Marketing and Public Relations, funding and resources have been increased to improve program marketing across the College. The CCC Technology Studies Coordinator will work with the new marketing team to create program marketing materials and engage in internal and external outreach and recruitment campaigns.

Anticipated program revenues are expected to exceed program expenditures in each of the first three years of the program with three-year anticipated overall revenues of $322,210, overall expenditures of $76,369, and overall net gains totaling $245,841. For additional details pertaining to cost, see the pro forma budget at the end of this proposal.

Program Administration *(Describe qualifications and assigned FTE load of administrator/faculty member responsible for the day-to-day operations of the proposed academic program. Identify individual for this role by name or provide time frame for prospective hiring)*

Andre Freeman, Professor of Mathematics and CCC Technology Studies Coordinator, will oversee the degree program and advise students in the program. Professor Freeman has a M.S. in Applied Mathematics from Worcester Polytechnic Institute and Ed.D. in Mathematics Education from Columbia University, where he completed coursework in mathematics, computer science, and statistics. He recently completed professional development in Data Science competencies related to this degree program.

Faculty *(Please complete the faculty template provided below to include current full-time members of the faculty who will be teaching in this program and, as applicable, any anticipated new positions/hires during the first three years of the program and their qualifications)*

How many new full-time faculty members, if any, will need to be hired for this program?

0 – No new full-time faculty hires needed for this program, the entirety of the program will be taught by current full-time and adjunct faculty members.

What percentage of the credits in the program will they teach?

N/A

What percent of credits in the program will be taught by adjunct faculty?

Current full-time and part-time faculty will teach courses in the program. In the first year, 100% of the data science courses will be taught by full-time faculty. In subsequent years, part-time faculty will be hired to teach additional courses as needs arise.

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program

A Master's Degree is required to teach courses in the program.

Special Resources *(Provide a brief description of resources that would be needed specifically for this program and how they will be used, e.g. laboratory equipment, specialized library collections, etc. Please include these resources in the Resources and Expenditures Projections spreadsheet)*

No additional resources are needed. Students will utilize existing computer laboratories and classrooms. Where possible, open-source technologies will also be used to enhance the data science courses.

***Special Requirements** include co-curriculum activities – structured learning activities that complement the formal curriculum – such as internships, innovation activities and community involvement.

NOTE: The PRO FORMA Budget on the last page should provide reasonable assurance that the proposed program can be established and is sustainable. Some assumptions and/or formulaic methodology may be used and annotated in the "Cost Effectiveness …" narrative on page 3.

Full-Time Faculty Teaching in this Program *(Note: If you anticipate hiring new faculty members for this program you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program)*

Faculty Name and Title	Institution of Highest Degree	Area of Specialization/Pertinent Experience	Other Administrative or Teaching Responsibilities
Andre Freeman Professor, Mathematics	Ed.D. Columbia University	Mathematics, Statistics, Data Science, Machine Learning	Program Coordinator, Technology Studies; advise students in program
Mike Proulx Professor, Mathematics	M.S. University of New Haven	Mathematics, Statistics	Department Chair, Science and Mathematics
Lisa Braverman Assistant Professor, Mathematics	M.A. Central Connecticut State University	Mathematics	
Kathleen Herron Professor, Mathematics	M.A. Wesleyan University	Mathematics	
Bujar Konjusha Professor, Mathematics	M.A. Central Connecticut State University	Mathematics, Statistics	
Ricardo Martinez, Jr Assistant Professor, Mathematics	M.S. University of Bridgeport	Mathematics	

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
APPLICATION FOR NEW PROGRAM APPROVAL – REPLICATION OF A COT PROGRAM

PRO FORMA Budget - Resources and Expenditures Projections (whole dollars only)

PROJECTED Enrollment	First Year (2021-22)						Second Year (2022-23)						Third Year (2023-24)					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Internal Transfer (from other programs	7	3	1	2			2	2	1	2			2	2	1	2		
New Students (first time matriculating)	3	3	1	2			4	3	2	3			4	3	2	3		
Continuing Students progressing to credential			9	5			9	7	13	10			11	13	15	16		
Headcount Enrollment	10	6	11	9			15	12	16	15			17	18	18	21		
Total Estimated FTE per Year[1]	14						21						25					
PROJECTED Program Revenue	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Tuition[2] (new + continuing students)	5,976	2,988	19,920	6,972			26,676	10,260	30,780	13,338			31,695	16,912	35,921	20,083		
Tuition from Internal Transfer[2]	13,944	2,988	1,992	1,992			4,104	2,052	2,052	2,052			4,226	2,114	2,113	2,114		
Program Specific Fees (lab fees, etc.)	1,280	768	1,408	1,152			1,980	1,584	2,112	1,980			2,304	2,439	2,439	2,846		
Other Revenue (College service and activity fees)	2,660	912	2,926	1,368			4,095	1,872	4,368	2,340			4,777	2,898	5,058	3,381		
Total Annual Program Revenue	$ 69,246						$ 111,645						$ 141,319					

PROJECTED Program Expenditures[3]	First Year	Second Year	Third Year
Administration (Chair or Coordinator)[4]	7420	7828	8324
Faculty (Full-time, total for program) [4]		11717	18189
Faculty (Part-time, total for program) [4]			
Support Staff (lab or grad assist, tutor)			
Library Resources Program			
Equipment (List in narrative)			
Other[5] *(Marketing)*	500	500	500
Estimated Indirect Costs[6]	2968	7818	10605
Total Expenditures per Year	10888	27863	37618

NOTE: Existing regulations require that: "an application for a new program shall include a complete and realistic plan for implementing and financing the proposed program during the first cycle of operation, based on projected enrollment levels; the nature and extent of instructional services required; the availability of existing resources to support the program; additional resource requirements; and projected sources of funding. If resources to operate a program are to be provided totally or in part through reallocation of existing resources, the institution shall identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

1 1 FTE = 12 credit hours for undergraduate programs; 1 FTE = 12 credit hours for graduate programs; both for Fall & Spring

2 Revenues from all courses students will be taking.

3 Capital outlay costs, instructional spending for research and services, etc. can be excluded.

4 If full-time person is solely hired for this program, use rate time; otherwise, use a percentage. Indicate if new hires or existing faculty/staff. Record Salary and Fringe Benefits, accordingly.

5 e.g. student services. Course development would be direct payment or release time; marketing is cost of marketing that program separately.

6 Check with your Business Office – community colleges have one rate; the others each have their own. Indirect Cost might include such expenses as student services, operations and maintenance.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Approval of a New Program

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a program in Counselor Education and Supervision (CIP Code: 42.2899) – leading to a Doctorate of Education at Southern Connecticut State University; and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020.

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Establishment of a new program leading to a leading to a Doctorate of Education in Counselor Education and Supervision at Southern Connecticut State University.

BACKGROUND

The proposed doctorate of counselor education and supervision (Ed.D-CES) program aligns closely with the mission of Southern Connecticut State University, which is to provide exemplary graduate and undergraduate education in the liberal arts and professional disciplines. The proposed program is a doctoral-level graduate program related to an established suite of professional disciplines at the master's level in the department of counseling and school psychology. Furthermore, this program aligns with the strategic goals of the current administration at Southern which include expanding the number of doctoral degrees offered.

A program situated in Southern Connecticut will offer a much-needed resource by providing doctoral-prepared counselor educators, supervisors, and managers/leaders who are able to facilitate the development of culturally responsive counselors, agencies, and policies because they are prepared to meet the unique needs of Connecticut's citizens. Furthermore, these counselors will work at agencies and institutions that require managers and supervisors who are prepared at the doctoral level.

Graduates of this program may work as faculty in counselor education programs, as managers/leaders in agencies and organizations, and as clinicians and clinical supervisors in agencies and private practice.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic Council that the Board of Regents approve this new program. The System's Provost and Senior Vice President for Academic and Student Affairs concurs with this recommendation.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **NEW PROGRAM APPROVAL***

SECTION 1: GENERAL INFORMATION	
Institution: Southern Connecticut State University	Date of Submission to CSCU Office of the Provost: April 22, 2020
Most Recent NECHE Institutional Accreditation Action and Date: 5th Year Interim Report accepted February 2017	
Program Characteristics Name of Program: Doctorate of Counselor Education and Supervision (EdD-CES) Degree: Doctor of Education (EdD) Stand-Alone Certificate: *(specify type and level)* Anticipated Program Initiation Date: August 2021 Anticipated Date of First Graduation: May 2024 Modality of Program: On ground Online x Combined If "Combined", % of fully online courses? Up to 25% Locality of Program: x On Campus Off Campus Both	Program Credit Distribution # Credits in General Education: 0 # Credits in Program Core Courses: 34 # Credits of Electives in the Field: 0 # Credits of Other Electives: 0 # Cr Special Requirements *(include internship, etc.):* **14** Total # Cr in the Program *(sum of all #Cr above)*: **48** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 0
NOTE: All applications to establish a new program will be considered for both Licensure and Accreditation by the BOR	
CIP Code Number 42.2899 Title of CIP Code Clinical, Counseling and Applied Psychology, Other.	
If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program: Program Discontinued: CIP: OHE#: BOR Accreditation Date: Phase Out Period Date of Program Termination	
Institution's Unit: College of Education Location Offering the Program: Southern Connecticut State University (SCSU)	
Other Program Accreditation: • If seeking specialized/professional/other accreditation, name of agency and intended year of review: The Council for Accreditation of Counseling and Related Educational Programs (CACREP) 2022 • If program prepares graduates eligibility to state/professional license, please identify: *(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)*	

Institutional Contact for this Proposal: Dr. Robert S. Prezant	Title: Provost and VP for Academic Affairs	Tel.: 203-392-5350 e-mail: prezantr1@southernct.edu

SECTION 2: PROGRAM PLANNING ASSESSMENT

Alignment of Program with Institutional Mission, Role and Scope

(Provide concise statements)

The proposed doctorate of counselor education and supervision (Ed.D-CES) program aligns closely with the mission of Southern Connecticut State University, which is to provide exemplary graduate and undergraduate education in the liberal arts and professional disciplines. The proposed program is a doctoral-level graduate program related to an established suite of professional disciplines at the master's level in the department of counseling and school psychology. Furthermore, this program aligns with the strategic goals of the current administration at Southern which include expanding the number of doctoral degrees offered.

Addressing Identified Needs

Jobs EQ Occupation Report Data Projects the following trends through 2027

At present, for Mental Health Counselors, CT is at 80% of the national average for award output. Therefore, the region is an importer of graduates for this occupation, meaning employers are currently hiring from outside of the region. As of 2019 Q4, total employment for Mental Health Counselors in Connecticut was 3,330. Over the past three years, this occupation added 374 jobs in the region and is expected to increase by 448 jobs over the next seven years, or at an annual average rate of 1.8%.

For Substance Abuse and Behavioral Disorder Counselors, CT is at 89% of national average output. Therefore, the region is an importer of graduates for this occupation, meaning employers are currently hiring from outside of the region. As of 2019 Q4, total employment for Substance Abuse and Behavioral Disorder Counselors in Connecticut was 2,109. Over the past three years, this occupation added 165 jobs in the region and is expected to increase by 236 jobs over the next seven years, or at an annual average rate of 1.5%.

For Counselors, All Other, CT is at 89% of national average of award output. Therefore, the region is an importer of graduates for this occupation, meaning employers are currently hiring from outside of the region. As of 2019 Q4, total employment for Counselors, All Other in Connecticut was 496. Over the past three years, this occupation shed 19 jobs in the region and is expected to increase by 29 jobs over the next seven years, or at an annual average rate of 0.8%.

For Clinical, Counseling and School Psychology, CT is at 67% of the national average of award output. Therefore, the region is an importer of graduates for this occupation, meaning employers are currently hiring from outside of the region. As of 2019 Q4, total employment for Clinical, Counseling, and School Psychologists in Connecticut was 2,641. Over the past three years, this occupation added 94 jobs in the region and is expected to increase by 140 jobs over the next seven years, or at an annual average rate of 0.7%.

- A program situated in Southern Connecticut will offer a much-needed resource by providing doctoral-prepared counselor educators, supervisors, and managers/leaders who are able to facilitate the development of culturally responsive counselors, agencies, and policies because they are prepared to meet the unique needs of Connecticut's citizens. Furthermore, these counselors will work at agencies and institutions that require managers and supervisors who are prepared at the doctoral level.
- Graduates of this program may work as faculty in counselor education programs, as managers/leaders in agencies and organizations, and as clinicians and clinical supervisors in agencies and private practice.
- The table below demonstrates long-term growth projected for several areas where masters-prepared counselors will be employed. These counselors will need doctoral-prepared counselor educators to provide initial training. They will also require approved clinical supervisors during the time when they are acquiring their hours for full licensure and will require strong leadership in the agencies and institutions where they serve.

- In terms of national data, the predicted job outlook (2014-2024) for clinical mental health counselors: 19% expected increase, compared to 7% expected increase in total US jobs. (Source: US Department of Labor, Bureau of Labor Statistics).
- In addition to this, employment of school and career counselors is projected to grow 8 percent from 2018 to 2028, faster than the average for all occupations. Increasing school enrollments is expected to lead to employment growth of these workers.

Connecticut-Specific Long-Term Occupational Projections (2016-2026)
(https://projectionscentral.com/Projections/LongTerm)

Location	Job Title	Base	Projected	Change	% Change
CT	Counselors, All Other	690	800	110	15.9
CT	Educational, Guidance	4750	5140	390	8.2
CT	Rehabilitation Counseling	2810	3280	470	16.7
CT	Social and Community Service Managers	4050	4630	580	14.3
CT	Substance Abuse and Behavior Disorder Counselors	3110	3540	430	13.8
CT	Mental Health Counselors	2670	3160	490	18.4

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, School and Career Counselors, on the Internet at https://www.bls.gov/ooh/community-and-social-service/school-and-career-counselors.htm (visited October 26, 2019).

The last two faculty searches within our counseling programs yielded no applicants with doctoral degrees from programs in New England. This means that anyone who is hired to work at a job requiring a doctorate in counseling in Connecticut will have earned their degree in another region. Having a CACREP-accredited doctoral program situated within the state university system will ensure that Connecticut is producing doctoral-trained graduates:

1) who are aware of the needs and concerns of the citizens of the state of Connecticut;

2) who are committed to offering services to individuals and groups in need in Connecticut;

3) who are prepared to provide a high level of community engagement as advanced helping professionals dedicated to the well-being of the state of Connecticut; and

4) who are trained in leadership and advocacy that will benefit the state by helping individuals, communities, and organizations in the state of Connecticut.

Benefits to the State of Connecticut:

- Our proposed plan includes a training clinic, which will provide counseling to underserved individuals and groups on campus and from the communities surrounding Southern.
- Providing professional excellence in counselor education at the doctoral level will also contribute to the state of Connecticut by drawing students interested in doctoral study from across New England.
- Providing doctoral-level training in counselor education will help retain people in Connecticut by supporting workforce retention. Master's trained professionals have left the state to pursue CACREP-accredited doctoral education.
- In addition to contributing to retention, the program will draw in talent to Connecticut because it will be the only CACREP-accredited program in New England.
- Supporting master's trained counselors in Connecticut with doctoral-trained counselor educators and supervisors will fuel mental health well-being in communities and schools in Connecticut.

We have provided several letters of support from a range of stakeholders. Our letters come from Western Connecticut State University, Central Connecticut State University, from agency administrators, alumni, and from leaders in national and regional counseling organizations. Please note that we also include a letter of support from the DSW (Doctor of Social Work) program at SCSU.

- Example of a quote included in a letter from Dr. Karen Ieva: From my prospective as ACES Career Link Chair, and as someone who recently created a New Jersey-approved PhD program in Counselor Education, and having also chaired 9 search committees (due to failed searches) in the past 10 years, there is only one conclusion I can give you. There is a shortage of highly qualified faculty candidates to meet the needs of all positions in CACREP accredited programs. We are even in more of a shortage regionally, as there are limited CACREP doctoral programs in the entire North Atlantic Region to feed the regional pipeline (approximately 10). ……. On average over the past five years, there are approximately 185 counselor education positions nationally. As of October 1, 2019, there were 97 counselor education positions that were approved at each institution for a start date of September 2020. This is remarkable, considering it takes a while for the approval process, and does not include all of the newly approved positions, or positions that open when current faculty move to other institutions. To use school counselor education as a specific example, there were close to 50 CACREP school counselor education positions that were open. There were currently only 19 who may qualify, but may not be prepared to work at Research 1 and 2 designated colleges and universities where those positions may be offered. A program like the one SCSU is proposing is vital to filling that gap of highly qualified candidates.

- How does the program make use of the strengths of the institution (*e.g. curriculum, faculty, resources)* and of its distinctive character and/or location?
  - Distinctive character: Southern is well-known as a social justice institution. Our CES Ed.D. will endorse and underscore the social justice mission and values of the university by providing access to excellence in doctoral study in counselor education and supervision in an area of the country where there are no easily accessible, affordable, CACREP-accredited counselor education doctoral programs. Creating a doctoral program in counselor education and supervision is an act of social justice because it is about access. It is about providing access to doctoral study to a population of students who may not otherwise have the means to pursue a terminal degree and it is about providing the citizens of Connecticut with access to professional excellence in counseling.
  - Location: Southern is in an ideal geographic location in which to implement a doctoral program in counselor education and supervision. We are in southern Connecticut and would be more accessible to all New England than any other CES doctoral program in the United States.
  - Resources: Since 1969, the counseling programs at Southern have built strong relationships with agencies, schools, and institutions where our masters-prepared students serve as interns and are frequently hired post-graduation. Having pre-established agreements with internship and practicum sites will expedite developing placements for doctoral students.
  - Davis Hall is equipped with a suite on the second floor that has up-to-date technology capable of providing supervised counseling sessions for trainees. This area can be converted to a training clinic, which will require minimal adjustments.

- Equity (eliminating achievement disparities among different ethnic/racial, economic and gender groups) is one of the Board of Regents' Goals. In addition to current institutional efforts already underway, what distinct actions will the proposed program undertake to advance equitable student success?
  - Our proposal includes needs for teaching fellowships and graduate assistantships that will reduce barriers for individuals with limited access.
  - We plan to offer flexible course offerings.
    - Hybrid program development: we will utilize hybrid courses for teaching doctoral students and doctoral students will be prepared to teach both online and hybrid as well as on-ground

courses, which will increase their ability to be competitive in the job market in addition to increasing accessibility by reducing travel. We can also continue to function in a region that has severe winter storms that can reduce on-ground class time.

- The coordinator of the doctoral program has over 10 years of experience teaching online and hybrid courses using both synchronous and asynchronous formats. The majority of the courses that the coordinator has taught at SCSU are hybrid courses and all are constructed as flipped classrooms.
- The teaching preparation course (CSP 805 Counselor Education Teaching and Practice) will cover not only online and hybrid courses but also flipped classrooms. Students will be required to pass this course with a B+ or higher in order to move on to complete the teaching requirements for their program of study.

- We are a lower tuition cost institution as a state /public institution.
- We are intentionally creating the maximum amount of preparation within the minimum amount of credits in order to earn the degree.
  - We are planning to begin with an hour-long "research orientation" which will train students to streamline their research throughout their studies. This way, any assignment for any class, even the ones that aren't research-oriented, should be approached by choosing topics that will require that the student read articles that will apply to their capstone. In this way, they will add those articles to their capstone annotated bib/synthesis matrix as they move through the program. This strategic planning of student goals means that they will be writing about their topic of interest in almost every content area. Doing so will require the student to pivot and look at it their area of interest from a variety of angles-- and in the process, the student will be adding new articles to keep up with the perspective-shifting.
- Our training clinic will provide opportunities for grant-writing, which will lead to monies that will fuel greater access to other students.
- We recognize that in Connecticut there is a strong need to serve veterans, provide services related to substance use and addictions, to work to address the achievement gap and the opportunity gap in schools, and to increase inclusion and support for members of the LGBTQ community.

- Describe any transfer agreements with other CSCU institutions that will be instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*
  There are no transfer agreements with other CSCU institutions related to the approval of this program.

- Indicate what similar programs exist in other CSCU institutions, and how unnecessary duplication is being avoided.
  - At this time, there are no similar programs existing within the CSCU system.
  - There had been a PhD program in counselor education at UConn, which is no longer accepting applicants.
    - An informal inquiry confirmed that the reason the program closed is related to hiring challenges faced by graduates due to the program not being accredited by CACREP.
  - There are also no private doctoral programs in counselor education and supervision.

Several important points need to be made about the proposed EdD-CES program in relationship to the current COVID-19 pandemic:

<u>The program</u>: The EdD-CES program strategically built in terms of its course delivery model and its curricular content so that graduates will be prepared to respond to situations like the current pandemic.

1. In terms of clinical counseling and clinical supervision, SCSU's students will be trained in telemental health skills;

2. SCSU's students will spend significant time developing an applied understanding of the ethics associated with telemental health practice;
3. SCSU's students will be trained to provide remote clinical supervision and will have a firm understanding of the ethics associated with remote clinical supervision;
4. SCSU's students will also be taught how to teach in all delivery methods-- online, hybrid, and on-ground-- and all students will be required to learn how to build flipped classrooms. Flipped classrooms are extremely important in terms of crisis response. Flipping a classroom refers to an instructional strategy that is sometimes called blended learning because it uses both synchronous/face-to-face learning along with an online platform. The use of the term, "flipped" refers to reversing the traditional learning environment by delivering portions of instructional content (that had traditionally taken up face-to-face time, such as lectures and quizzes) online, outside of the classroom. This opens up classroom time to be used for applied activities. Because the program coordinator has all of her classes built as "flipped classrooms", during the pandemic her courses have transitioned quickly and smoothly with minimal "extra" effort on the part of the instructor and minimal confusion and stress for my students in the midst of this crisis.
5. Students in SCSU's master's level counseling programs are already trained in telemental health; training doctoral students in tele-supervision will be a natural extension of this training. School counseling master's students are also trained in delivering Multi-Tiered Systemic Supports (MTSS) using on-ground, hybrid, and online delivery methods; training doctoral students to engage in outreach, leadership, and managerial activities using all delivery methods is a natural extension of this training.

The coordinator: The faculty member who will coordinate the EdD-CES program completed her doctoral studies at a university situated 10 minutes from the largest naval base in the world. As a result of the influence of the US Department of Defense, the doctoral program invested a great deal in teaching multiple methods of delivery so that graduates would be prepared in the event of a national crisis. The program coordinator has successfully transitioned all of her current classes to online delivery with very little disruption to the students because she was trained in the use of a "flipped classroom" approach.

1. The coordinator of the program was further influenced by her time as full-time substitute faculty teaching five classes per semester when Hurricane Sandy hit New York City. As a result of this time, the coordinator's approach to infusing disaster preparedness and competence in use of technology throughout the doctoral program parallels the method by which the master's programs infuse social justice into all of our coursework.
    a. In addition to technological competence and disaster preparedness, social justice, decolonization, and liberation will also be infused throughout the doctoral program.
2. The coordinator was further influenced by her time as full-time faculty at SUNY New Paltz, where she taught for the Institute for Disaster Mental Health (funded by the Benjamin Center) and where she was mentored by Dr. James Halpern, former director of the Institute for Disaster Mental Health, first responder during 9/11 and author of the following books:
    a. Halpern, J., & Vermeulen, K. (2017). Disaster mental health interventions: Core principles and practices. New York, NY : Routledge.
    b. Halpern, J., & Tramontin, M. (2007). Disaster mental health: Theory and practice. Belmont, CA: Thomson Brooke/Cole.
3. In spite of the challenges caused by the current pandemic, job postings for counselor educators continue to go up daily on our professional list serv, particularly for individuals who are trained in multiple delivery methods;
4. Because SCSU's EdD-CES graduates will be strategically prepared to respond to situations like the current pandemic, they will be highly sought after for employment in all tracks into the "post COVID-19" reality into which they will graduate.

Student Recruitment / Student Engagement

What are the sources for the program's projected enrollments. Describe the marketing, advisement and other student recruitment activities to be undertaken to ensure the projected enrollments are achieved.

Student recruitment activities will include informational webinars. We have considered multiple options for attracting interest through the use of webinars and YouTube videos, which include:

- Our program will have three tracks—those who wish to become professors will follow the teaching track, those who wish to be agency/district managers will follow the managerial/leadership track, and those who are interested in focusing on supervision will follow a clinical/supervision track. This diverse offering of options for sculpting a program of study will ensure that our students are generating a professional identity that is congruent with their goals and with market needs.
- Our current master's programs have more qualified applicants than we are able to admit in all three of our programs. Thus, we are already established and recognized as a strong counseling department and anticipate that we will have a similar abundance of applicants at the doctoral level.
- Perhaps the most important draw will be our location. This will be the only CACREP-accredited doctoral program in all of New England. Our four closest competitors are in New York and New Jersey and require a substantial commute past New Haven. There are 7 fully online programs in the United States (and two of these are religiously affiliated) and each requires a residency component. Students from the New England area would still need to travel substantial distances and incur heavy costs to meet these residency requirements.
- "Meet the Faculty and Get to Know the Program" webinars. We have seen that other programs in the country offer fee waivers for admissions to individuals who attend informational webinars.
- YouTube videos describing what happens in some of the core courses and possible routes for practicum and internship. This could be a potential practicum assignment for members of incoming first year cohort.
- Our counseling and school psychology department Social Justice and Diversity Committee has a Facebook page. When we recently held our search to hire a new faculty, nearly every prospective candidate inquired about our SJDC and mentioned that this was a unique and attractive component of our program that they had not seen from other programs. We expect that applicants interested in pursuing doctoral-level study will also see this aspect of our program as distinct from our competitors.
- Open houses through the graduate school.

If applicable, what student engagement strategies will be employed to advance student retention and completion in program? Our practicum and internship handbook describes the multi-tiered support and mentorship that will be provided as students move through the program. A draft of the internship and practicum handbook has been provided as an attachment to this document.

- As mentioned earlier, we are planning to begin with an hour-long "research orientation" which will train students to streamline their research throughout their studies. This way, any assignment for any class, even the ones that aren't research-oriented, should be approached by choosing topics that will require that the student read articles that will apply to their capstone. In this way, they will add those articles to their capstone annotated bib/synthesis matrix as they move through the program. This strategic planning of student goals means that they will be writing about their topic of interest in almost every content area. Doing so will require the student to pivot and look at it their area of interest from a variety of angles-- and in the process, the student will be adding new articles to keep up with the perspective-shifting. It is our belief that this approach to the capstone project will assist in retention and completion because the research process will be clear and streamlined from the beginning.

SECTION 3: PROGRAM QUALITY ASSESSMENT

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program and concisely describe assessment methodologies to be used in measuring the outcomes. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes in attention to such requirements. With as much detail as possible, please map these learning outcomes to courses listed under the "Curriculum" section of this application)*

According to CACREP, doctoral programs in counselor education address professional roles in five doctoral core areas: counseling, supervision, teaching, research and scholarship, and leadership and advocacy. These five doctoral core areas represent the foundational knowledge required of doctoral graduates in counselor education. Therefore, counselor education programs must document where each of the lettered standards listed below is covered in the curriculum (in parentheses following the objective).

1. COUNSELING
   a) scholarly examination of theories relevant to counseling (CSP 856/CSP 865)
   b) integration of theories relevant to counseling (CSP 856/CSP 865)
   c) conceptualization of clients from multiple theoretical perspectives (CSP 856/CSP 865)
   d) evidence-based counseling practices (CSP 856/CSP 809/CSP 816/CSP 865)
   e) methods for evaluating counseling effectiveness (CSP 816/CSP 856)
   f) ethical and culturally relevant counseling in multiple settings (CSP 816/CSP 875/CSP 809/CSP 865)
2. SUPERVISION
   a) purposes of clinical supervision (CSP 801/CSP 808)
   b) theoretical frameworks and models of clinical supervision (CSP 801/CSP 808)
   c) roles and relationships related to clinical supervision (CSP 801/CSP 808)
   d) skills of clinical supervision (CSP 801/CSP 808/CSP 865)
   e) opportunities for developing a personal style of clinical supervision (CSP 801/CSP 808)
   f) assessment of supervisees' developmental level and other relevant characteristics (CSP 801/CSP 808)
   g) modalities of clinical supervision and the use of technology (CSP 801/CSP 808/CSP 865)
   h) administrative procedures and responsibilities related to clinical supervision (CSP 808/CSP 816)
   i) evaluation, remediation, and gatekeeping in clinical supervision (CSP 801/ CSP 808/CSP 816)
   j) legal and ethical issues and responsibilities in clinical supervision (CSP 801/CSP 808/CSP 809)
   k) culturally relevant strategies for conducting clinical supervision (CSP 801/CSP 875/CSP 808/ CSP 809/ CSP 865)
3. TEACHING
   a) roles and responsibilities related to educating counselors (CSP 805)
   b) pedagogy and teaching methods relevant to counselor education (CSP 805)
   c) models of adult development and learning (CSP 805)
   d) instructional and curriculum design, delivery, and evaluation methods relevant to counselor education (CSP 805)
   e) effective approaches for online instruction (CSP 805)
   f) screening, remediation, and gatekeeping functions relevant to teaching (CSP 805)
   g) assessment of learning (CSP 805)
   h) ethical and culturally relevant strategies used in counselor preparation (CSP 805/CSP 809/CSP 875)
   i) the role of mentoring in counselor education (CSP 805/CSP 801/CSP 875)
4. RESEARCH AND SCHOLARSHIP
   a) research designs appropriate to quantitative and qualitative research questions (CSP 722/CSP 800)
   b) univariate and multivariate research designs and data analysis methods (CSP 722/CSP 800)
   c) qualitative designs and approaches to qualitative data analysis (CSP 815)
   d) emergent research practices and processes (CSP 722/ CSP 800/ CSP 809/CSP 815)
   e) models and methods of instrument design (CSP 722/ CSP 800/ CSP 815)
   f) models and methods of program evaluation (CSP 816/CSP 815)
   g) research questions appropriate for professional research and publication (CSP 800/CSP 815/CSP 898)

h) professional writing for journal and newsletter publication (CSP 800/CSP 815/CSP 898)
i) professional conference proposal preparation (CSP 800/CSP 898)
j) design and evaluation of research proposals for a human subjects/institutional review board review (CSP 800/CSP 815/CSP 898)
k) grant proposals and other sources of funding (CSP 800/CSP 816/CSP 898)
l) ethical and culturally relevant strategies for conducting research (CSP 800/CSP 809/CSP/815/CSP 875)

5. LEADERSHIP AND ADVOCACY
   a) theories and skills of leadership (CSP 860)
   b) leadership and leadership development in professional organizations (CSP 860)
   c) leadership in counselor education programs (CSP 860/CSP 805)
   d) knowledge of accreditation standards and processes (CSP 860/ CSP 809/ CSP 816)
   e) leadership, management, and administration in counseling organizations and other institutions (CSP 860)
   f) leadership roles and strategies for responding to crises and disasters (CSP 860/CSP 856)
   g) strategies of leadership in consultation (CSP 860/CSP 808)
   h) current topical and political issues in counseling and how those issues affect the daily work of counselors and the counseling profession (CSP 809)
   i) role of counselors and counselor educators advocating on behalf of the profession and professional identity (CSP 809/CSP 860)
   j) models and competencies for advocating for clients at the individual, system, and policy levels (CSP 809/CSP 860/CSP 875)
   k) strategies of leadership in relation to current multicultural and social justice issues (CSP 860/ CSP 865/ CSP 875)
   l) ethical and culturally relevant leadership and advocacy practices (CSP 860/ CSP 865/ CSP 875)
6. DOCTORAL LEVEL PRACTICUM AND INTERNSHIP: PRACTICUM
   a) Doctoral students participate in a supervised doctoral-level counseling practicum of a minimum of 200 hours, of which 40 hours must be providing direct counseling services. The nature of doctoral-level practicum experience is to be determined in consultation with counselor education program faculty and/or a doctoral committee. (CSP 869)
   b) During the doctoral student's practicum, supervision is provided by a counselor education program faculty member or an individual with a graduate degree (preferably doctoral) in counseling or a related mental health profession with specialized expertise to advance the student's knowledge and skills. (CSP 869)
   c) Individuals serving as practicum supervisors have (1) relevant certifications and/or licenses, (2) knowledge of the program's expectations, requirements, and evaluation procedures for students, and (3) relevant training in counseling supervision. (CSP 869)
   d) Doctoral students participate in an average of one hour per week of individual and/or triadic supervision throughout the practicum. When individual/triadic supervision is provided by the counselor education program faculty, practicum courses should not exceed a 1:6 faculty:student ratio. (CSP 869)
   e) Group supervision is provided on a regular schedule with other students throughout the practicum and must be performed by a counselor education program faculty member. Group supervision of practicum students should not exceed a 1:12 faculty: student ratio. (CSP 869)
   f) Doctoral students are covered by individual professional counseling liability insurance policies while enrolled in practicum. (CSP 801/CSP 869)
7. DOCTORAL LEVEL PRACTICUM AND INTERNSHIP: INTERNSHIP
   a) Doctoral students are required to complete internships that total a minimum of 600 clock hours. The 600 hours must include supervised experiences in at least three of the five doctoral core areas (counseling, teaching, supervision, research and scholarship, leadership and advocacy). Doctoral students are covered by individual professional counseling liability insurance policies while enrolled in a counseling or supervision internship. (CSP 870/CSP 871)
   b) During internships, the student receives an average of one hour per week of individual and/or triadic supervision, performed by a supervisor with a doctorate in counselor education or an individual with a

graduate degree and specialized expertise to advance the student's knowledge and skills. (CSP 870/CSP 871)

c) Group supervision is provided on a regular schedule with other students throughout the internship and must be performed by a counselor education program faculty member. (CSP 870/CSP 871)

Program Administration *(Describe qualifications and assigned FTE load of administrator/faculty member responsible for the day-to-day operations of the proposed academic program. Identify individual for this role by name or provide time frame for prospective hiring)*

The administrator of this program will have an earned doctorate from a CACREP-accredited program or have taught in a CACREP program as a counselor educator prior to 2013. The administrator for this program will be elected by departmental faculty vote and will serve a term of (3) years, at which time the faculty may choose to run for re-election. The administrator of this program will receive one course release per semester to allow time for administrative duties and will receive a summer stipend to compensate for work done while other faculty are off-contract.

Faculty *(Please complete the faculty template provided below to include current full-time members of the faculty who will be teaching in this program and, as applicable, any anticipated new positions/hires during the first three years of the program and their qualifications)*

How many new full-time faculty members, if any, will need to be hired for this program?

According to CACREP, a doctoral program will require 2 faculty members in addition to the 6 Counseling faculty required for our 2 master's programs in school counseling and clinical mental health counseling. We already have 7 full-time faculty members in our Counseling programs. Since the successful hire of one additional faculty to begin employment fall 2020, we will meet the requirements for CACREP accreditation of the doctoral program.

Per CACREP requirements, faculty members who teach in doctoral programs in CACREP-accredited programs shall not carry more than a 3/3 teaching load. As such, during any semester where a faculty is teaching a doctoral-level course, any credits over 9 would be considered overload.

What percent of credits in the program will be taught by adjunct faculty?

We do not anticipate requiring adjunct faculty to support this program. In fact, our doctoral students will provide co-teaching and teaching as part of their practicum and internship responsibilities and will therefore reduce the need for adjunct hire in our master's programs.

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program

In the unanticipated event that adjunct faculty are needed, they must have an earned Doctorate in counselor education (preferably from a CACREP-accredited program) or a closely related field.

Special Resources *(Provide a brief description of resources that would be needed specifically for this program and how they will be used, e.g. laboratory equipment, specialized library collections, etc. Please include these resources in the Resources and Expenditures Projections spreadsheet)*

We will need the following in order to support our program:

- Psychotherapy.net library database—a robust catalog of video streaming clinical demonstrations.
- Clinic software for scheduling and tracking counselor performance/client experience
- Computers and office furniture for the clinic space (e.g., desks, bookcases and chairs)
- Key card-secured space in Davis Hall dedicated to a training clinic.
- One part-time clinical coordinator position. We envision this position as a permanent part-time position which would provide the individual an opportunity to earn their (unpaid) clinical hours toward licensure in the training clinic. We believe that there are a number of our master's students who would be interested in this opportunity.

Full-Time Faculty Teaching in this Program *(Note: If you anticipate hiring new faculty members for this program you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program)*

Faculty Name and Title	Institution of Highest Degree	Area of Specialization/Pertinent Experience	Other Administrative or Teaching Responsibilities
Laurie Bonjo, Assistant Professor	Old Dominion University	Counselor Education and Supervision	School Counseling Faculty
Louisa Foss-Kelly, Professor	Kent State University	Counselor Education and Supervision	Clinical Mental Health Counseling Program Coordinator & Faculty
Jennifer Parzych, Associate Professor	The University of Connecticut	Counselor Education and Supervision	School Counseling Program Coordinator & Faculty
Margaret Generali, Professor	The University of Connecticut	Counselor Education and Supervision	Department Chair & School Counseling Faculty
Misty Ginicola, Professor	Yale University	Counselor Education and Supervision	Clinical Mental Health Counseling Faculty
Qu Chen, Assistant Professor	The Pennsylvania State University	Counselor Education and Supervision	Clinical Mental Health Counseling Faculty
Uchenna Nwachuku, Professor	University of Massachusetts at Amherst	Counselor Education and Supervision	Clinical Mental Health Counseling Faculty
Cheri Smith, Professor	Mississippi State University	Counselor Education and Supervision	Clinical Mental Health Counseling Faculty

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **NEW PROGRAM APPROVAL***
PRO FORMA Budget - Resources and Expenditures Projections (whole dollars only)

PROJECTED Enrollment	First Year FY 20200						Second Year FY 2023						Third Year FY 2024					
	Fall 2021		Spring 2022		Summer 2022		Summer 2022		Fall 2022		Spring 2023		Summer 2023		Fall 2023		Spring 2024	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Internal Transfer (from other programs																		
New Students (first time matriculating)		8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0
Continuing Students progressing to credential								7.0		7.0		7.0		13.0		13.0		13.0
Headcount Enrollment		8.0		8.0		8.0		15.00		15.00		15.00		21.00		21.00		21.00
Total Estimated FTE per Year[1]						3						5						7
PROJECTED Program Revenue	First Year FY 2020						Second Year FY 2023						Third Year FY 2024					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Tuition[2]		62,208		62,208		51,840		116,640		116,640		106,272		155,520		147,744		137,376
Tuition from Internal Transfer[2]																		
Program Specific Fees (registration @ $55/semester)		440		440		440		825		825		825		1,155		1,155		1,155
Other Revenue (annotate in narrative)																		
Total Annual Program Revenue	$177,576						$342,027						$444,105					

PROJECTED Program Expenditures[3]	First Year	Second Year	Third Year
Administration (Chair or Coordinator)[4]	8,316	8,316	8316
Faculty (Full-time, total for program) [4]			
Faculty (Part-time, total for program) [4]	47,124	97,020	144,144
Support Staff (lab or grad assist, tutor)	49,800	49,800	49,800
Library Resources Program	6,000	6,000	6,000
Equipment (List in narrative)*	15,000		
Other[5]	30,00	18,00	18,00
Estimated Indirect Costs[6]	25,080	26,808	33,540
Total Expenditures per Year	$181,320	$205,944	$259,800

NOTE: Existing regulations require that: "an application for a new program shall include a complete and realistic plan for implementing and financing the proposed program during the first cycle of operation, based on projected enrollment levels; the nature and extent of instructional services required; the availability of existing resources to support the program; additional resource requirements; and projected sources of funding. If resources to operate a program are to be provided totally or in part through reallocation of existing resources, the institution shall identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

1 1 FTE = 12 credit hours for undergraduate programs; 1 FTE = 12 credit hours for graduate programs; both for Fall & Spring. Formula for conversion of part-time enrollments to Full-Time Equivalent (FTE): Divide part-time enrollment by 3, and round to the nearest tenth - for example 20 part-time enrollees equals 20 divided by 3 equals 6.67 or 6.7 FTE.

2 Revenues from all courses students will be taking.

3 Capital outlay costs, instructional spending for research and services, etc. can be excluded.

4 If full-time person is solely hired for this program, use rate time; otherwise, use a percentage. Indicate if new hires or existing faculty/staff. Record Salary and Fringe Benefits, accordingly.

5 e.g. student services. Course development would be direct payment or release time; marketing is cost of marketing that program separately.

6 Check with your Business Office – community colleges have one rate; the others each have their own. Indirect Cost might include such expenses as student services, operations and maintenance.

Assumptions:

1. The program consists of 48 credits taken over 3 school years.
2. All enrollment is Part Time.
3. Each new cohort will start every summer and consist of 8 students the first year, 7 the second, and 6 the third.
4. There will not be any incremental full time expenses. The Administrative Coord will receive one credit release time per session for a total of 3 credits per year. This release time will be cover by backfill, via adjunct expense.
5. While all teaching will be provided by full time faculty that is already part of the University full time budget base, all costs shown are for the back fill required to cover the other courses these faculty will no longer be able to teach. The cost of the back fill is shown as adjunct expense regardless of the session in which it is provided, i.e., summer, fall or spring. Teaching costs are calculated this way because this document is to show INCREMENTAL operating costs to be incurred by the new program, and existing faculty are considered a fixed cost since they will remain on the SCSU payroll whether the new program is approved or not. The only incremental cost to the University is for the back fill adjunct.
6. Other expenses are higher in the first year because it reflects $12,000 for new computers. This is considered to be a one-time cost unless enrollment increases significantly in future years.
7. *This is a one-time cost. Equipment of $10,000 for 5 desks, 8 chairs, a printer and stand. Also, $5,000 for some minor renovations. These costs would normally be capitalized but are included here because of tighter capital resources from the State.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Approval of a New Program

June 18, 2020

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a program in Health Sciences (CIP Code: 51.0000) – leading to an Associate of Science at Capital Community College; and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020.

A True Copy:

_____

Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Establishment of a new program leading to a leading to an Associate of Science in Health Science at Capital Community Science.

BACKGROUND
In line with the Capital's mission, the Health Science A.S. seeks to provide access to higher education to the diverse residents of the greater Hartford region by preparing individuals for transfer education and careers in the healthcare sector. Specifically, the proposed Health Science A.S. degree will provide a foundation in liberal arts and enable the recipients to be eligible for an array of healthcare jobs.

Currently, Capital has a certificate in Health Science that leads into either Nursing, Radiologic Technology, or General Studies associate degrees at Capital; however, there are no associate Health Science programs available in the CSCU system.

SCSU and ECSU offer a Bachelor of Science in Healthcare Studies. WCSU offers a Bachelor of Science in Health Education or Bachelor of Science in Health Promotion Studies. Also, the University of St. Joseph (a private institution only a few miles from CCC) offers a Bachelor of Science in Health Science.

This proposed Health Science A.S. will create new opportunities for students. The Health Science A.S. will:

- Provide students a solid foundation in the principles of healthcare delivery and prepare them to pursue entry-level professional training
- Provide an opportunity for health professionals who are already working in healthcare settings, to learn valuable healthcare knowledge, while completing an associate's degree
- Prepare students for admission to a broad range of health and human services advanced degree or professional programs
- Provide knowledge and skills for non-clinical employment opportunities in healthcare settings including, but not limited to patient navigator and health services administration.
- Provide an associate degree pathway for transfer into Health Science baccalaureate programs.

With many healthcare organizations adopting strategies to deliver "patient-centered care" and "coordinated care," it is incumbent upon academic institutions to offer degree programs that provide this knowledge.

Enrollment trends at Capital indicate that an increasing number of applicants and transfer students are interested in pursuing careers in healthcare.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic Council that the Board of Regents approve this new program. The System's Provost and Senior Vice President for Academic and Student Affairs concurs with this recommendation.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
*APPLICATION FOR **NEW PROGRAM APPROVAL***

SECTION 1: GENERAL INFORMATION

Institution: Capital Community College	Date of Submission to CSCU Office of the Provost: **Spring 2020**
Most Recent NECHE Institutional Accreditation Action and Date: **Continued Accreditation 2016-17 (10-year)**	
Program Characteristics Name of Program: **Health Science, AS** Degree: Title of Award *(e.g. Master of Arts)* **Associate of Science** Degree Certificate: *(specify type and level)* Stand-Alone Certificate: *(specify type and level)* Anticipated Program Initiation Date: **Fall 2020** Anticipated Date of First Graduation: **Spring 2022** Modality of Program: **X** On ground Online Combined If "Combined", % of fully online courses? Locality of Program: **X** On Campus Off Campus Both	**Program Credit Distribution** # Credits in General Education: **21** # Credits in Program Core Courses: **27** # Credits of Electives in the Field: **3/4** # Credits of Other Electives: **0** # Cr Special Requirements *(include internship, etc.):* **9** Total # Cr in the Program *(sum of all #Cr above)*: **60-61** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **54-55**
NOTE: All applications to establish a new program will be considered for both Licensure and Accreditation by the BOR	
CIP Code Number **51.0000** Title of CIP Code: **Health Services/Allied Health/Health Sciences, General**	
If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program: **N/A** Program Discontinued: CIP: OHE#: BOR Accreditation Date: Phase Out Period Date of Program Termination	
Institution's Unit *(e.g. School of Business)* **Nursing/Health Careers** Location *(e.g. main campus)* Offering the Program: **950 Main St. Hartford, CT (Campus)**	
Other Program Accreditation: • If seeking specialized/professional/other accreditation, name of agency and intended year of review: **N/A** • If program prepares graduates eligibility to state/professional license, please identify: **N/A** *(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)*	

Institutional Contact for this Proposal: **Dr. Miah LaPierre Dreger, EdD**	Title: **Dean of Academic and Student Affairs**	Tel.: **860-906-5011** e-mail: **mlapierre-dreger@capitalcc.edu**

SECTION 2: PROGRAM PLANNING ASSESSMENT

Alignment of Program with Institutional Mission, Role and Scope

(Provide concise statements)

In line with the Capital's mission, the Health Science A.S. seeks to provide access to higher education to the diverse residents of the greater Hartford region by preparing individuals for transfer education and careers in the healthcare sector. Specifically, the proposed Health Science A.S. degree will provide a foundation in liberal arts and enable the recipients to be eligible for an array of healthcare jobs.

Currently, Capital has a certificate in Health Science that leads into either Nursing, Radiologic Technology, or General Studies associate degrees at Capital; however, there are no associate Health Science programs available in the CSCU system.

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This proposed Health Science A.S. will create new opportunities for students. The Health Science A.S. will:

- Provide students a solid foundation in the principles of healthcare delivery and prepare them to pursue entry-level professional training
- Provide an opportunity for health professionals who are already working in healthcare settings, to learn valuable healthcare knowledge, while completing an associate's degree
- Prepare students for admission to a broad range of health and human services advanced degree or professional programs
- Provide knowledge and skills for non-clinical employment opportunities in healthcare settings including, but not limited to patient navigator and health services administration.
- Provide an associate degree pathway for transfer into Health Science baccalaureate programs.

With many healthcare organizations adopting strategies to deliver "patient-centered care" and "coordinated care," it is incumbent upon academic institutions to offer degree programs that provide this knowledge.

Enrollment trends at Capital indicate that an increasing number of applicants and transfer students are interested in pursuing careers in healthcare. The Health Science A.S. has been designed for several student profiles:

1. Newly enrolled high school and transfer students who wish to enter the healthcare industry and who do not have healthcare experience may wish to explore health science degree programs to learn about their educational options. Currently, students at CCC must specialize in one of four programs; Nursing, Paramedic/EMT, Radiologic Technology, or Medical Assistant. The Health Studies A.S. will serve as a new degree alternative that provides a broad range of health knowledge. This degree program will attract new students who want to explore the health care industry and their educational options.

2. The subset of students who attend Capital with an interest in nursing, but are not successful with that pathway or change interests. In each of the past 5 years, Capital has enrolled an average of 1,280 new freshman students into the General Studies associate degree each fall. Unfortunately, many of these students are placed into this degree while attempting to gain entry into the Nursing program. Each year, approximately 1100 students (statewide across all 6 community college Nursing programs in CT) successfully complete required pre-requisite courses and are eligible for admission to the statewide CT-CCNP nursing program. Of these, approximately 300 qualified students apply to CT-CCNP Nursing program at Capital. However, due to physical space limitations and limited number of clinical placements available in healthcare facilities to train nursing students, the Capital nursing program is only able to accept 165 students per year. Unfortunately, enrollment data indicates that attrition is high among the two groups of students who enroll at Capital with a declared interest in nursing but don't make it into the program:
    a. Those who thrive in their rigorous pre-requisite courses and meet all requirements for admission, but are not accepted into the Capital nursing program due to the limited capacity
    b. Those who do not thrive in nursing pre-requisite courses and therefore do not qualify to apply for the nursing program (approximately 25-30% of CT-CCNP applicants).

    These students need other degree options that address their interest in health professions.

3. Those students who are admitted to the CT-CCNP at Capital nursing program but do not successfully complete that program (approximately 40% of admitted students).

The Health Science A.S. will greatly expand degree completion options for Capital students and serve as an attractive degree option for incoming high school students and community college transfer students. The addition of this degree program will lead to increases in overall enrollment in the college and the Allied Health Division and increase retention of students who initially pursue nursing, but are not successful.

A large portion of the courses required for the delivery of the A.S. in Health Science already exist at Capital and are being taught by current full-time faculty as requirements for pre-requisites in nursing and allied health programs. These departments include Biology, Psychology, Social and Behavioral Sciences, Math, Chemistry, and Medical Assisting.

Addressing Identified Needs

- How does the program address CT workforce needs and/or the wellbeing of CT communities – and include a description/analysis of employment prospects for graduates of this proposed program *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

Growth is projected in the health care sector nationally and locally, mainly due to an aging population, and changing health care delivery trends, leading to greater demand for healthcare services, however it will likely also increase due to the local, national, and global impact of the COVID-19 pandemic crisis.

As healthcare has become increasingly complex, employers are seeking professionals with a skill set that addresses the dynamics of an evolving healthcare system. It is essential that public community colleges and universities provide programs that prepare students with these skills to position them for current and emerging employment opportunities and provide a foundation for pursuing advanced degrees in a variety of health and human services professions. Skills for entry level jobs in healthcare include:

- Medical office administration
- Health insurance member services
- Community health services
- Health navigators/educators
- Medical billing management
- Health informatics
- Health services librarian
- Health science writers

Nationally, the Bureau of Labor Statistics (BLS) cites 13 of the top 30 fastest-growing occupations as those in the healthcare sector (https://www.bls.gov/emp/tables/fastest-growing-occupations.htm). Overall, employment in healthcare occupations is projected to grow 14 percent from 2018 to 2028, much faster than the average for all occupations, adding about 1.9 million new jobs. Additionally, healthcare occupations are projected to add more jobs than any of the other occupational groups (https://www.bls.gov/ooh/healthcare/).

Specifically, healthcare support occupations are projected to add 1.1 million jobs, a 28% increase from 2012-2022 (https://www.bls.gov/opub/mlr/2013/article/occupational-employment-projections-to-2022.htm). Examples include:

Table 1: Healthcare Support: Occupational Outlook Handbook, U.S. Bureau of Labor Statistics, 2018-2028

Occupation	Job Outlook, 2018-28	Number of Jobs, 2018	Education Level
Health Educators and Community Health Workers	11% (Much faster than average)	123,800	Postsecondary Certificate or Associate's Degree
Home Health Aides and Personal Care Aides	36% (Much faster than average)	3,253,000	High School Diploma or Equivalent
Medical Assistants	23% (Much faster than average)	686,600	Postsecondary Certificate or Associate's Degree
Medical Records and Health Information Technicians	11% (Much faster than average)	215,500	Postsecondary Certificate or Associate's Degree

Occupational Therapy Assistants and Aides	31% (Much faster than average)	51,700	Associate degree
Psychiatric Technicians and Aides	12% (Much faster than average)	138,200	Postsecondary Certificate or Associate's Degree
Technical Writers	8% (Faster than average)	55,700	Associate's degree or Bachelor's degree

Additionally, the second fastest growing group of occupations, at 17.6 percent, is those requiring an associate's degree. Part of the reason for rapid growth in associate's degree occupations is because of how common these occupations are in the healthcare and social assistance industry. This industry is expected to account for 846,800 of the 1.0 million new jobs requiring an associate's degree (https://www.bls.gov/opub/mlr/2013/article/occupational-employment-projections-to-2022.htm).

Moreover, healthcare practitioner occupations (9.5%) and healthcare support occupations (12.3%) are also expected to grow in Connecticut over a ten-year period ending in 2026 (https://www1.ctdol.state.ct.us/lmi/projections2016/HealthSupport.asp). Examples include:

Table 2: Healthcare Support: Employment Projections, CT Department of Labor, 2016-2026

Occupation	Job Outlook, 2018-28	Number of Jobs, 2018	Education Level
Community Health Workers	15.3% (Much faster than average)	710	Postsecondary Certificate or Associate's Degree
Home Health Aides	34% ("Hot job")	10,437	High School Diploma or Short OJT
Health Educators	10.8% (Much faster than average)	739	Associate's Degree or Bachelor's Degree
Medical Assistants	20.8% ("Hot job")	9,412	Postsecondary Certificate or Associate's Degree
Medical Records and Health Information Technicians	11.1% (Much faster than average)	1,979	Postsecondary Certificate or Associate's Degree
Medical Secretaries	16.6% (Much faster than average)	4,770	High School Diploma or Moderate OJT
Occupational Therapy Assistants	11.9% (Faster than average)	526	Associate degree
Psychiatric Aides	8.7% (Faster than average)	1,830	High School Diploma or Short OJT

Likewise, according to JobsEQ, total demand for healthcare and social assistance occupations is 30,289, with employment growth of 2.003 and annual percentage growth of 0.7% (https://jobseq.eqsuite.com/analytics/industry-snapshot?_num=15849237864752).

Also, Capital has long been associated with the greater Hartford community as an important neighbor and partner in its economic growth by producing graduates who drive its economic engine by employment and civic engagement. The city of Hartford's major employment sector is education and health services (https://www1.ctdol.state.ct.us/lmi/ces/nfhtfdcm.asp). Likewise, Capital has many established relationships with healthcare providers in the Hartford area that support the college's existing associate degree programs in Nursing, EMT-Paramedic, Radiologic Technology, and Medical Assisting. The Health Science A.S. degree program is another educational program that will meet local and regional workforce needs of employers.

- How does the program make use of the strengths of the institution (*e.g. curriculum, faculty, resources)* and of its distinctive character and/or location?

The Health Science A.S. degree program will utilize pre-existing human and physical resources and therefore, require minimal additional costs.

A large portion of the courses required for the delivery of the proposed Health Science A.S. already exist at CCC and are being taught by current full-time faculty as requirements for pre-requisites in Nursing and other Allied Health programs. These departments include Biology, Psychology, Social and Behavioral Sciences, Math, Chemistry, and Medical Assisting. As such, all the necessary labs and equipment for this proposed program are already in place. Only two new courses will be developed for this program and neither requires new lab spaces or equipment.

Initially, this program will utilize existing full-time faculty, a small number of adjunct faculty, and existing departmental administrative staff and leadership to support this program. An existing full-time faculty member will also be provided release time to serve as coordinator of this new program and work with healthcare settings to coordinate any program-related service-learning experiences. As program enrollment grows, additional full-time faculty will be hired to meet the needs of student enrollment generated by this program.

- Equity (eliminating achievement disparities among different ethnic/racial, economic and gender groups) is one of the Board of Regents' Goals. In addition to current institutional efforts already underway, what distinct actions will the proposed program undertake to advance equitable student success?

Within the healthcare industry, African Americans, Latinos and Asians are each underrepresented groups within the Healthcare Support and Healthcare Practitioner occupations (https://www.bls.gov/cps/cpsaat11.htm):

Table 3: Employment Diversity in Healthcare Support: Employed Persons by Occupation, U.S. Bureau of Labor Statistics, 2019

Occupation	Black or African American	Asian	Hispanic or Latino
Community Health Educators and Workers	22.5%	2.5%	21.9%
Medical Assistants	15.3%	4.8%	29.0%
Medical Records and Health Information Technicians	17.5%	6.0%	14.4%
Nursing, Home Health, and Psychiatric Aides	37.2%	4.4%	17.6%
Technical Writers	11.8%	2.9%	8.8%

In line with the Capital's mission, the Health Science A.S. seeks to engage a diverse student population and prepare our predominately African American and Latino student population for entry-level employment in the healthcare industry.

Moreover, Capital is one of the most ethnically diverse campuses in New England. In fall 2019, the student body included 36% African American, 31% Hispanic, 19% Caucasian, 5% Asian, and 9% other ethnicities. In addition, for the fourth time, Capital has received the Higher Education Excellence in Diversity (HEED) Award, a national honor recognizing U.S. colleges and universities that demonstrate an outstanding commitment to diversity and inclusion.

As a college that exemplifies and values diversity, Capital is uniquely positioned to infuse a diverse body of graduates from the proposed Health Science A.S. program into the growing healthcare systems and agencies in the city of Hartford and throughout the state of Connecticut.

- Describe any transfer agreements with other CSCU institutions that will be instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

Currently, Capital has a certificate in Health Science that leads into either Nursing, Radiologic Technology, or General Studies associate degrees at Capital; however, there are no associate Health Science programs available in the CSCU system.

The existing certificate in Health Science at Capital will fully "stack" into the proposed Health Science A.S. degree propram.

Also, this proposed program will create a new transfer pipeline opportunity into numerous health-related baccalaureate degrees in the CSCU system such as the Bachelor of Science in Healthcare Studies offered at SCSU and ECSU or the Bachelor of Science in Health Education and Bachelor of Science in Health Promotion Studies at WCSU. In addition, this program will also transfer into the Bachelor of Science in Health Science offered at the University of St. Joseph (a private institution only a few miles from CCC).

- Indicate what similar programs exist in other CSCU institutions, and how unnecessary duplication is being avoided

Currently, there are no associate Health Science programs available in the CSCU system, therefore no duplication will occur.

Cost Effectiveness and Availability of Adequate Resources

(Complete the PRO FORMA Budget – Resources and Expenditure Projections on page 6 and provide a narrative below regarding the cost effectiveness and availability of adequate resources for the proposed program. Add any annotations for the budget form below, as well.)

Strong enrollment is projected in this new Health Science A.S. program since many students come to Capital in hopes of being accepted into one of the college's health-related selective admissions programs (Nursing, Radiologic Technology, EMT/Paramedic, Medical Assisting) and this new program will provide a much more appropriate "initial" degree rather than the General Studies A.S. degree, as is currently the case.

In addition, for students who do not ultimately make it into one of the health-related selective admissions programs at Capital, this new Health Science A.S. will also be a more useful degree leading to health-related transfer and employment opportunities instead of the General Studies A.S. degree, as is also currently the case.

Also, the Health Science A.S. degree program will utilize pre-existing human and physical resources and therefore, require minimal additional costs. In particular, an existing full-time faculty member will be given a course release each semester to coordinate this program. Also, as the program progresses into years two and three, the two new courses not previously available at the college will be offered and will have associated instructional costs with each. These projected expenses as well as projected revenues and net gains for this new Health Science A.S. are detailed in the Pro Forma budget at the end of this proposal document and are summarized in Table 4 below.

Table 4: Health Science A.S. Cost Effectiveness

	Year 1	Year 2	Year 3
Projected Program Revenues	$1,098,290	$1,448,370	$1,621,540
Projected Program Expenditures	$47,145	$82,518	$119,666
Projected Program Net Gains	$1,051,145	$1,365,852	$1,501,874

Student Recruitment / Student Engagement

- What are the sources for the program's projected enrollments. Describe the marketing, advisement and other student recruitment activities to be undertaken to ensure the projected enrollments are achieved.

As was described in Section 2 above, the Health Science A.S. will draw projected enrollments from the following groups:

- Incoming high school graduates
- Transfer students who wish to enter the healthcare industry and who do not have healthcare experience
- New or current students who are interested in other health-related selective admission programs (SAPs) at Capital (i.e., Nursing, Paramedic/EMT, Radiologic Technology, or Medical Assistant) who either:
  - Are eligible for the SAP but do not get accepted due to space limitations
  - Are not eligible for the SAP due to incomplete prerequisite admission requirements
  - Are no longer eligible for the SAP because they did not successfully complete the SAP requirements

Much of the internal marketing and outreach for this program will be done through advisement and counseling with students. College admissions staff, counselors, and academic (faculty) advisors will share information about this program with students who express an interest in a health-related career.

In addition, through new leadership at the college and a new Director of Marketing and Public Relations, funding and resources have been increased to improve program marketing across the College. Marketing and outreach materials for this program would be developed in partnership with the new Director of Marketing. The college catalog, existing program brochures, and the college web site would be updated to reflect this new program and highlight the employment and transfer pathways aligned to the program.

- If applicable, what student engagement strategies will be employed to advance student retention and completion in program?

As is the case for all students in the College's other health-related programs, students in the proposed Health Science A.S. program would be assigned to a program-specific academic advisor with healthcare expertise and insights who will provide assistance to students throughout their academic journey as they progress to degree completion.

SECTION 3: PROGRAM QUALITY ASSESSMENT

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program and concisely describe assessment methodologies to be used in measuring the outcomes. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes in attention to such requirements. With as much detail as possible, please map these learning outcomes to courses listed under the "Curriculum" section of this application)*

1. Demonstrate a strong foundation in behavioral, natural, social, and health sciences appropriate to entry-level positions in the healthcare sector and/or admission to post graduate programs. *(Assessment:* [redacted]
2. Demonstrate clear and effective communication skills to provide information to clients in the healthcare environment. *(Assessment:* [redacted]*)*
3. Demonstrate general knowledge of medical perspectives, health professions, and healthcare systems, *(Assessment:* [redacted]*)*
4. Apply legal concepts and ethical considerations within the framework of the healthcare industry. *(Assessment:* [redacted]*)*
5. Identify and demonstrate skills and knowledge necessary for the health care worker. *(Assessment:* [redacted]*)*

Program Administration *(Describe qualifications and assigned FTE load of administrator/faculty member responsible for the day-to-day operations of the proposed academic program. Identify individual for this role by name or provide time frame for prospective hiring)*

This program will utilize existing departmental administrative staff and leadership to support this program.

Initially, an existing full-time faculty member will be provided release time to serve as coordinator of this new program and work with healthcare settings to coordinate any program-related service-learning experiences. As program enrollment grows, additional full-time faculty will be hired to meet the needs of student enrollment generated by this program.

Faculty *(Please complete the faculty template provided below to include current full-time members of the faculty who will be teaching in this program and, as applicable, any anticipated new positions/hires during the first three years of the program and their qualifications)*

- How many new full-time faculty members, if any, will need to be hired for this program?

No new full-time faculty will be need to be hired for this program. All but two new courses required for the delivery of the Health Science A.S already exist at CCC and are being taught by current full-time faculty as requirements for pre-requisites in Nursing and other Allied Health programs. These departments include Biology, Psychology, Social and Behavioral Sciences, Math, Chemistry, and Medical Assisting. As program enrollment grows, additional full-time faculty will be hired to meet the needs of student enrollment generated by this program.

- What percentage of the credits in the program will they teach?

90-100% of this new program (55 to 61 credits) will be taught by existing faculty.

- What percent of credits in the program will be taught by adjunct faculty?

0-10% of this new program (up to 6 credits) may be taught by new adjunct faculty since two new courses will be developed for this program.

- Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program

A Master's Degree in a related field is required to teach in this program.

Special Resources *(Provide a brief description of resources that would be needed specifically for this program and how they will be used, e.g. laboratory equipment, specialized library collections, etc. Please include these resources in the Resources and Expenditures Projections spreadsheet)*

N/A - A large portion of the courses required for the delivery of the proposed Health Science A.S. already exist at CCC and are being taught by current full-time faculty as requirements for pre-requisites in Nursing and other Allied Health programs. These departments include Biology, Psychology, Social and Behavioral Sciences, Math, Chemistry, and Medical Assisting. As such, all the necessary labs and equipment for this proposed program are already in place. Only two new courses will be developed for this program and neither requires new lab spaces or equipment.

***Special Requirements** include co-curriculum activities – structured learning activities that complement the formal curriculum – such as internships, innovation activities and community involvement.

NOTE: The PRO FORMA Budget on the last page should provide reasonable assurance that the proposed program can be established and is sustainable. Some assumptions and/or formulaic methodology may be used and annotated in the "Cost Effectiveness …" narrative on page 2.

Full-Time Faculty Teaching in this Program *(Note: If you anticipate hiring new faculty members for this program you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program)*

Faculty Name and Title	Institution of Highest Degree	Area of Specialization/Pertinent Experience	Other Administrative or Teaching Responsibilities
Dr. Bharat Bushan Assistant Professor, Biology	M.D. Medical College Trivandrum	Biology, Anatomy & Physiology	
Dr. Stephen Fagbemi Professor, Psychology	Ph.D. University of Texas at Dallas Psy.D. University of Hartford	Psychology, Life Span Development	
Dr. Lilliam Martinez Professor, Psychology	Psy.D. Union Institute and University	Psychology, Life Span Development	Department Chair, Social and Behavioral Sciences
Dr. Devi Mather Assistant Professor, Medical Assisting and Health Information Management	M.D. Saba University School of Medicine	Medical Assisting, Health Information Management	Program Coordinator, Medical Assisting Program Coordinator, HIM
Dr. Guillermo Muhlmann Professor, Chemistry	Ph.D. Massachusetts Institute of Technology	Chemistry, Organic Chemistry	
Dr. Josiah Ricardo Professor, Sociology	Ed.D. Breyer State University	Social Services, Intro to Mental Health System, Health and Aging	Program Coordinator, Social Services
Dr. Cleo Rolle, Associate Professor, Biotechnology	Ph.D University of Miami	Biology, Biotechnology	Program Coordinator, Biotechnology
Dr. Adolofo Sanchez-Blanco Instructor, Biology	Ph.D. University of Connecticut	Biology, Anatomy & Physiology	
Kristen Swider Professor, Biology	M.S University of Connecticut	Biology, Microbiology, Genetics	
Michelle White Professor, Sociology	M.S.W. University of Connecticut	Social Services, Intro to Mental Health System, Health and Aging	
Dr. Carmen Yiamouyiannis Professor, Science	Ph.D. Indiana University	Biology, Anatomy & Physiology	

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
APPLICATION FOR NEW PROGRAM APPROVAL

PRO FORMA Budget - Resources and Expenditures Projections (whole dollars only)

PROJECTED Enrollment	First Year (2020-21)						Second Year (2021-22)						Third Year (2022-23)					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Internal Transfer (from other programs	60	140	35	80			25	65	15	55			20	45	10	30		
New Students (first time matriculating)	35	50	30	45			50	80	35	50			65	110	40	60		
Continuing Students progressing to credential	-	-	65	125			65	125	100	185			75	145	110	210		
Headcount Enrollment	95	190	130	250			140	270	150	290			160	300	160	300		
Total Estimated FTE per Year[1]	205						237						250					
PROJECTED Program Revenue	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Tuition[2] (new + continuing students)	69,720	49,800	189,240	169,320			235,980	210,330	277,020	241,110			295,820	269,535	316,950	285,390		
Tuition from Internal Transfer[2]	119,520	139,440	69,720	79,680			51,300	66,690	30,780	56,430			42,260	47,565	21,130	31,710		
Program Specific Fees (lab fees, etc.)	12,160	24,320	16,640	32,000			18,480	35,640	19,800	38,280			21,680	40,650	21,680	40,650		
Other Revenue (College service and activity fees)	25,270	28,880	34,580	38,000			38,220	42,120	40,950	45,240			44,960	48,300	44,960	48,300		
Total Annual Program Revenue	$ 1,098,290						$ 1,448,370						$ 1,621,540					

PROJECTED Program Expenditures[3]	First Year	Second Year	Third Year
Administration (Chair or Coordinator)[4]	11,106	11,717	12,361
Faculty (Full-time, total for program)[4]	22,212	46,867	72,757
Faculty (Part-time, total for program)[4]			
Support Staff (lab or grad assist, tutor)			
Library Resources Program			
Equipment (List in narrative)			
Other[5] *(Marketing)*	500	500	500
Estimated Indirect Costs[6]	13,327	23,434	34,047
Total Expenditures per Year	$ 47,145	$ 82,518	$ 119,666

NOTE: Existing regulations require that: "an application for a new program shall include a complete and realistic plan for implementing and financing the proposed program during the first cycle of operation, based on projected enrollment levels; the nature and extent of instructional services required; the availability of existing resources to support the program; additional resource requirements; and projected sources of funding. If resources to operate a program are to be provided totally or in part through reallocation of existing resources, the institution shall identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

1 1 FTE = 12 credit hours for undergraduate programs; 1 FTE = 12 credit hours for graduate programs; both for Fall & Spring

2 Revenues from all courses students will be taking.

3 Capital outlay costs, instructional spending for research and services, etc. can be excluded.

4 If full-time person is solely hired for this program, use rate time; otherwise, use a percentage. Indicate if new hires or existing faculty/staff. Record Salary and Fringe Benefits, accordingly.

5 e.g. student services. Course development would be direct payment or release time; marketing is cost of marketing that program separately.

6 Check with your Business Office – community colleges have one rate; the others each have their own. Indirect Cost might include such expenses as student services, operations and maintenance.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Connecticut State Community College: College and Career Success 101

June 18, 2020

WHEREAS the Board of Regents has endorsed the implementation of Guided Pathways practices and completing a First Year Experience course is consistent with these practices and meets all four Guided Pathways pillars: Clarifying academic and career pathways for students, helping students select a plan of study, keeping students on their plan, and creating meaningful learning experiences,

WHEREAS the Association of American Colleges & Universities lists the First Year Seminar as one of several High-Impact Educational Practices, which help students become more actively involved in their education and make a noticeable impact on students' engagement in the college, academic success, and sense of belonging in the campus community,

WHEREAS in keeping with the Board of Regents directive regarding the Students First implementation of Guided Pathways, Provost Gates charged the First Year Experience work group to "use guided pathways practices and existing expertise in the CSCU community colleges to design and recommend policies and practices that facilitate student retention and completion through the development of a first year experience that provides opportunity for career exploration and leads to the creation of an academic/career plan,"

WHEREAS the FYE work group, led by Guided Pathways managers for the Choice Architecture team and the Holistic Student Support Redesign team, and consisting of faculty, staff, and administrators from all twelve community colleges (https://www.ct.edu/gp/groups), developed the foundation for College and Career Success (CCS 101), a course informed by Guided Pathways principles and backward designed to focus on outcomes of college success, career exploration, and the development of core general education competencies.

WHEREAS the Advising Leads Council, in January 2019, recommended that CCS 101 should be a required course in the General Education proposal,

WHEREAS the FYE work group further recommended, in February 2020, that FYE/Student success departments and faculty move the course through their college curriculum approval process, academic programs include this course in their curriculum, and academic administrators support the scheduling and staffing of the course,

WHEREAS the Guided Pathways Holistic Student Support Redesign and Choice Architecture teams (https://www.ct.edu/gp/groups) reviewed and supported the CCS 101 course proposal and FYE work group recommendations, in February 2020 and May 2020, respectively,

WHEREAS research has established that First Year Experience courses must be taken early in a student's academic career to have the highest impact, that the optimal First Year Experience course is a 3-credit stand-alone class, and that all students, even those who are high-performing or transfer students, benefit from establishing a career path as well as learning the academic and personal skills to be successful students and employees,

WHEREAS the Holistic Case Management Advising policy of the Board of Regents requires that all students create a personalized academic and career plan,

WHEREAS the General Education Core for Connecticut State Community College has been established to include competency requirements as well as a diversity requirement,

WHEREAS the learning outcomes of CCS 101 are designed to promote a successful first year, student success, and equity, which are three of the five goals of the Board of Regents,

BE IT RESOLVED: That the Board of Regents for Higher Education directs Connecticut State Community College, in conjunction with the CSCU System Office through the leadership of the CSCU Provost and Senior Vice President for Academic and Student Affairs, to:

- Require all Connecticut State Community College programs of study to include the three (3) credit CCS 101 which is focused on college success and career exploration.
- Require all degree-seeking students to enroll in CCS 101 within their first nine (9) credits.
- Ensure that CCS 101 includes a component that meets the general education core diversity requirement.
- Ensure that CCS 101 fulfills one of the general education core competencies.
- Make recommendations regarding which programs of study might add CCS 101 as an exception to normalization, in accordance with BOR policy.
- Provide guidance regarding which circumstances allow a student to request exemption from taking CCS 101 with final decisions on exemptions made by campus academic leadership.
- Ensure that CCS 101 is regularly updated to align with the latest research and evidence from the field regarding successful first year experience courses, noting that current research demonstrates that the most successful first year experience courses use pedagogies that promote learning-for-application, use equity-minded pedagogies and inclusive formats, give instructors the tools and structural supports to teach effectively, and substantively link the course to other academic courses to improve transfer of learning.
- Provide administrative oversight of CCS 101 to ensure consistency of delivery and outcomes.

ITEM

To increase community college retention and graduation under Students First, the following policy is proposed concerning College and Career Success 101. The policy directs the Connecticut State Community College, in conjunction with the CSCU System Office under the leadership of the CSCU Provost and Senior Vice President for Academic and Student Affairs, to:

- Require all Connecticut State Community College programs of study to include the three (3) credit CCS 101, which is focused on college success and career exploration;
- Require all degree-seeking students to enroll in CCS 101 within their first nine (9) credits;
- Ensure that CCS 101 includes a component that meets the general education core diversity requirement;
- Ensure that CCS 101 fulfills one of the general education core competencies;
- Make recommendations regarding which programs of study might add CCS 101 as an exception to normalization, in accordance with BOR policy;
- Provide guidance regarding which circumstances allow a student to request exemption from taking CCS 101 with final decisions on exemptions made by campus academic leadership;
- Ensure that CCS 101 is regularly updated to align with the latest research and evidence from the field regarding successful first year experience courses, noting that current research demonstrates that the most successful first year experience courses use pedagogies that promote learning-for-application, use equity-minded pedagogies and inclusive formats, give instructors the tools and structural supports to teach effectively, and substantively link the course to other academic courses to improve transfer of learning; and
- Provide administrative oversight of CCS 101 to ensure consistency of delivery and outcomes.

RECOMMENDED MOTION FOR FULL BOARD

Resolved: That the Board of Regents for Higher Education formally adopts the College and Career Success 101 Policy for the Connecticut State Community College.

EXECUTIVE SUMMARY

This staff report consists of three main sections:

A. **BACKGROUND (p. 3-7)**, which establishes that:
   a. The first year of college is a critical period in determining students' chances of long-term success;
   b. The Connecticut State Community College can improve retention and completion rates by strengthening support services for students in their first year;
   c. A well-designed first-year experience course is an efficient vehicle to get every incoming student on a personalized academic and career plan and effectively teach them the knowledge, skills, and habits associated with higher learning, better course performance, and persistence in college; and
   d. Participation in a first-year experience course improves a wide range of student outcomes, such as course performance, credit accrual, persistence, retention, and graduation;

B. **THE COURSE (p. 8-11)**, which describes how:
   a. College & Career Success 101 (CCS 101) promotes Guided Pathways principles by equipping all degree-seeking students at the Connecticut State Community College with a personalized academic and career plan and the knowledge, skills, and habits required to achieve their educational goals;
   b. CCS 101 promotes equity by improving outcomes for all students who take it, especially those who face the greatest social, economic, and cultural disadvantages, thereby reducing disparities in student success rates among CSCU student groups;
   c. CCS 101 works in concert with Guided Pathways Advising and Areas of Study to promote early student success and the efficient completion of credentials; and
   d. CCS 101 was developed by a team representing many different perspectives from all twelve community college campuses; and

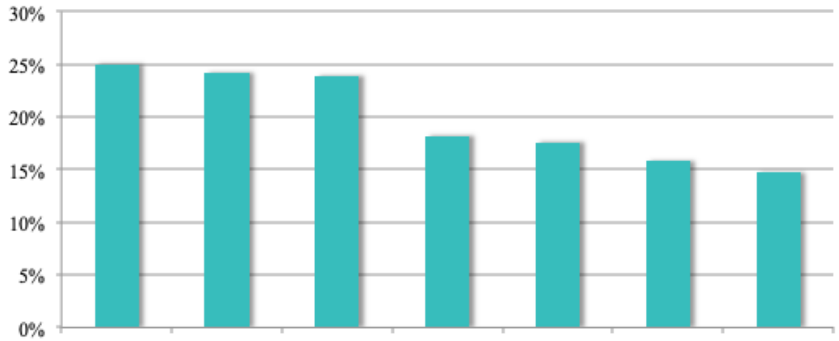
C. **FREQUENTLY ASKED QUESTIONS (p. 12-14)**, which explains that:
   a. CCS 101 should be mandatory to preserve its potential to bring greater equity to the Connecticut State Community College and improve the most disadvantaged students' chances of reaching their academic and career goals;
   b. CCS 101 should be worth three (3) credits because it is academically rigorous and requires significant time to fulfill its potential to meet the student outcomes;
   c. CCS 101 should be taken within the first nine (9) credits for students to reap the benefits of the course;
   d. CCS 101 aligns with the general education core diversity requirement to prepare students to live in a diverse and interdependent society; and
   e. The Board of Regents will direct the CSCU Provost, Associate Vice President of Academic and Student Affairs, and Provost for Connecticut State Community College to take further action if the policy is approved.

BACKGROUND

Why increase support for students in their first year specifically?

CSCU's community college students face tremendous challenges to efficient completion of a postsecondary credential. These challenges have resulted in persistently low graduation rates across all twelve community colleges. Among first-time, full-time students who enrolled in a CSCU community college between 2011 and 2015, fifteen percent completed all the requirements for a degree or certificate within three years of starting. As illustrated in Figure 1, this was lower than the national graduation average and that of all other state community college systems in New England during the same time period.

Figure 1: Percentage of first-time, full-time students who completed a degree or certificate at a public 2-year college within three years *(Sample: Cohorts 2011-2015)*

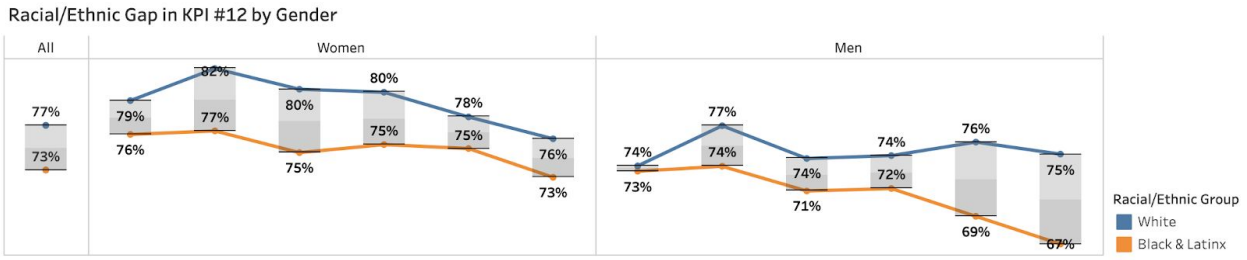


Source: IPEDS, 2019; Juszkiewicz, 2017; NCES, 2019

Historically underserved and minoritized student groups at the community colleges face additional barriers to success that make them even less likely to graduate. The average IPEDS three-year graduation rate for Black students has been 7 percent over the past five years and 11 percent for Latinx students, compared to 18 percent for Asian students and 19 percent for White students. The Board of Regents has stated its goals to increase retention and graduation rates and eliminate these racial and ethnic disparities, as well as disparities between different socioeconomic and gender groups (BOR, 2019).

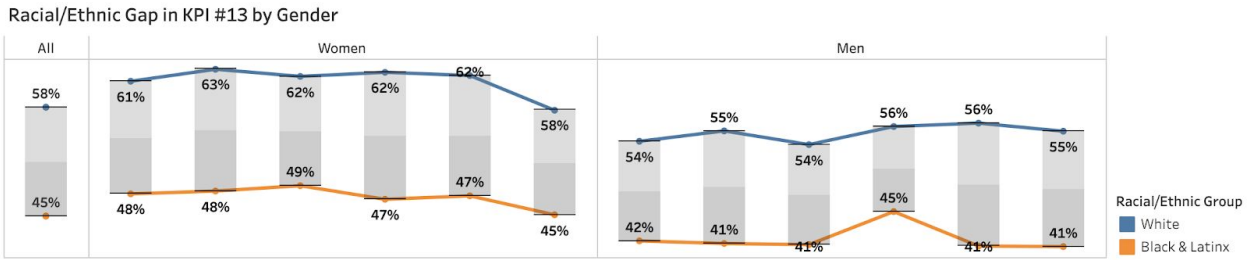
While these endpoint statistics reveal the inadequacy of current institutional supports for students, they do not tell the entire story of the CSCU community colleges' completion and equity problem. Our students are not bound to drop out of college at such extreme rates when they first enroll; the vast majority of them are determined to complete a credential and either move on to further education or a job. But various Guided Pathways Key Performance Indicators show that as early as their first year, students struggle to reach certain milestones predictive of completion. Figures 2, 3, and 4 illustrate disheartening trends in first-year student persistence, academic performance, and credit accrual across the community colleges, disaggregated by race, ethnicity, and gender.

Figure 2: Percentage of students who persisted from term one to term two (fall to spring) among Fall 2013-2018 cohorts



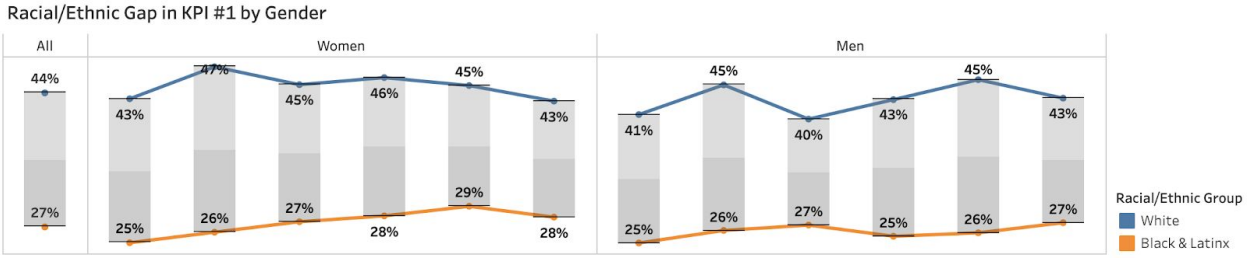
Source: CSCU Office of Research and Systemic Effectiveness

Figure 3: Rate of college-level course passing (C or above) in students' first academic year (fall, winter, spring, summer) among Fall 2013-2018 cohorts



Source: CSCU Office of Research and Systemic Effectiveness

Figure 4: Percentage of students who earned 15 or more college-level credits after year one (fall, winter, spring, summer) among Fall 2013-2018 cohorts



Source: CSCU Office of Research and Systemic Effectiveness

These indicators are evidence that major obstacles to success are present from the very beginning of students' community college journey. Indeed, the transition to postsecondary education in general poses several simultaneous challenges to incoming students:

First, college-level coursework is more rigorous than the classes most students took in high school. In addition to a higher mastery of course content and competencies, academic success in college requires more disciplined and sophisticated study habits like reflective note-taking, independent time management, and the proactive use of academic support services (Karp & Bork, 2012). The gap between college academic standards and students' level of preparation is greatest for those who attended less resourced and effective elementary, middle, and high schools.

Second, success in college requires students to model new behaviors that are specific to the culture of higher education. These behaviors include speaking and writing in academic language, actively participating in class, interacting with professors, adapting to different instructors' teaching styles and classroom expectations, and navigating bureaucratic systems like financial aid and transfer (Karp & Bork, 2012). It is important to note that collegiate expectations of "proper" behavior are rooted in White, middle-class norms (Rendon et al., 2000; Hurtado & Carter, 1997; Tierney, 1999); thus, they can be especially difficult to perform for students who did not grow up in that culture or have family members who attended college (Collier & Morgan, 2008; Falcon, 2015; Karp & Bork, 2012, O'Gara et al., 2009).

Third, many new college students must contend with more responsibilities than they ever have before, balancing school with part-time or full-time jobs and caregiving roles at home. These various commitments compete constantly for students' time and attention. Being able to prioritize school work amidst these constraints requires students to intentionally carve out study time, make contingency plans, filter out distractions, modify their class schedule to accommodate work and family, and communicate with instructors about conflicts (Karp & Bork, 2012).

Last but not least, success in college often requires students to ask for help from instructors, advisors, and other support staff without prompting. Seeking help is more complicated than meets the eye. Students must first recognize and admit that they need help, ideally before the situation becomes dire; then understand where and how to seek help given the available resources; and finally have the sense of agency to take action (Karp & Bork, 2012). Asking for help and advocating for oneself do not come easily to many college students. It can be challenging, anxiety-provoking, and even identity-threatening (Cox, 2009; Gardenhire-Crooks et al., 2010; Peña & Rhoads, 2018).

Altogether, these challenges make the transition to college very difficult for many students. This is why the students' first year of college–especially their first semester–is a decisive time for colleges to provide stronger institutional support services. College students' earliest moves have outsized consequences and can set forth in motion either a positive or negative feedback loop. On the one hand, students with good academic preparation, adequate financial resources, minimal commitments outside of school, and family members who graduated from college have

the highest chances of transitioning to college smoothly, building confidence and early connections, and making steady progress toward their goals. On the other hand, students without these advantages are at a greater risk of making an early misstep–e.g., a bad grade, missed class, late assignment–losing focus and self-esteem, and never fully recovering. As the system's 72 percent persistence rate from Fall 2018 to Spring 2019 suggests, a considerable number of first-year community college students drop out under the stress.

The challenge of first-year student attrition presents an opportunity for stronger first-year student supports. Intentional first-year programming–particularly within students' first 15 credit hours–can divert "early leavers" away from exiting college prematurely to excelling in their introductory courses and persisting further along the path to completion (CCSSE, 2009; Hunter, 2006; Puyana & Shugart, 2001; Scott-Clayton, 2011; Veenstra, 2009).

Why adopt a first-year experience course?

Two- and four-year colleges across the nation have pursued several strategies to promote first-year success. Among the most popular and high-impact strategies is the first-year experience (FYE) course–also known as a student success course or College 101 course–which generally serves as an extended orientation seminar for new students (Barefoot & Fidler, 1992). FYE courses have gained a foothold at the majority of higher education institutions. According to a 2009 survey of more than 1,000 institutions, 87 percent of respondents offered a first-year seminar (Padgett & Keup, 2011).

While FYE courses vary in content, instruction, and institutional context, they share the common purpose of familiarizing students with the college environment and developing their ability and confidence to achieve their educational goals. The typical FYE course provides participants with information about campus resources and services, assistance in academic and career planning, and techniques to improve study habits and personal skills like time management (Barefoot & Fidler, 1992; Hunter & Linder, 2005; Karp et al., 2012).

FYE courses are a useful vehicle to teach students a wide range of knowledge, skills, attitudes, and behaviors associated with college and career success in a coherent way. To become an effective college student, incoming students must engage in several distinct tasks at once, such as career exploration, academic planning, academic and personal skill development, and orientation to campus resources and services. An FYE course is a convenient, one-stop location where students can learn about these various topics from a single source, understand their relevance and utility, and clarify the connections between them (O'Gara et al., 2009). Without an FYE course to streamline and coordinate this information, students have to piece together the recipe for success on their own, an approach too burdensome, confusing, and haphazard for something as high-stakes as the transition to college.

Another advantage of FYE courses, at least compared with campus-wide orientations, is that they allow enough time for students to engage in deeper, more interactive learning activities that improve their internalization of new knowledge and skills and ability to use them in the future. Thoughtful career exploration and academic planning are also time-intensive, iterative processes

(Harrington et al., 2018). FYE courses give students a supportive environment and extended period of time dedicated to honing these skills and strategies and gaining comfort transferring them to other contexts.

Finally, FYE courses are an efficient way to deliver support services to far more students than other mechanisms like advising, given the same amount of resources. There are pieces of information and activities that all new students should learn and participate in; conveying this information and facilitating these activities for 20 to 25 students in one classroom requires less time and energy than doing so in 20 to 25 individual advising sessions (Karp, 2011; O'Gara et al., 2009). Yet another benefit of bringing groups of 20 to 25 students together in an FYE course setting is the potential for closer friendships and support networks to form (O'Gara et al., 2009; Tinto, 1993). Positive relationships can increase student persistence by making them more comfortable in college.

The research literature strongly suggests that student participation in a first-year experience course is associated with a range of positive outcomes. In studies of various two- and four-year college across the nation, students who enrolled in an FYE course, as compared to similar peers who did not, were more likely to:

- **stay in college longer (from one semester to multiple years longer);**
    - (Belcher, 1993; Blanton et al., n.d.; Boudreau & Kromrey, 1994; Bushko, 1995; Goodman & Pascarella, 2006; Jackson, 2005; Jaijairam, 2016; Karp et al., 2015; Fraser et al., 2017; Miller et al., 2007; Permzadian & Crede, 2016; Pittendrigh et al., 2016; Schnell & Doetkett, 2004; Starke et al., 2001; Strumpf & Hunt, 1993; Stupka, 1993; Vaughan et al., 2014; VerDuin, 2005)
- **earn more college credits and higher grades in subsequent terms;**
    - (House, 2005; Jaijairam, 2016; Jamelske, 2008; Jenkins-Guarnieri et al., 2015; Karp et al., 2015; Schwartz & Grieve, 2008; Vaughan et al., 2014; Wahlstrom, 1993)
- **feel a greater sense of belonging;**
    - (Jaijairam, 2016; Keup & Barefoot, 2005; O'Gara et al., 2009)
- **feel better about the career decision-making process;** and
    - (Adams et al., 2008; Belson & Deegan, 1993; Jaijairam, 2016; Fraser et al., 2017; Peterson & Stubblefield, 2008)
- **graduate in less time and with fewer credits.**
    - (Blowers, 2005; Clouse, 2012; Lang, 2007; Miller & Lesik, 2015; Pascarella & Terenzini, 2005; Schnell et al., 2003)

Larger-scale studies of the community college systems in Florida, Virginia, and North Carolina found a positive association between FYE course participation and retention and completion rates (Cho & Karp, 2013; Yamasaki, 2010; Zeidenberg et al., 2007). Furthermore, FYE has already shown promise to improve student success here in Connecticut: New students who enrolled at Asnuntuck Community College in the fall semester between 2008 and 2014 and who took its FYE course had a nearly 17 percent higher fall-to-fall retention rate than their peers who did not take the course (CCC Advising Leads Council, 2019).

THE COURSE

CCS 101: College & Career Success

The Guided Pathways framework seeks to help community college students efficiently complete credentials, transfer, and attain jobs with value in the labor market. It imagines a student's college journey as a pathway from entry to completion that is filled with obstacles that institutions must clear to promote student success. Guided Pathways consists of four principles around which colleges can organize their various student success initiatives in a coherent way:

1) Provide students with clearly structured pathways to a credential, transfer, and employment;
2) Get students on a plan that lays out the requirements to achieve their academic and career goals;
3) Help students stay on track until they complete their goals; and
4) Ensure that students are learning with clear program outcomes and effective teaching practices.

CCS 101: College & Career Success is a first-year experience course designed by faculty, staff, and administrators from CSCU's 12 community college campuses to help new students transition effectively to college and to improve student learning and persistence. The course connects seamlessly to the principles of Guided Pathways: CCS 101 is an efficient way to ensure all students entering the Connecticut State Community College have a personal academic and career plan, the knowledge and skills to persist through challenges, and study strategies that facilitate greater learning and success in their coursework.

CCS 101's learning objectives are rooted in theories of student persistence and empirical evidence of the key determinants of college success. For instance, by the end of the course, students will have 1) created a personal academic and career plan after assessing their personal strengths, interests and values; 2) researched the nature and outlook of different professions; 3) mapped out a course of study that helps them meet their desired job qualifications; and 4) devised a strategy to cover the costs associated with their chosen degree or credential (CSCU FYE Work Group, 2019). There are potentially tremendous benefits of engaging in a structured exploration and planning process at the beginning of college. First, the exploration process gives incoming students the time and guidance to articulate their goals and the value of a college education, increasing their motivation and intentionality. Students who do not have clear goals or a genuine understanding of why college is worthwhile are more likely to make counterproductive choices and get derailed by minor challenges and setbacks (Grubb, 2006).

Furthermore, the planning process results in a thoughtful, realistic course-by-course roadmap to completion. Research strongly suggests that success outcomes improve when students develop a concrete set of steps for attaining their goals (Bahr, 2008; Jenkins et al., 2017; Metzner, 1989; Visher et al., 2010). Second, a plan may help students make more informed academic and personal decisions by regularly reminding them of the requirements for completion and

providing them with clear benchmarks against which they can measure their progress. Last but not least, the act of creating a plan in CCS 101 may have as much value as the document itself. The experience of researching, drafting, and refining the plan during the first year could develop students' ability to reflect on their personal goals and circumstances, critically assess their options, and formulate a course of action that best suits them (Harrington et al., 2018; Karp & Bork, 2012). These skills are essential to independently manage and rebound from challenges in the future, which can improve student persistence (Dignath & Büettner, 2008).

The other learning objectives of CCS 101 support the third and fourth principles of Guided Pathways: help students stay on a path and ensure students are learning. In CCS 101, students will learn the expectations required of successful college students; develop essential academic skills such as information literacy, critical thinking, and effective communication; identify and practice using campus resources and services; and learn how to apply various study habits and personal success strategies that promote well-being, motivation, and resilience (CSCU FYE Work Group, 2019). Accomplishing these outcomes will enable students to decipher and master the many unwritten rules of college that impact their academic performance and motivation to stay in college. Examples of these oft-unspoken requirements of success include knowing how to participate in class appropriately, how to navigate bureaucratic systems to access resources, how and when to ask for help, and how to effectively balance school, work, and family commitments (Bourdieu, 1973; Karp, 2011; Tinto, 1993). Failure to learn these behaviors can demoralize students and contribute to low persistence (Tinto, 1993).

Instead of leaving students to figure out how to navigate the college environment and do well in college-level courses, CCS 101 lays out what it takes for them to achieve academic success and then empowers them to do so. Moreover, CCS 101 sets students up for higher quality learning, which is the true value of earning a degree or credential. Students will effectively learn more not only by virtue of persisting and taking more classes, but also because they have the skills and strategies to more meaningfully engage with the lessons in each class that faculty work so hard to impart. Several CSCU community college campuses have demonstrated support for components of CCS 101, and they are taking action independently to incorporate them into their program curricula.

Equity Impact Statement

Disparities in achievement remain despite the best efforts of the twelve community college campuses to promote equity among CSCU students. The Connecticut State Community College's CCS 101 will advance the Board of Regents' twin goals of increasing student success and eliminating achievement disparities among different racial, ethnic, socioeconomic, and gender groups (BOR, 2019).

First, by taking CCS 101, all degree-seeking community college students will gain the resources and skills associated with college and career success. Students will take the course within their first nine credits so they can apply what they learn as early as possible, thereby maximizing the quality of their learning, their preparedness for upper-level coursework, and their chances of completing their goals. Research strongly suggests that an early and intentional intervention like

CCS 101 stands to improve a range of outcomes for *all* CSCU community college students, including course performance, credit accrual, and retention and completion rates.

Second, CCS 101 will especially empower students who face the greatest barriers to college and career success. Compared to more selective higher education institutions, community colleges enroll a disproportionate share of disadvantaged students, including first-generation college students, low-income dependents and earners, part- and full-time workers, and caregivers. These student populations face high barriers to learning, education, and employment, and are the most likely to drop out of college before earning a credential (Carnevale et al., 2015; Carnevale & Smith, 2018; Cataldi et al., 2018; Edgecombe, 2019; Fountain, 2019; Gault et al., 2016; Jenkins, 2003; RTI International, 2019a, 2019b, 2019c; Ma & Baum, 2016; NSC Research Center, 2019; Noll et al., 2017; Yuen, 2019).

CCS 101's emphasis on developing academic skills and study habits, practicing using campus resources, and engaging with community members will benefit students whose home lives and previous schooling did not provide them with the social network or academic, practical, and cultural knowledge required to navigate higher education and excel in college-level classes. Furthermore, CCS 101's focus on personal success strategies and academic, career, and financial planning will increase the bandwidth and resilience of students who are balancing college with work and family commitments and other personal needs like physical well-being, mental health, and food and housing security. Taken together, the various learning outcomes of CCS 101 comprise both a safety net and springboard to success for students who would otherwise struggle to stay in college long enough to complete their educational goals.

How does CCS 101 interact with other Guided Pathways efforts?

CCS 101 is a critical piece of CSCU's implementation of Guided Pathways. The course works in concert with the Areas of Study and Holistic Case Management Advising (HCMA) policies to get every Connecticut State Community College student on a pathway as early as possible and to equip them with the tools to achieve those goals as efficiently as possible. CCS 101 will provide Guided Pathways Advisors with the necessary support in making sure every student has a thoughtful academic and career plan. Additionally, the six Areas of Study will give students early momentum by helping them choose early course sequences that align with their interests and goals and reduce the chances that they switch programs of study later on, which might result in taking classes that do not count toward requirements for completion (Bailey et al., 2015; Karp, 2011; Rosenbaum et al., 2006).

The overall effects of this suite of Guided Pathways initiatives will be greater student motivation, focus, and preparedness. There is evidence from other community colleges across the nation, such as Lorain County Community College, that have implemented similar changes simultaneously and seen both a significant rise in credential attainment and decrease in the number of excess credits at the time of graduation (Ohio Higher Ed, 2018).

How was CCS 101 created?

The CSCU Provost and Senior Vice President for Academic and Student Affairs charged the FYE workgroup in 2018, a subgroup under the CSCU Guided Pathways Choice Architecture and Support Architecture (later renamed as Holistic Student Support Redesign). The workgroup was tasked with designing and recommending policies and practices that facilitate student retention and completion through the development of a First Year Experience course that provides opportunity for career exploration and leads to the creation of an academic/career plan. The group's recommendations would then move to the Guided Pathways Task Force and the Community College Implementation Committee for approval. All twelve colleges were asked to participate and ultimately sent members; the workgroup was comprised of FYE course coordinators, faculty, college administrators, and staff from complementary areas including library services, advising, and academic support (see Appendix for a list of contributors). Together this group brought diverse experiences and perspectives on content, pedagogy, and administration.

The development of CCS 101 was supported by a partnership with the New Jersey Success Center. Dr. Christine Harrington, then Executive Director of the NJ Success Center, is a nationally renowned expert in FYE. Dr. Harrington visited Connecticut three times in 2018 to facilitate a series of course development workshops. The course development started with a broad discussion about what students should be able to know or do upon completion of the course and developed a list of potential course objectives and outcomes. The group engaged in breakout sessions and full-group dialogue to winnow down the list of outcomes into a set of four course outcomes. The group then developed more detailed learning objectives along with two exemplar assessments. The group established the course name, subject code, prerequisite, and recommended class size. The group engaged in a series of edits and revisions to refine the content, language, and essential elements of the proposal needed for faculty to bring the course through their curricular governance process. The final proposal was approved in December 2019.

The community college advising council developed a statement of support endorsing the efficacy of the course and recommending that the general education committee adopt CCS 101 as a requirement for all students. The FYE workgroup mirrored that statement of support stressing the importance of the course in reaching the BOR's stated goals for Guided Pathways and equity. Several colleges have already incorporated aspects of the CCS 101 course into their current FYE course. Manchester Community College brought the CCS 101 course through the entire faculty curricular governance process and the course was formally approved by the college senate on May 7, 2020.

FREQUENTLY ASKED QUESTIONS

Why should CCS 101 be mandatory?

All new students enrolled at Connecticut State Community College should be required to take CCS 101, unless they are granted an exception, for a plain and simple reason: equity.

A Guided Pathways-informed first-year experience course like CCS 101: College and Career Success potentially has tremendous value for disadvantaged student populations, including first-generation college students, low-income dependents and earners, part- and full-time workers, and caregivers. Unfortunately, students who may benefit the most from an optional first-year experience course are least likely to take advantage of it (Harrington et al., 2018). For instance, first-generation college students are less likely than their counterparts whose parents have a Bachelors degree to use a variety of optional support services, such as academic advising services, health services, academic support services, and career services (RTI International, 2019c). Reasons for this include a lack of awareness of the service's potential benefits; not knowing how to access the service; unfamiliarity or discomfort with asking for help; and work or family-related scheduling conflicts that prevent students from visiting campus (Cox, 2009; Gardenhire-Crooks et al., 2010; Karp & Bork, 2012; Peña & Rhoads, 2018).

To ensure the benefits of CCS 101 flow to those who need the greatest support in making a successful transition to college, the course must be mandatory. Making the seminar optional–which the One College General Education Core currently does–undermines its potential to ensure *every* Connecticut State Community College student has the foundational knowledge and skills to achieve their academic and career goals, not just those students who are fortunate enough to be college-ready upon enrollment.

Why should CCS 101 be worth 3 credits?

CCS 101 should be worth three (3) credits because it is academically rigorous, holds students to high standards, and grows their cognitive capacities. A major focus of the course is developing students' critical thinking, writing, communication, and information literacy skills so they can meet the expectations of college-level classes. Students will cultivate these skills through a variety of tasks that will challenge them to think and perform at a higher level than they did before; example tasks include close reading, writing, and research assignments, as well as focused discussions and interactive projects. CCS 101 is no less demanding than courses in traditional academic departments and should be accorded the contact hours and status it deserves.

Furthermore, CCS 101 should be worth three (3) credits because college and career readiness is not a singular skill that can be acquired instantaneously. Rather, it encompasses an array of knowledge, skills, attitudes, and habits associated with academic achievement and persistence; learning this suite of competencies requires extensive reflection, practice, and consequently time (Karp et al., 2012; Harrington et al., 2018). For CCS 101 to fulfill its potential to improve student learning, retention, and completion, it must be worth three credits. The increased number of

contact hours also ensures that students who have the least time outside of class–whether due to work, family, or other responsibilities–have ample time to develop a thoughtful academic and career plan as well as the essential academic and personal skills to succeed.

Additionally, creating a personalized academic and career plan is a time-intensive process. It is highly reflective, complex, and iterative: students must reflect on their goals, values, interests, and strengths; explore and assess potential career options; identify a program of study that aligns with their career(s) of interest; map out the courses required to graduate from that program of study; and identify the support services and funding sources they will need to complete their credential. CCS 101 provides students with the time, structure, and guidance to do a thorough job, such that their plans are genuinely effective tools for future decision-making.

Research shows that reducing CCS 101 to one or two credits would both limit instructors' ability to achieve all of the learning outcomes by the end of the term and weaken students' motivation to take the class seriously (Blanton et al., n.d.; Cuseo, n.d.; Du, 2016; Jessup-Anger, 2011; Swing, 2002). Although it is difficult to make space in program curricula for a 3-credit course, the upfront investment of time will pay dividends for both students and instructors whose classes will be filled with better prepared learners.

Why should CCS 101 be taken within the first 9 credits?

CCS 101's value increases the earlier students take it: the sooner they gain these tools, the more confident, prepared to learn, and successful they will be. Research and practice make it unambiguously clear that students' earliest experiences in college have an outsized impact on their decision to stay and their chances of completion (Hunter, 2006). According to the Center for Community College Engagement, colleges can improve students' first-year experience by creating a welcoming and supportive environment, promoting a sense of community, making sure students have a clear academic plan and pathway, promote engaged learning, and provide opportunities for students to build their academic and social support network (CCSSE, 2009). CCS 101 is designed to accomplish all of these goals as soon as possible.

How is CCS 101 suited to fulfill the general education core diversity requirement?

The ultimate goal of the diversity requirement–"to prepare students for an increasingly diverse and interdependent campus and the world that they live in and will lead" (UCLA)–dovetails nicely with the self-reflective and collaborative ethos of CCS 101. Through various experiences and assignments, CCS 101 students will develop a greater awareness of themselves, including their values, biases, and assumptions, as well as engage with other students with different backgrounds and cultures. Learning to recognize their own perspectives, appreciate those of others, and build relationships across differences are key interpersonal competencies to successfully work and live in diverse societies. Colleges and universities across the nation, such as Guttman Community College, Georgia Southern University, Xavier University, and University of North Carolina at Chapel Hill, have also seen the potential of first-year experience programming to promote diversity and inclusion and are currently integrating these focuses into their respective courses.

What are the next steps if the policy is approved?

The Board of Regents will direct the CSCU Provost, Associate Vice President of Academic and Student Affairs, and Provost for Connecticut State Community College to shepherd the course refinement and curricular approval of CCS 101 through the future Connecticut State Community College curriculum procedures. These procedures must adhere to the principles of shared governance as well as those established by NECHE in standard 4.5.

RECOMMENDATION

It is the recommendation of the System's Provost and Associate Vice President of Academic and Student Affairs that the Board of Regents give favorable consideration to the adoption of the proposed College and Career Success 101 Policy for the Connecticut State Community College.

This report was authored by Benjamin Wong, a Research Fellow for CSCU Guided Pathways.

APPENDIX

CCS 101 Contributors

As of December 18, 2019

Catherine Babbitt	*Associate Professor of Developmental English*	Gateway
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Samantha Gonzalez	*Division Director of Liberal Arts, FYE Instructor*	Manchester
Jaime Hammond	*Director of Library Services*	Naugatuck Valley
Forrest Hightower	*Chair, Academic Enrichment &*	Norwalk

	First Year Experience	
Mary Ellen Jukoski	*President*	Three Rivers
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Bridget Mullally	*Coordinator of First Year Studies*	Gateway
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Tim St. James	*Dean of Students/FYE Instructor*	Asnuntuck
Kathy Taylor	*Associate Professor, Legal/Business*	Naugatuck Valley
Joanna White	*GEAR UP Program Director*	Manchester
Pam Williams	*Research Librarian*	Three Rivers
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CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Extension of teach out deadlines in cases

of student hardship

June 18, 2020

WHEREAS, CSCU institutions discontinue programs based upon regular review of their viability;

WHEREAS, As part of the discontinuation of programs, institutions set teach out deadlines to ensure enrolled students can complete;

WHEREAS, There are circumstances in which student hardship and mitigating circumstances prevent a student from completing within the specified teach out timeline, therefore be it

RESOLVED, That the Board of Regents for Higher Education approves that the CSCU Provost and Senior Vice President of Academic Affairs will review and grant extensions to the teach out timeline as originally submitted for programs, as appropriate based on student need.

A True Copy:

Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM: That the CSCU Provost and Senior Vice President of Academic Affairs will review and grant extensions to the teach out timeline for discontinued programs as appropriate based on student need.

BACKGROUND: As part of the regular and periodic review, institutions make decisions to discontinue programs that they consider no longer viable. At the time that the Board of Regents approves the request for discontinuation of a program, new students cannot enter that program. However, in many cases, there are students already enrolled in the program. When submitting a program for discontinuation, institutions are required to submit a teach out period to accommodate any students who are currently enrolled in the program. This plan sets both an end date and any necessary procedures for enrolled students to complete. Once that date passes, the program loses its OHE identification number and consequently becomes ineligible for federal financial aid.

Although the institutions strive to accurately set the end date for discontinuations, enrolled students that experience challenges may be unable to complete a program within the allotted time. This policy gives the Provost and Senior Vice President of Academic Affairs the authority to grant institutions an extension of a discontinued program's end date, case by case. Requests for extending the end date of a discontinued program will be made by an institution's chief academic officer and will include an explanation of the mitigating circumstances that prevent one or more students from completing the program as planned within the allotted teach out time. Upon the approval of the Provost and Senior Vice President of Academic for an extension to the teach out end date, the Office of the Provost will update the OHE of the modified date so that the program can continue to be eligible for Federal Financial Aid.

RECOMMENDATION: That the Board of Regents approve this policy for extending the teach out timeline for discontinued programs. The Provost and Senior Vice President of Academic Affairs supports this recommendation.

06/05/2020 – BOR -Academic and Student Affairs Committee
06/18/2020 – Board of Regents

PA12-40 Report

Spring 2020

Background/Context

Factors Impacting Developmental Education in Connecticut Community Colleges

To understand the impact of PA12-40 on higher education in Connecticut, it is essential to be aware of the factors that led to the enactment of this legislation, especially those factors that impact the effectiveness of the remedial/developmental coursework and support provided by the state's community colleges. There are many factors that have the potential to influence the effectiveness of developmental education for students in Connecticut's community colleges. Some factors likely to impact student success are difficult to measure, such as individual motivation, family expectations, and peer support. Other factors can be accurately measured, and their substantial impact on academic success is well documented. In study after study of college performance, family income and prior academic preparation are two interrelated factors that have been shown to correlate with overall student achievement in postsecondary education. Not surprisingly, these two factors have been shown to have a considerable influence on the academic achievement of students in Connecticut's community colleges. One reason that prior academic preparation is particularly influential is due to the combined effect of the open admission policy of these colleges and the large academic achievement gap between the state's urban and suburban school districts.

Open Door Admissions

In 1965, Connecticut's community colleges were established by legislation (PA 65-330) designed to expand educational opportunities for the citizens of Connecticut. A key feature of this expansion of access to higher education was the open-door admission policy of Connecticut's community colleges (see Ct.edu website). The open-door admission policy offers acceptance to anyone with a high school diploma or GED. The significance of an open-door admissions policy is that, unlike most public and private four-year colleges and universities with competitive admissions policies, colleges with an open-door admissions policy have no influence on determining whether applicants are sufficiently prepared to complete a college degree in the areas of study they offer. Many of the measurements of accountability for student progress that make sense at a competitive admissions college do not match well with the

circumstances of the open-door admission college. For example, when students fail to complete degrees at a college with admission requirements, it is fair for an accreditor to expect that the college should have been aware of its entering students' needs and invested in the necessary resources to meet those needs. At an open-door admission institution, however, the college has far less information about the academic preparation of each new student cohort, and – especially at community colleges with limited resources – limited ability to invest in sufficient resources to support students with the least preparation and highest need for support.

Public School Achievement Gap

For many years, Connecticut has held the unenviable distinction of being a state with one of the largest academic achievement gaps in the nation. The results of standardized tests such as Smarter Balanced, CAPT and CMT provide clear evidence that this achievement gap has persisted for decades. For example, in school year 2010-11, the year before PA12-40 was enacted, less than 11% of high school sophomores in the Hartford Public School system met the State's reading goal on the Connecticut Academic Performance Test (CAPT) while over 68% of students in neighboring West Hartford achieved this level of reading competency. In Bridgeport that year, 11% of students met the reading goal while in neighboring Trumbull the rate of students meeting this goal was 62%. New Haven (16%), Waterbury (14%) and New London (9%) students met the reading goal at considerably lower rates than students in the neighboring school districts of Woodbridge's Region 5 (71%), Watertown (61%) and Waterford (60%). CAPT testing evidence for these intractable gaps stretch back to at least 2001 and continue to be shown by Smarter Balanced results today. This year's Smarter Balanced test results show that Connecticut's achievement gap correlates with income levels, with students from across the state who are eligible for free lunch demonstrating competency in English and math at much lower rates (35% and 26%) compared to students who are not eligible (71% English and 62% math). The inequities in achievement also fall along racial and ethnic lines with Connecticut's white students achieving competency at a rate of 69% in English and 62% in math, African-American students at a rate of 34% in English and 23% in math, and Hispanic/Latinx students at a rate of 36% in English and 27% in math (http://edsight.ct.gov/SASPortal/main.do) . Compared to students from middle- and high-income families who demonstrate competency in reading, writing and math during high school, underprepared students from lower income families are more likely to attend their local community college. As a result, a disproportionate number and percentage of new students with considerable academic deficiencies enroll in Connecticut community colleges instead of four-year public or private colleges. Evidence for this enrollment pattern includes the high percentage of community college students who are eligible for Pell

Grants and over 30 years of data on placement testing results consistently showing that more than 60% of entering Connecticut community college students require remedial support in reading, writing or math.

Remedial/Developmental Education

Early in their history, Connecticut community colleges faced the difficult challenge of balancing their responsibility for delivering college-level quality coursework to all students and providing access to higher education for the many entering students who lacked the academic skills required to succeed in college-level work. A college whose mission is to prepare students for transfer and employment has the responsibility to deliver a curriculum that meets regional and national standards for postsecondary education. Therefore, that college cannot maintain its integrity and simply lower the performance standards of its curriculum so that unprepared students can earn credits and graduate. The responsible alternative is to devote institutional resources and expertise to assist unprepared students to develop the skills they need to participate fully in the educational opportunities available in college. In response to the evidence that many entering students lacked the reading comprehension, written communication and quantitative thinking skills to succeed in college-level courses, the community colleges began to offer *remedial* or *developmental-level* instruction in the skills of reading, writing and math for students who did not develop competency in these essential areas during their 12 years of public education. At first, one level of remedial coursework was sufficient to bring the majority of underprepared students to a level of academic competency that would allow them to be successful in college courses. However, over time increasing numbers of students who lacked even basic reading and arithmetic skills received high school diplomas and began enrolling in their local community colleges. The colleges responded by offering remedial coursework and support over two or more semesters for students who needed extensive academic support.

During the 1980's, Connecticut colleges began testing students' reading, writing, and mathematical competencies at the time of admission to ensure all students were placed into classes that would prepare them to be successful in college-level work. By 1988, the Connecticut Community College System determined that placement testing was an essential part of serving students and convened the Community College Basic Skills Council to recommend uniform testing processes at all community colleges. Initially a paper-and-pencil assessment (NJBST) was used, and when computerized placement testing became available, this group recommended College Board's Accuplacer as the placement instrument for all Connecticut community colleges. Both the NJBST and Accuplacer assessments have consistently shown that the majority of students entering Connecticut's community colleges do not possess the reading, writing, and math skills to begin their studies in college-level English and math coursework.

Economics & Educational Resources

In 2011, financial pressures related to a nationwide recession led more middle-income families to choose the cost-effective community college option for their children, and unprecedented numbers of students enrolled in Connecticut's community colleges. This increase in enrollment overwhelmed the resources of the colleges and led Higher Education Commissioner Michael Meotti to question whether Connecticut's community colleges should continue to serve underprepared students at all ("Community College Open Door Already Partly Closed" CT Mirror 5/24/2011) when better prepared students were unable to enroll in the then overbooked colleges.

At the same time, across the nation, politicians – most with little experience in higher education – began to depict remedial coursework as an expensive obstacle for unprepared students to overcome rather than necessary support for them to be successful. Confusing correlation with causation, organizations such as Complete College America actually blamed enrollment in remedial coursework – and not the students' lack of basic academic skills – as the reason why unprepared students were not as successful as students who entered college with adequate reading, writing and math skills. Ignoring the overwhelming evidence that increasing numbers of high school graduates clearly lacked the necessary skills to be successful in post-secondary education, politicians in several states questioned the value of teaching unprepared students the essential skills that they had failed to develop in high school. In Connecticut, members of the State Legislature began to examine the ways in which remediation was carried out at the State's twelve community colleges.

Fortunately, unlike lawmakers in other states, who attempted to legislate the elimination of developmental courses and support in college, Connecticut legislators led by Beth Bye spoke with experienced educators from the community college system before finalizing a draft of what would become PA12-40. During the spring of 2012, PA12-40 was passed in an effort to reduce the amount of time unprepared students would be required to participate in remedial instruction. The legislation also addressed concerns about the limitations of standardized placement testing, in particular the use of a single placement instrument to assess student preparedness for college. And, the legislation supported proactive steps to reduce the need for remediation in college by calling for Connecticut high schools to do a better job of addressing their students' academic deficiencies before they graduated.

PA12-40

The key features of PA12-40 stated that beginning no later than the fall semester of 2014:

1) Colleges would use more than one method for determining student placement in initial math and English courses (multiple measures).
2) Colleges would offer an embedded support option that would enable eligible students to complete the gateway English and/or math courses during their first semester of attendance.
3) Colleges would be prohibited from offering a sequence of multiple levels of developmental courses.
4) For students with very low skills, colleges would make transitional level programs available free of charge (the legislation designated additional funds for this purpose).
5) To reduce the demand for remediation in college, by 2016 Connecticut high schools would develop a process to assess their students' level of readiness in time to offer remediation before these students earned their diplomas.

Implementation

PA12-40 would require a major overhaul of the existing approaches to remediation at most Connecticut community colleges because many of the community colleges offered a sequence of two or more levels of remedial coursework in reading, writing, and mathematics to address the wide range of academic deficiencies presented by entering students. Initially, there was widespread confusion over how to comply with this law in the weeks and months following the passage of the bill. The bill included new unfamiliar terminology; for example, the familiar term *developmental* instruction was replaced with *intensive* instruction. Questions arose about *embedded instruction* and placement processes that used *multiple measures*. Prior to 2012, none of the colleges had been offering embedded support in college-level courses in part due to what had been considered the prohibitive expense associated with this type of instruction (e.g., increased faculty costs for smaller class sizes and additional instruction time). PA12-40 not only required colleges to develop embedded curriculum, but the new bill provided additional funding to make this type of instruction possible. Questions also concerned the bill's one-semester of intensive instruction. Student advocates wanted to know if struggling students would be allowed to repeat an intensive course if they were unable to develop the competencies to pass the course in just one semester. There were also questions about funding the transitional-level programs for students with very low literacy and numeracy levels because these courses were not financial aid eligible. In addition, faculty from science, social science, humanities, and other academic departments expressed concern that students moving into their courses from accelerated developmental programs would not be prepared to keep up with the pace and reading expectations of college coursework.

To address these questions and improve transparency and communication, the PA12-40 Advisory Group, with representation from across the system, was convened in November 2012. One of the first tasks of the PA12-40 Advisory Group was to produce a Frequently Asked Questions (FAQ) document to answer key questions about PA12-40 and how it would be implemented.

One of the major decisions for responding to PA12-40 involved the process of establishing new curricula for transitional, developmental, and embedded math and English courses. Some saw this as an opportunity to unify the developmental curriculum of all the colleges while others were concerned that imposing a single curriculum would reduce the effectiveness of instruction for some groups of students. Fortunately, the newly created PA12-40 Advisory Group recognized that imposing a single approach at every college would be less likely to effectively address the needs of students in 12 different communities. Rather than using a top-down approach that would limit valuable faculty input, the Advisory Group recommended to the Vice Presidents that each college be allowed to fully engage its faculty and its local decision-making processes to create solutions that best meet the needs of its students. In this way, hundreds of faculty members were able to participate and contribute their expertise to develop curricula that addressed the needs of their students within the boundaries set forth by the law.

College Access Challenge Grants (CACG)

To inform the development of the curriculum that would respond to PA12-40, the BOR awarded College Access Challenge Grants to statewide math (Math Issues Group) and English (CCET) committees to research remediation efforts throughout the system and to make recommendations for effecting the changes required by PA12-40. These two committees – each open to members from every community college in the state – had ready access to information on current developmental and gateway course learning objectives and each college's Accuplacer placement scores as well as detailed information about developmental and gateway level curricula being used throughout the system. Throughout the spring and summer of 2013, the members of CCET and the Math Issues Group worked diligently to address the changes required by PA12-40. Each group examined the charge of PA12-40 to determine its impact on current approaches to basic skills instruction across the system. This examination involved surveying all twelve colleges to identify current practices with regard to instruction and placement. The work of CCET and Math Issues during this period established the foundation for curriculum development and placement practices for each of the twelve schools to build upon.

Connecticut Coalition of English Teachers (CCET)

Over eight months in the spring and summer of 2013, the Steering Committee of CCET collaborated at the state level while its individual members worked with their local English departments to realize the outcomes of the College Access Challenge Grant (CACG). The group began by identifying the competencies for entry into each of the levels described in PA12-40. Focus on these competencies grounded CCET's work on outcomes and placement. Subsequently, CCET members agreed on learning outcomes for developmental, embedded and gateway English courses, confirming that embedded and gateway English courses must have the same learning outcomes. The group also developed a course description of a six-credit intensive-level course (ENG096) with common learning outcomes for reading and writing. CCET's report included recommendations for the development of placement processes that incorporated the use of multiple measures as required by the legislation. Recommendations included the option of a challenge essay to supplement results from standardized instruments (SAT and Accuplacer).

Math Issues Group

Math Issues reviewed the alignment of the topics in both the Elementary Algebra and Intermediate Algebra courses. As a result, the scope and sequence of topics were carefully assessed and more abstract topics (e.g., factoring polynomials) were moved to Intermediate Algebra and more foundational algebraic topics (e.g., solving simultaneous equations) were moved to Elementary Algebra. All 12 community colleges reached 100% agreement on the learning outcomes of both Elementary Algebra and Intermediate Algebra. In 2018-2019, Math Issues conducted a survey of the 12 community colleges and found that the 100% alignment of the courses was still in place across the math curricula of the colleges. The members of the Math Issues Group also identified a range of Accuplacer scores for initial student placement in intensive-level, embedded-level, and college-level math courses.

Curriculum Design and Implementation

To address the development of embedded curriculum in the area of English Composition, some colleges used the ALP model that was developed by Peter Adams and colleagues at Baltimore County Community College. In this model, students who placed below college-level English would attend the same class as those who tested into college-level English. However, the former group would attend an additional hour after class in which they would receive supplementary instruction and feedback on their progress. Other schools used a model of embedded support in which students who tested just under college-level would be taught together but receive additional instruction time (ranging from 1 to 3 hours) with their professors each week throughout the semester. Each college could determine how much

additional time was optimum with most settling on an additional three hours per week. However, financial and logistical concerns also factored in the determination of the amount of additional time at some colleges.

Course Placement Instruments

For over a decade, Accuplacer by The College Board had been used by all of the community colleges to place entering students in their initial math and English courses. Although Accuplacer was the system's common instrument, each college determined its own cut-off scores for placement in college-level and developmental coursework. In May 2013, the BOR policy requiring colleges to use Accuplacer results to place students in their initial courses was relaxed to allow colleges to develop their own placement procedures to meet the multiple measures requirement of PA12-40. During this period, some colleges developed behavioral questionnaires to supplement Accuplacer scores. For one year, one college stopped using Accuplacer results altogether and conducted interviews with all entering students to determine their placement in math and English. Other placement measures included using students' SAT/ACT/GED scores, overall high school GPA, and student writing samples. During 2013 and 2014, Connecticut's public schools were planning to administer the competency test Smarter Balanced to all students in their junior year of high school. This instrument promised to provide diagnostic information on the academic skills of students. The use of junior year Smarter Balanced results was also proposed as a multiple measure for determining math and English course placement at the colleges. However, while the Smarter Balanced instrument was adopted for use with students from third to eighth grade, parental objections prevented it from being administered to high school students. Instead, beginning in March 2016, all high school juniors would be required to take the SAT. In 2018, The College Board released a new version of Accuplacer – Accuplacer Next Generation – that included significant changes to content, question format, and score ranges. CCET and CMAC thoroughly reviewed this instrument and revised their placement recommendations accordingly. In 2019, the Test Administrators Council recommended that an electronic bridge be developed between the BOR and the State Department of Education to obtain SAT scores of students who apply to the community colleges. Later that year, the community colleges adopted a uniform policy to accept AP test scores of 3 or higher for college credit.

Impact of PA12-40: Results

To examine the impact of changes related to PA12-40, this section will compare the performance of two entering student cohorts. The pre-PA12-40 cohort is made up of first-time students who entered a Connecticut community college in the fall semesters of 2011 and 2012. The post PA12-40 cohort is

composed of first-time students who began their studies in the fall semesters of 2015 and 2016 after changes made in response to PA12-40 had been fully implemented. Each cohort is divided into three subgroups based on their Accuplacer results. The first subgroup (Subgroup I) is composed of students whose Accuplacer results place them slightly below college-level coursework. Before the passage of PA12-40, these students would have been required to pass a developmental-level course to be eligible to take college English and math. Post PA12-40, most of these students are eligible to enroll in a college-level course with embedded support. The second subgroup (Subgroup II) is made up of students whose placement results were significantly below the cut-off for college-level coursework. Prior to PA12-40, some of these students would have been required to take one semester of developmental-level coursework and many would have been required to complete two semesters of coursework before being eligible to take college-level courses. Post PA12-40, these students would most likely begin their studies in one-semester intensive-level courses. The third subgroup (Subgroup III) is composed of students whose placement results indicate the most extreme level of academic deficiency. Many of these students lack the ability to do basic arithmetic and/or lack fundamental reading comprehension skills. Prior to PA12-40, most of these students were required to successfully complete two semesters of remedial coursework. Post PA12-40, these students are placed into the free transitional-level of instruction and support.

For all entering students at all academic levels, the impact of PA12-40 has been positive. Clearly, the students whose placements results put them just below college-level coursework (Subgroup I) have benefitted most from the new curriculum. Prior to 2014, these students, would have been required to complete one semester of developmental coursework, but now many are enrolling and completing college-level English and math courses during their first semester of attendance. In addition, being eligible to take ENG101 during their first semester also enables these students to take college-level coursework in other subject areas, which can further accelerate their progress toward earning a degree.

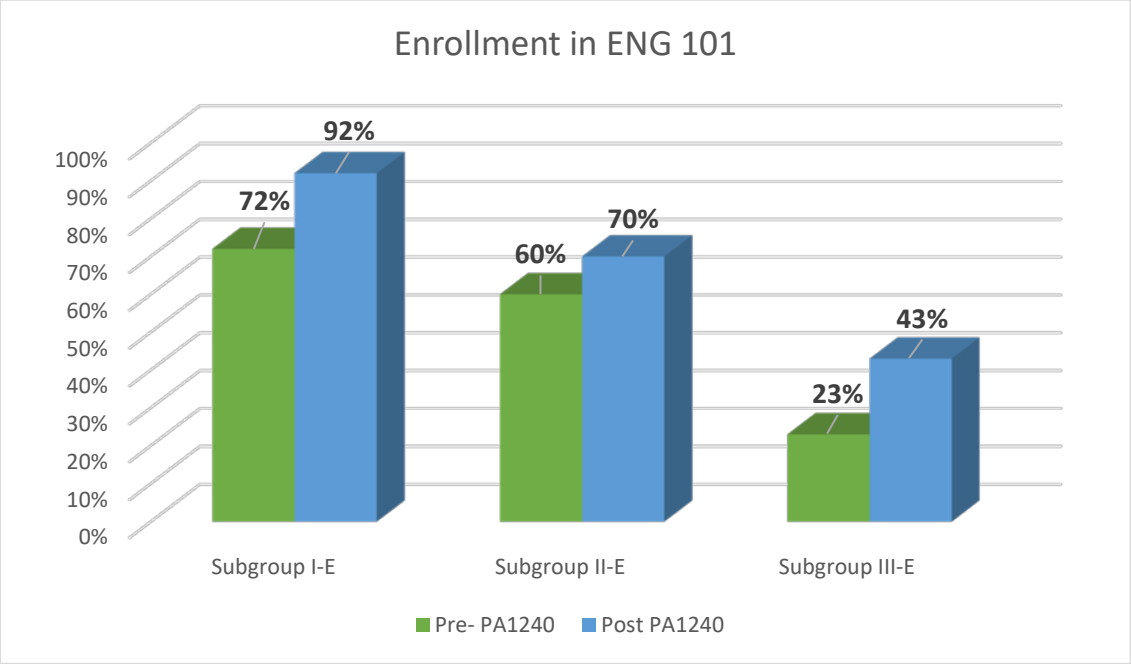
College English Enrollment

Achieving eligibility to enroll in college-level English Composition (ENG101) is an important milestone for a college student. A student identified as prepared for the challenges of ENG101 has demonstrated the ability to read and write sufficiently to participate fully in college-level coursework. At most colleges, eligibility for ENG101 is a prerequisite for enrollment in introductory courses in most subject areas. Consequently, many students cannot begin taking the courses that will count toward graduation until they are eligible to take ENG101.

The rates that students in all three English subgroups enroll in English 101 have increased since the implementation of PA12-40. Prior to the passage of PA12-40, 72% of entering students in Subgroup I-E enrolled in college-level Composition (ENG101) within three years of attendance. This number

jumped to 92% when PA12-40 curriculum and support took full effect. The percentage of students in Subgroup II-E enrolling in ENG101 increased by 10 percentage points from 60% pre- PA12-40 to 70% post PA12-40. And the lowest skilled students in Subgroup III-E nearly doubled their rate of eventually enrolling in ENG101 from just 23% before PA12-40 to 43% after PA12-40 took full effect (see figure 1).

Figure 1: All Subgroups ENG101 Enrollment

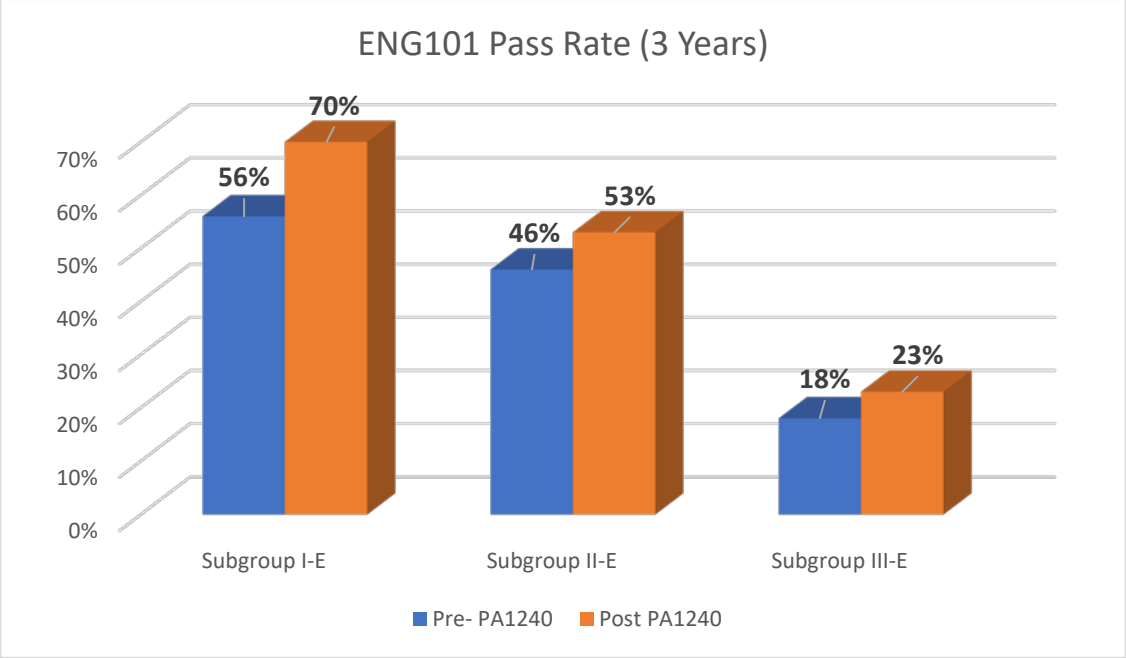


College English Pass Rate

While being eligible to enroll in ENG101 is an important progress marker for college students, passing this key course is essential for continued progress towards a degree. Prerequisites for many liberal arts and second-year program courses require that students have passed ENG101. Given that the majority of these courses require extensive writing, students must possess the skills associated with passing ENG101 in order to be successful. These skills not only include the ability to write grammatically correct sentences that express ideas clearly, but also the ability to organize information to communicate a complex line of thinking over several pages of text. The ENG101 pass rates of students in all three subgroups increased following the implementation of PA12-40. Pass rates for students in each cohort were tracked over three years and pass rates for all three subgroups improved under PA12-40. Prior to the passage of PA12-40, the pass rate (over three years) for students in Subgroup I-E was 56%. With PA12-40 in full effect, the pass rate of students in Subgroup I-E increased by 14 percentage points to 70%. The pre- and post PA12-40 ENG101 pass rates for students in Subgroup II-E increased more moderately by 7

percentage points from a pre-PA12-40 rate of 46% to a post PA12-40 rate of 53%. The ENG101 pass rate for students in the lowest skilled subgroup (Subgroup III-E) increased by 5 percentage points from 18% pre-PA12-40 to 23% post PA12-40 (see figure 2).

Figure 2: All Subgroups ENG101 Pass Rate



The average time required for developmental students to pass English 101 has declined significantly since the implementation of PA12-40. Prior to the implementation of PA12-40, students in Subgroup I-E took an average of one full academic year to pass college-level English Composition. After PA12-40 was implemented, the average time to passing ENG101 was cut to just one semester for this subgroup. The implementation of PA12-40 also reduced time to passing ENG101 for students in Subgroup II-E with most of these students successfully completing ENG101 in their first academic year.

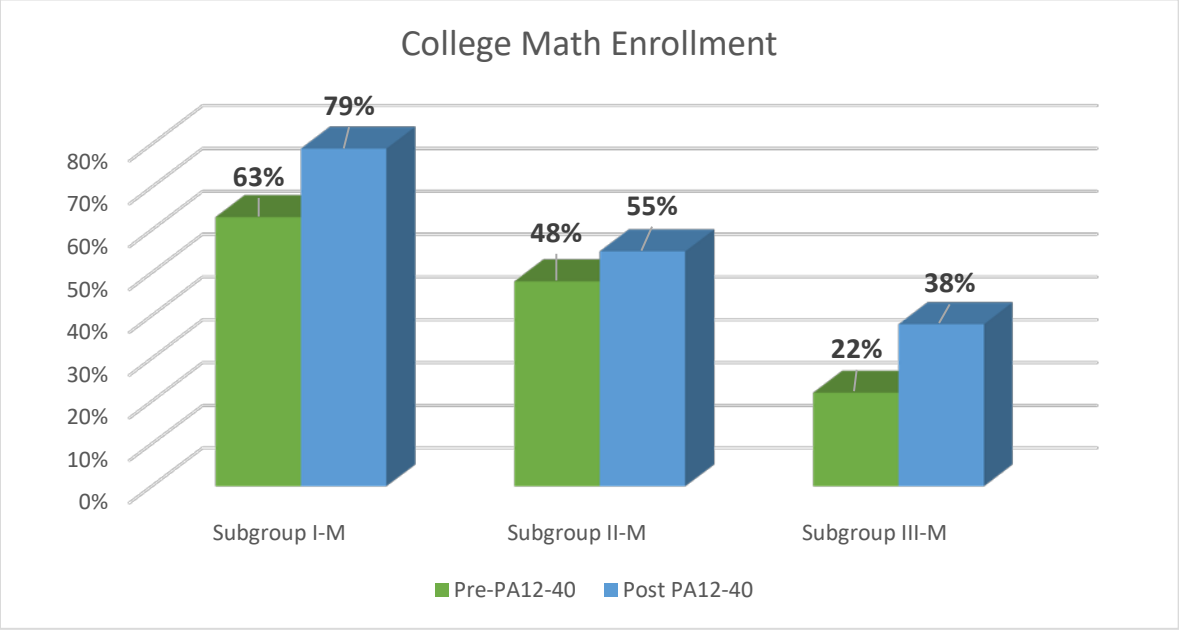
English 101 GPA has not improved for developmental students when they take college-level English since the implementation of PA 12-40. GPA in ENG101 for post PA12-40 Subgroup I-E students is flat compared to Subgroup I-E students from the pre PA12-40 cohort. Grades for Subgroup II-E students (whose scores are well below the college-level cutoff) show a slight trend downward. This trend is understandable given that students whose placement results indicate significant need for remediation are entering college-level English after fewer semesters of preparation. Despite slightly lower grades in English Composition, these students are still performing well enough to pass their college-level English course and progress toward degree completion.

The implementation of PA12-40 has had no discernable effect on fall-to-spring retention of students in Subgroup I-E and Subgroup II-E. Approximately 60% of students in Subgroup I-E in both cohorts returned for the subsequent spring semester. Students in both cohorts of Subgroup II-E returned for the subsequent spring at a rate of approximately 55%. For students in Subgroup III-E, however, retention to the spring semester improved from 41% for the pre-PA12-40 cohort to 48% for the post-PA12-40 cohort.

College Mathematics Enrollment

Achieving eligibility to enroll in college-level math is another important milestone for college students, especially for those who are pursuing careers in STEM fields. At most colleges, eligibility for Intermediate Algebra is a prerequisite for enrollment in most introductory physical science courses, such as chemistry. As seen in English, the rates that students in all subgroups enroll in college-level math have increased since the implementation of PA12-40. Prior to the passage of PA12-40, 63% of entering students in Subgroup I-M enrolled in college-level math within three years of attendance. This number rose to 79% when PA12-40 curriculum and support took full effect. The percentage of students in Subgroup II-M enrolling in college-level math increased from 48% pre- PA12-40 to 55% post PA12-40 while the rate of Subgroup III-M students enrolling in college-level math improved considerably by 16 percentage points from just 22% before PA12-40 to 38% after PA12-40 took full effect (see figure 3).

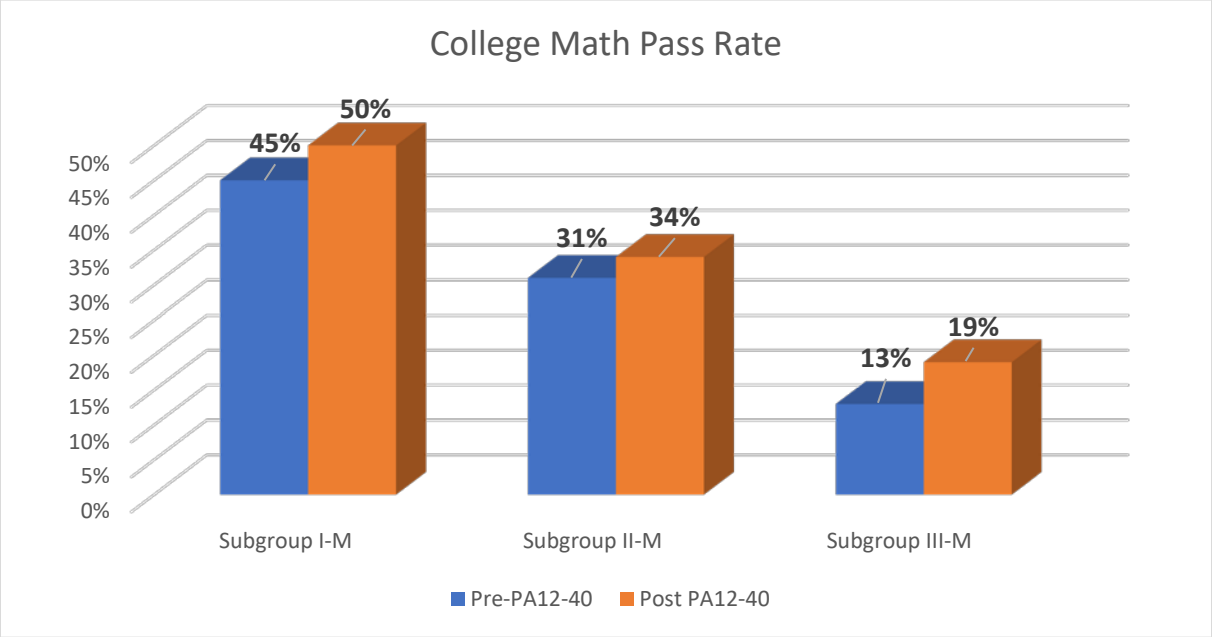
Figure 3: All Subgroups College Math Enrollment



Passing College-level Mathematics

The college-level math pass rates also increased following the implementation of PA12-40. Tracked over three years, pass rates for all three subgroups improved under PA12-40. The post PA12-40 college math pass rate for students in Subgroup I-M increased 5 percentage points from a pre-PA12-40 rate of 45% to a post PA12-40 rate of 50%. Prior to the passage of PA12-40, the pass rate (over three years) for students in Subgroup II-M was 31%. With PA 12-40 in full effect, the pass rate of students in Subgroup II-M improved to 34%. The college math pass rate for students in the lowest skilled subgroup (Subgroup III-M) increased by 6 percentage points from 13% pre-PA12-40 to 19% post PA12-40 (see figure 4).

Figure 4: All Subgroups College Math Pass Rate



PA12-40 Student Progress to Degree

The ultimate goal of PA12-40 was to enable more students to earn college degrees. So, while the steps taken in response to this legislation have led to more students completing their English and math requirements over a shorter period of time, it is important to evaluate the impact of PA12-40 curricular and support changes on degree attainment. Long term student success can be measured by the number of students who earn an associate degree over a given period of time. One measure used in IPEDS reporting involves determining how many first-time students in an incoming cohort graduate within 150% of the expected time it would take a student earning 30 credits per year to complete a degree. The 150%

completion marks are different for a four-year university and a community college. For a community college student, the expected time to complete the requirements of an associate degree is two years, so 150% of this period is three years.

A more accurate measure of community college student accomplishment may be *success rate*, which is a combination of graduation and transfer-out rates. Students who graduate or transfer to a four-year school within 150% of the expected completion time are counted as successes. For community colleges, the *success rate* is the percentage of students in a cohort who either graduate or transfer to a four-year college or university within three years of entering college. This metric has been used in our Accountability Reports to the Higher Education Coordinating Council for some time, with the rationale that it is a better measure of performance for non-selective two-year schools than graduation rate alone.

The *success rate* for developmental English students just below the testing cutoff for college-level English (the top half of Subgroup IE) has improved with the implementation of PA12-40. In the pre-PA12-40 cohort, these students graduated or transferred to a four-year school at a rate of 19%. With the full implementation of PA12-40, the success rate for the corresponding group of students rose to 21%. Credit accumulation also increased for students entering college at this level of proficiency. The pre-PA12-40 student cohort earned 17.82 credits over their first two years of attendance while the post-PA12-40 cohort earned an additional three credits (20.72) over the same period. Credit accumulation among students in the other subgroups remained flat or showed a very small increase.

In addition, the gap in *success rate* between college-ready English students and those testing just below the college-level English cutoff narrowed with the implementation of PA12-40 from 6% to 3%.

However, for the majority of developmental students, those in the lower half of Subgroup IE, as well as Subgroups IIE and IIIE, success rate and credit accumulation remained unchanged among the pre- and post- PA12-40 cohorts.

CONCLUSIONS

The implementation of PA12-40 was a major undertaking that required extensive individual and collaborative efforts across the system over the past six years. The data presented above provide clear evidence that these efforts have benefited students throughout the state. All available evidence indicates that the effects of implementing PA12-40 legislation have been positive for helping new students to enroll in and pass intensive, embedded, and gateway courses in math and English. Compared to students in the pre-PA12-40 era, today's students of all ability levels are enrolling in math and English gateway courses sooner, and higher percentages of these students are successfully completing these important courses than did students in the pre-PA12-40 era. The positive effects of PA12-40 implementation extend to students

who enter the community college system with a range of academic abilities. As indicated above, each of the six English and math subgroups showed improvement as a result of implementation.

While we have evidence that PA12-40 implementation has helped students to complete key English and math courses, the available evidence does not show improvement in the three-year graduation rate for students post PA12-40. However, three-year graduation rates are often a poor measure of our students' achievement, given that the majority of Connecticut community college students do not maintain full-time status throughout their college careers and would not be expected to graduate within three years. Due to the recency of full PA12-40 implementation, there is insufficient data on the four-year and five-year graduation rates of post PA12-40 students. As stated above, however, an increase in the combined graduation and transfer rates (*success rate)* of some developmental students provides some evidence of positive long-term impacts of PA12-40 on student achievement.

RECOMMENDATIONS

The implementation of PA12-40 has demonstrated that with adequate support, community college students can accelerate the pace at which they develop the reading, writing, and math skills necessary to participate in college-level studies. However, resources impact the extent to which individual colleges are able to make intensive and embedded courses and support available for their students. Due to resource considerations, some of the colleges have not been able to make a seat in an embedded support course available to every student who qualifies for one. Further, resource considerations have impacted the amount of additional time for embedded support as well as the availability of academic support in the forms of in-class tutoring and technology. We recommend that the resources allocated for PA12-40 be used to ensure that every student who is eligible for intensive or embedded coursework and who registers in a timely manner is able to enroll in those courses during the first semester of attendance. We further recommend that resources be allocated to make best practices such as in-class tutoring available to students at all colleges.

The research contained herein allows for very broad conclusions about the overall effectiveness of the restructured approaches to remediation that have been brought about by the implementation of PA12-40. One of the benefits of fostering local decision-making in the implementation of PA12-40 is that colleges were able to try out and evaluate different approaches to facilitating student achievement. Over the first years of implementation, colleagues shared the pros and cons of each method, and eventually the system saw a convergence of approaches to educating students in math and English. Throughout our work, the PA12-40 Advisory Council has recommended that long-term, in-depth studies of various forms of instruction and instructional support be carried out in order to determine if some approaches are more effective than others. However, while conducting this type of research on an ongoing basis is important, it

is essential to underscore that this research may not identify one method or combination of methods as superior. Various instructional methods may work equally well, and some methods may be particularly effective with students from particular academic, cultural, and socioeconomic backgrounds.

We also recommend continued research and exploration of placement tools and procedures. For over fifteen years, Accuplacer has been the placement measure common to all of the community colleges. In 2018, a new version of Accuplacer (Next Generation) was released, and the previous version became unavailable. Over the past two years, CCET has expressed concerns about the usefulness of the writing component of Accuplacer Next Generation, and some English departments are questioning whether the community colleges should continue to use this product. We recommend that additional research be conducted to assess the usefulness of Accuplacer Next Generation for placing students in their initial English and math courses. In response to direction from the Board of Regents, over the past four years, the PA12-40 Advisory Council has been attempting to identify a limited number of placement methods that qualify as approved multiple measures. While we understand the benefits of limiting the number of placement tools used throughout the system, we also believe that colleges should continue to explore the efficacy of alternative approaches to placement, especially those that do not rely solely on standardized multiple-choice instruments. To that end, we recommend increased collaboration among the colleges and the State Department of Education to facilitate the use of SAT results, Advanced Placement scores, and high school GPA in the placement process for entering community college students. The COVID 19 crisis necessitated utilization of SAT and GPA as primary placement measures and the use of both will provide data on the value of each as a placement measure. Second, we recommend the continued availability of non-standardized assessment measures such as writing samples for English placement. Finally, we recommend funding and support to develop opportunities for college faculty to collaborate with high school faculty to better prepare students for college-level work to realize the PA12-40 goal of reducing the need for remediation in college.

It is also critical that future research examine the effects of PA12-40 implementation on long-term student success, especially student progress towards an associate degree and eventual transfer to a four-year college or university. For decades, colleges have framed student preparedness for college-level work based on their demonstrated reading, writing, and mathematical skills. Consequently, the majority of resources for remediation have focused on these areas. As long as students struggled to pass these courses, which are typically prerequisites for other college-level coursework, helping students to be successful in math and English was considered essential and even sufficient for promoting college success in general. However, recent studies of remediation have shown that accelerating student progress in math and English does not always impact their accumulation of credits toward completing a degree over time. Therefore, it is important to assess whether the methods currently used in Connecticut's community

colleges to accelerate student progress in math and English have an enduring impact on degree completion among students who enter college with lower levels of English and math proficiency.

In the area of curriculum, we recommend that the levels of coursework outlined in PA12-40 continue to be made available to serve students of various levels of academic preparedness. The legislature recognized that our students enter with varying levels of readiness, and our multiple measures approach to placement has allowed us to effectively identify students and place them in the appropriate course level, either transitional, intensive, embedded, or college ready. The intensive level of instruction is particularly important to preserve. Time is an important resource for students who are building essential academic skills. English research indicates that many intensive level students register for the college-level course after a single semester of remediation, but not all students enter our colleges prepared to make the leap directly into an embedded curriculum. We strongly recommend continuation of this model of offering intensive, embedded, and college-level curriculum as the best strategy to meet the needs of our diverse student population.

Finally, we recommend that it is essential that faculty play a central role in all future curriculum planning and development. One important lesson of PA12-40 is the critically important part that faculty involvement played in the development of solutions that promoted effective teaching and learning within the parameters of the legislation. Faculty expertise and collaboration in the CCET, Math Issues, and Math Basic Skills statewide groups as well as the extensive contributions of faculty in the Math, English, and Developmental Studies Departments on individual campuses were largely responsible for the successful implementation of PA12-40. Because the members of these groups worked with students every day, they were able to draw upon their expertise to make informed decisions about the most effective ways to meet students' learning needs. Although faculty were not consulted when legislators developed this bill, it was the faculty who made it work to serve the best interests of our students. Therefore, we believe that changes of this magnitude should engage faculty involvement from the outset.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

CSCU: BELOW THRESHOLD: NEW ACADEMIC OFFERING - INFORMATION REPORT

SECTION 1: BELOW-THRESHOLD GENERAL PROGRAM INFORMATION[1]	
Institution: Western Connecticut State University	Date of Submission to CSCU Office of the Provost: April 16, 2020
Characteristics of Below-Threshold Offering Name of Offering: **New track in the Master of Science in Nursing: Acute Care Nurse Practitioner-Adult Gerontology** Type of Offering *(e.g. Grad Certificate)* **Master of Science** Anticipated Initiation Date: **Fall 2020** Anticipated Date of First Completion *(if applicable)*: **May 2023** Modality of Program: **X Combined** If "Combined", % of fully online courses? **45%** Locality of Program: **On Campus with clinical site placements**	**Credit Distribution of the Offering** # Credits in General Education: 0 **# Credits in Program Core Courses: 31 credits in core courses, 10 in clinical specialty)** # Credits of Electives in Field: 0 # Credits of Electives: 0 # Credits Special Requirements *(e.g. internship):* 0 Total # Credits the Institution Requires to Award the Credential: **41 credits**
CIP Code No. **51.3803** Title of CIP Code: **Adult Health Nurse: Nursing**	

Description of Offering, Context and Justification

WCSU is adding a focus in Acute Care track within our existing MS Nurse Practitioner Degree. With our existing focus in Adult Gerontology, the opportunity to specialize in acute care is a logical next step. **The total additional curriculum is 10 credits in clinical settings**, **there is no change in the number of credits for the degree.** This will be an additional track in the existing program. This is a critical need the state of Connecticut.

The ACNP-AG program is designed to prepare nurses for the role of advanced practice registered nurses (APRN) delivering care across the lifespans of young adult, and adult to gerontology clients with unstable chronic, acute, and critically complex healthcare problems. The population of the United States will continue to experience complex acute healthcare needs, and with the increase in patients over the age of 65 more than doubling, the need for acute care medical services will increase. Clinical experiences are designed to manage complex acute and multisystem healthcare problems providing students the ability to synthesize, integrate and apply all competencies required for the ACNP-AG certification exams. This proposal for the ACNP-AG program track adds no additional coursework to the current existing graduate nurse practitioner programs. The changes in this proposal occur in the student's specialty track focus which involve their seminar courses and clinical hour rotations.

ACNP-AG Learning Outcomes

Working with individuals and groups, the graduate of the master's in nursing program will

1. Use evidence-based nursing interventions to generate research for the purpose of expanding nursing science.

[1] This information report pertains to academic programs not reaching the threshold requiring Board of Regents action. Information is shared with the BOR-Academic Council and included in the BOR-Academic and Student Affairs Committee meetings. The following academic programs are considered Below Threshold and do not require a BOR resolution:

a) new degree options or certificate programs:

i. an undergraduate certificate of program of 30 credit hours or fewer which falls within an approved program,

iii. a new undergraduate degree option or certificate program of 15 or fewer semester credit hours,

iv. a new graduate option or certificate program of 12 or fewer semester credit hours

b) academic programs that do not qualify students to become eligible for federal financial aid.

2. Demonstrate expertise in the provision of care to individuals and groups from diverse backgrounds across the health spectrum.
3. Function in a variety of roles collaborating with other disciplines in the attainment of improved patient care and outcomes.
4. Continuously evaluate their nursing practice in relation to professional standards and assume accountability for practice.
5. Demonstrate comprehensive knowledge of policy formulation and how it impacts nursing practice and health care delivery.
6. Analyze ethical issues as they affect communities, society, the health professions, and their own practice.
7. Use technologies to integrate and support safe nursing practice, promote health information communication, teach patients and families, mange knowledge and mitigate errors.

Cost Effectiveness and Availability of Adequate Resources

The proposed program track (ACNP-AG) will use existing nursing faculty at Western Connecticut State University. Almost all nursing faculty in the nursing department have Doctoral degrees and several are current practicing nurse practitioners within the population foci of adult-gerontology and are currently teaching in the established nurse practitioner programs of Adult-Gerontology and Clinical Nurse Specialist tracts. Resources are currently in place that include simulation labs, tutoring, writing lab, technology, and library resources.

Institutional Contact for this Proposal: Dr. Mary Nielson Dr Linda Dalessio	Title: Assistant Professor of Nursing Title: Assistant Professor of Nursing	Tel.: 203-837-8888 e-mail: Nielsonm@wcsu.edu Tel: 2038378919 e-mail Dalessiol@wcsu.edu
Institution's Unit: School of Professional Studies, WCSU, Main Campus		

SECTION 2: DETAILS OF NEW OFFERING

Curriculum

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs
New Courses			
*NUR 5XX (1) The Adult-Gerontology Acute Care Nurse Practitioners Management of Acutely Ill Complex Populations (180 clinical hours)	1,2,3	NUR 501, 5XX,504,511,515,570,575 Take NUR 580 with this seminar course 5XX (1)	5
*NUR 5XX (2) The Adult-Gerontology Acute Care Nurse Practitioner Management of the Chronically Ill Complex Populations (180 clinical hours)	1,2,3	NUR 580, 5XX (1) Take NUR 585 with this seminar course 5XX (2)	5
Existing Courses			
NUR 501 Theoretical Basis of Nursing Practice			3
NUR 5XX Diagnostics in the Acute and Chronically Ill Adult- Gerontology Populations (**this course is currently NUR 502 and is being retired and revised to this course)**			2
NUR 504 Evidence Based Nursing Research			3
NUR 511 Foundations of Clinical Nursing Practice			3
NUR 515 Advanced Pathophysiology			3
NUR 570 Advanced Clinical Pharmacology			3
NUR 575 Advanced Health Assessment			3
NUR 580 The Advanced Nursing Management of the Acutely Ill Adult-Gerontology Populations			2
NUR 585 The Advanced Nursing Management of the Chronically Ill Adult-Gerontology Populations			2
NUR 590 Professional Role Enactment			7
Total Other Credits Required to Issue Credential			41

Learning Outcomes - L.O. Demonstrate progression in learning of concepts in acute, complex, multisystem healthcare changes and apply knowledge of these concepts to diagnose and develop a plan of care for the young adult, adult, and gerontology populations.

1. Integrate, apply, manage, and document direct clinical care using the history and physical exam, advanced pharmacology, advanced pathophysiology, and genomics for common acute multisystem organ disfunction to develop diagnosis and appropriate differentials during acute health status changes. Provide and implement transitions of care.
2. Analyze clinical practice guidelines in acute care and apply or modify to deliver patient-centered care by using knowledge of the scientific principles of illness/wellness and differentiate between normal and abnormal changes to illness.

Assessment methods: Competency based scoring rubrics, simulation practices, clinical papers and testing will be used to assess student knowledge and skill development based on competencies issued by the American

Association of Colleges of Nursing (AACN) graduate essentials in acute care; the National Association of Nurse Practitioners Faculties (NONPF) core competencies; and graduate Quality and Safety Education in Nursing (QSEN). For clinical hours, a competency-based clinical evaluation form for clinical experiences are aligned with NONPF/AACN/QSEN competencies for ACNP-AG nursing practice will be used to assess student performance during clinical experience hours.

Course Outlines for the Acute Care Option: WCSU Department of Nursing

Course Number: NUR 58X (x1) seminar and clinical practicum

Course Title: The Adult-Gerontology Acute Nurse Practitioners Management of the Acutely Ill Complex Populations

Credits: 5 S.H. (180 hours of clinical, and demonstrating of competency)
(15 clinical seminars hours per semester) Grading- Pass/Fail

Placement: Role Requirement

Pre-requisites: All foundational core, role development courses or permission of the graduate nursing department coordinator.

Co-requisite: NUR 580

Course Description:
This clinical seminar and practicum focus on the diagnosis, treatment and acute management of complex and critically ill younger adult, and adult- gerontology medical conditions with life threatening and/or rapidly changing physiological and pathophysiological conditions. Emphasis is on the role of the advanced acute nurse practitioner role in evaluating, diagnosing, and implementing treatment plans in complex medical or surgical management. Clinical experiences are designed to provide opportunities in safety, quality, evidence-based practice and interprofessional collaboration with other health specific providers.

Student Learning Outcomes:

1. Demonstrate progression in learning of concepts in acute, complex, multisystem healthcare changes and apply knowledge of these concepts to diagnose and develop a plan of care for the young adult, adult, and gerontology populations.
2. Integrate, apply, manage, and document direct clinical care using the history and physical exam, advanced pharmacology, advanced pathophysiology, and genomics for common acute multisystem organ disfunction to develop diagnosis and appropriate differentials during acute health status changes. Provide and implement transitions of care
3. Assess and document the complex, acute, critical, and multisystem derangements for urgent and emergent conditions, both using physiological and technical data to assess risk for potential life-threatening conditions.
4. Analyze, apply, and evaluate research and evidence-based practice in relation to the acute care of complex medical and surgical conditions.

5. Demonstrate understanding and application of specific therapeutic/surgical interventions that are used in the acute younger adult, adult and gerontology populations that is culturally and ethically sensitive and provides individualized patient-centered care.
6. Discuss and integrate quality and safety measures through collaboration with other health care professionals in the care of the younger adult and adult-gerontology population.
7. Use technologies to integrate and support safe advanced nursing practice to promote health information, promotion, communication, teaching, knowledge to avoid errors.

Seminar Outline:

I. Introduction to acute care advanced nursing practice role
   - A. Course expectations
   - B. Selecting a preceptor
   - C. Accreditation bodies and competencies
   - D. Clinical and documentation proficiency
   - E. AACN synergy model for patient care
   - F. Advanced acute nurse practitioner characteristics
   - G. Clinical judgement
   - H. Advocacy/moral judgment
   - I. Caring practices
   - J. Collaboration
   - K. Systems thinking
   - L. Response to diversity
   - M. Facilitation of Learning
   - N. Clinical inquiry
   - O. Transitions in care

II. Acute cardiac derangements
   - A. Advanced assessment for multisystem failures effects in the cardiac system
   - B. Basic principles of advanced cardiac support
     - i. 12 lead EKG application and rhythm analysis, pharmacological treatment/cardioversion, and defibrillation
     - ii. Pacemakers- Emergent indications of implanted, transvenous and epicardial pacemakers and management
     - iii. Pharmacological and surgical treatments in cardiology acute care- cardiac cooling, pericardiocentesis, CABG, valve replacements, angioplasty

III. Acute respiratory derangements
   - A. Acid-base balance
     - i. Advanced assessment for multisystem failure effects in the respiratory system- COPD, Asthma, ARDS, TACO, Heart Failure, Pneumonia, Cancer
   - B. Adjuncts to support the respiratory system
     - i. Hi-Flow oxygen
     - ii. CPAP and Bipap
     - iii. Ventilatory support- modes of ventilation, Trach, ETT, emergent cricothyrotomy, LMA
     - iv. Emergent chest-tube insertion, thoracentesis

v. Other acute respiratory treatments

IV. Acute trauma response, shock states and surgical interventions
- A. Chest/abdomen/pelvis injuries and treatment
- B. Orthopedic- complex fractures, vascular, wound and limb salvage
- C. Head and neck soft tissue injury/ fractures- airway issues
- D. Neurological trauma and surgery- ICP monitoring, EVD placements
- E. Blood transfusion and components to manage acute traumatic injury or derangements

V. Common acute care/outpatient surgeries and management
- A. Cardiac
- B. Thorax
- C. GI system
- D. GU system
- E. Orthopedic
- F. Vascular
- G. Endocrine
- H. Oncological
- I. GYN
- J. Neurological

VI. Infection and immune derangements in the acute care populations
- A. Sepsis stages and shock
- B. Common pathogens
- C. Viral/Cancer/Parasitic/Others
- D. Tissue disorders

VII. Acute care procedures
- A. Principals of infection control and sterile procedures
- B. Arterial line insertion and care
- C. Central line insertion and care
- D. Insertion of chest tubes/removal
- E. Intubation
- F. Insertion of oral feeding tubes and drainage tubes
- G. Lumbar puncture
- H. Suturing, abscess drainage and wound debridement/vac placement
- I. Paracentesis

Assessment plan:
Competency based scoring rubrics will be used to assess student knowledge and skill development, documentation

Time provision:
This course will continue to be offered during the fall or spring semester.

WCSU Department of Nursing

Course Number: NUR 58(x2) seminar and clinical practicum

Course Title: The Adult-Gerontology Acute Nurse Practitioners Management of the Chronically Ill Complex Populations

Credits: 5 S.H (180 hours of clinical, and demonstrating of competency)
(15 clinical seminars hours per semester) Grading- Pass/Fail

Placement: Role Requirement

Pre-requisites: All foundational core, role development courses, NUR 580, 58X(x1)

Co-requisite: NUR 585

Course Description:
This clinical course focuses on treatment and outcome management of acutely ill adult-gerontology patients with multisystem derangements of chronic health conditions. Emphasis is placed on specialty practices and generalist services that deal with urgent and emergent complex acute chronic medical conditions. Clinical experiences are designed to provide opportunities in safety, quality, evidence-based practice and interprofessional collaboration with other health specific providers.

Student Learning Outcomes:

1. Evaluates risk-benefit ratios for adverse outcomes before, during and after acute care treatments/procedures and intervenes as needed.
2. Understand and apply all the domains in the synergy model for patient care.
3. Analyze clinical practice guidelines in acute care and apply or modify to deliver patient-centered care by using knowledge of the scientific principles of illness/wellness and differentiate between normal and abnormal changes to illness
4. Incorporate multiple, complex pharmaceutical therapy in the care of the acute, complex, chronically ill patient.
5. Incorporate and evaluate acute care diagnostics into the diagnosis and plan of care and applies continuous quality improvement of one's own practice.
6. Develop an age-appropriate plan of care for the patient that takes into consideration factors such as patient risk/benefits, preferences, developmental, financial resources, life circumstances and cultural-ethnic background and provide appropriate transition of care.
7. Identify and apply collaborative resources with multiple disciplines to facilitate intra and interdisciplinary best practices in acute care including the examination and application of health promotion and prevention with consideration of ethical, legal, and cultural-ethnic patient-centered care
8. Demonstrate advanced levels of diagnostic reasoning, systems thinking, and accountability in evaluating evidence-based acute care practices and application to patient management.
9. Use technologies to integrate and support safe advanced nursing practice and promote health information, communication, collaboration and teaching of patients and families.

Seminar Outline:

I. AACN synergy model for patient care
   A. Advanced acute nurse practitioner characteristics
   B. Clinical judgement
   C. Advocacy/moral judgment
   D. Caring practices
   E. Collaboration
   F. Systems thinking
   G. Response to diversity
   H. Facilitation of Learning
   I. Clinical inquiry
   J. Transitions in care
   K. Healthy people: Nations health care goals

II. Priority in recognition of acute deterioration and priority of data collection in the acute care nursing management of complex multisystem healthcare problems
   A. Circulation
   B. Breathing
   C. Acute psychological changes in the acutely ill adult-gerontology population
   D. Acute acid-base derangements and their treatments
   E. Acute toxicology/poisonings and their treatment

III. Hemodynamics

   A. Basic hemodynamics
   B. Advanced hemodynamics and application
   C. Intra-aortic balloon pump/LVAD
   D. ECMO
   E. CVVH
   F. Management of cardiogenic shock
   G. Management of fluid shifts and acute electrolyte disturbances
   H. Advanced, multisystem medication management

IV. Management of acute chronic healthcare conditions in the following systems:
   A. Cardiac
   B. Thorax
   C. GI
   D. GU
   E. Orthopedic
   F. Vascular
   G. Endocrine
   H. Oncological
   I. GYN
   J. Neurological, head and neck
   K. Psychiatric

V. Promotion of risk reduction, quality, and safety management in acute care
   A. Restraint-free care
   B. Use and removal of invasive equipment
   C. Cognitive and sensory enhancements
   D. Mobility
   E. Differentiate between normal/abnormal age related physiological and psychological symptoms/changes
   F. Manage acute care emergencies and crisis

Assessment plan:
Competency based scoring rubrics will be used to assess student knowledge and skill development; competency-based clinical evaluation form aligned with NONPF/AACN/QSEN competencies will be used to assess student performance during clinical experiences.

Time provision:
This course will continue to be offered during the fall or spring semester.

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BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University	Date of Submission to CSCU Office of the Provost: April 22, 2020
Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019	

Original Program Characteristics

CIP Code No. 52.0305 Title of CIP Code Accounting and Business/Management

Name of Program: Business Administration

Degree: Title of Award *(e.g. Master of Arts)* **MBA**

Stand-Alone Certificate: *(specify type and level)*

Date Program was Initiated: 12/15/1993 OHE#: 02816

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 0

Credits in Program Core Courses: 15

Credits of Electives in the Field: 12

Credits of Free Electives: 0

Cr Special Requirements *(include internship, etc.):* 3 (Capstone)

Total # Cr in the Program *(sum of all #Cr above)*: 30

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **30**

Modified Program Characteristics

Name of Program: Business Administration

Degree: Title of Award *(e.g. Master of Arts)* **MBA**

Certificate[1]: *(specify type and level)*

Program Initiation Date: 12/15/1993

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 30

Other: **Addition of a "General" Track**

Modified Program Credit Distribution

Credits in General Education: 0

Credits in Program Core Courses: 15

Credits of Electives in the Field: 12

Credits of Free Electives: 0

Cr Special Requirements *(include internship, etc.):* 3 (Capstone)

Total # Cr in the Program *(sum of all #Cr above)*: 30

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **30**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):

Program Discontinued: CIP: OHE#: Accreditation Date:

Phase Out Period Date of Program Termination

Rationale for Modification

The MBA already houses 12-credit tracks for directed electives in accounting, business analytics, finance, and supply chain analytics. Including a 12-credit "general track" will allow students who are taking courses from across these domains to be identified within a distinct track and will facilitate advising.

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

None.

Institutional Contact for this Proposal: C. Christopher Lee Title: MBA Program Director Tel.: (860)832-3288 e- mail: christopher.lee@ccsu.edu

Institution's Unit and Location Offering the Program: School of Business, main campus

SECTION 2: Curriculum Details for a Program Modification						
Course Number and Name	**L.O. #**	**Pre-Requisite**	**Cr Hrs**	**Course Number and Name**	**L.O. #**	**Cr Hrs**
Program Core Courses				**Other Related/Special Requirements**		
AC 531: Accounting Information for Decision Making	1, 2, 3		3	**Capstone**		
MIS 531: Strategic IT Alignment	1, 3		3	BUS 580: Applied Business Research OR BUS 581: Graduate Special Project AND BUS 582: Graduate Capstone Seminar	1, 2, 3	3
FIN 531: Corporate Finance	1, 2, 3		3			
MGT 531: Managing and Leading in the Contemporary Organization	1, 3		3			
MKT 531: Strategic Marketing	1, 3		3			
Core Course Prerequisites				**Elective Courses in the Field**		
AC 531 - Admission to the MBA program or permission of the MBA Director, or admission to the MS Accounting Program.				**Accounting Track (12 credits)**		
MIS 531- Admission to MBA program or permission of MBA director.				AC 507: Advanced Accounting	1, 2	3
FIN 531- Admission to the MBA program or admission to the MS Accounting Program or permission of the MBA Director or Finance Department Chair.				AC 520: Managerial Analysis & Cost Control	1, 2	3
MGT 531 - Admission to MBA program or permission of MBA director.				AC 521: Accounting for Lean Enterprises	1, 2	3
MKT 531 - Admission to the MBA program or permission of MBA Director.				AC 524: Accounting for Non-Profit Institutions	1, 2	3
				AC 540: Global Financial Reporting and Analysis	1, 2	3
				AC 542: Tax Issues in Business Decisions	1, 2	3
				AC 544: Financial Statement Analysis and Valuation	1, 2	3
				AC 546: Advanced Forensic Accounting	1, 2	3
				AC 548: Contemporary Accounting Topics	1, 2	3
				Business Analytics Track (12 credits)		
				BUS 538: Business Quantitative Analytics AND 3 of the following:	1, 2	3
				BUS 540: Business Intelligence and Analytics	1, 2, 3	3
				BUS 542: Web Analytics	1, 2, 3	3
				BUS 544: Business Process Modeling	1, 2, 3	3
				BUS 546: Applications of Business Analytics	1, 2, 3	3
				BUS 548: Business Decision Models	1, 2, 3	3
				Finance Track (12 credits)		
				FIN 535: Advanced Financial Management	1, 2	3

		FIN 540: Financial Statement Analysis and Valuation	1, 2	3
		FIN 545: Real Estate Finance & Investment	1, 2	3
		FIN 550: Money, Capital Markets and Banking	1, 2	3
		FIN 555: International Finance	1, 2	3
		FIN 560: Commercial Lending	1, 2	3
		FIN 570: Investments and Securities Analysis	1, 2	3
		FIN 580: Derivatives and Risk Management	1, 2	3
		FIN 590: Finance Seminar	1, 2, 3	3
		Supply Chain Analytics Track (12 credits)		
		BUS 538: Business Quantitative Analytics	1, 2	3
		BUS 540: Business Intelligence and Analytics	1, 2, 3	3
		MIS 555: Enterprise and The Supply Chain	1, 3	3
		AND 1 of the following		
		BUS 544: Business Process Modeling OR	1, 2, 3	3
		MIS 552: Managing Projects in the Supply Chain	1, 3	3
		General Business Track (12 credits)		
		(Choose 12 credits from any of courses above including:)		
		AC 550: Financial Accounting Standards	1, 2	3
		AC 552: Taxation of Business Entities	1, 2	3
		BUS 594: Independent Study In Business	1, 2, 3	3
		BUS 598: Special Topics in Business	1, 3	3
		MGT 573: Advanced Organizing and Managing for Innovation	1, 3	3
		LAW 550 Advanced Business Law & Ethical Leadership	1, 3	3
Total Other Credits Required to Issue Modified Credential				

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. MBA students will gather, analyze, and synthesize relevant data and information in order to solve problems and arrive at appropriate decisions.
2. MBA students will utilize quantitative analysis methods to identify salient information and trends in data.
3. MBA graduates exercise effective written and oral communication skills.

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BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 13.1101 Title of CIP Code Counselor Education/School Counseling and Guidance Services
Name of Program: Counselor Education
Degree: Title of Award *(e.g. Master of Arts)* **MS**
Stand-Alone Certificate: *(specify type and level)*
Date Program was Initiated: 05/01/1970 OHE#: 00049
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 0
Credits in Program Core Courses: 39
Credits of Electives in the Field: 18-24
Credits of Free Electives: 0
Cr Special Requirements *(include internship, etc.):* 0-3 (Thesis/Comprehensive Exam)
Total # Cr in the Program *(sum of all #Cr above)*: 60-63
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **60-63**

Modified Program Characteristics

Name of Program: Counselor Education
Degree: Title of Award *(e.g. Master of Arts)* **MS**
Certificate[1]: *(specify type and level)*
Program Initiation Date: 05/01/1970
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 60-63
Other:

Modified Program Credit Distribution

Credits in General Education: 0
Credits in Program Core Courses: 39
Credits of Electives in the Field: 18-24
Credits of Free Electives: 0
Cr Special Requirements *(include internship, etc.):* 0-3 (Thesis/Comprehensive Exam)
Total # Cr in the Program *(sum of all #Cr above)*: 60-63
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **60-63**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):
Program Discontinued: CIP: OHE#: Accreditation Date:
Phase Out Period Date of Program Termination

Rationale for Modification

Curriculum is being modified to response to accreditation and licensing standards. Within the Clinical Mental Health Counseling and Clinical Addictions Recovery Counseling tracks, CNSL 571 (Counseling Families) will be replaced with MFT 451 (Introduction to Theories of Family Systems). Within the Gerontology Counseling track, CNSL 565 (Foundations of Gerontology Counseling) and CNSL 566 (Community Resources, Systems, and Challenges in Counseling the Older Adult) will be replaced by GERO 510 (Policy, Aging, and Ethics) and PSY 511 (Psychology of Aging). All changes involve three-credit courses.

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

None. All courses that serve as replacements are standard curricular offerings within existing programs and have the capacity to absorb increases in enrollment without adding sections.

Institutional Contact for this Proposal: Dr. Cherie King Title: Associate Professor and Chairperson of Counselor

Education and Family Therapy Tel.: 860.832.2407 e- mail: kingche@ccsu.edu Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: School of Education and Professional Studies, main campus

SECTION 2: Curriculum Details for a Program Modification

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
CNSL 500: The Dynamics of Group Behavior			3	CNSL 599: Thesis – OR -		3
CNSL 501: Theories and Techniques in Counseling			6	Capstone (Comprehensive Exam)		0
CNSL 503: Supervised Counseling Practicum			3	*Students in the Clinical Mental Health track or Clinical Additions Recovery Counseling electing to do a thesis (Plan A) will be exempt from one course as determined with the advisor.		3
CNSL 504: Professional Studies in Counseling			3	*Plan B: Comprehensive Examination		3
CNSL 505: Counseling and Human Development Across the Lifespan – OR - PSY 512: Seminar in Developmental Psychology				*Students take the national examination: Counselor Preparation Competency Examination (CPCE)		3
CNSL 521: Career Counseling and Development			3			
CNSL 522: Appraisal Procedures in Counseling			3			
CNSL 568: CNSL 568 Foundations of Addictions Counseling			3			
CNSL 569: Foundations of Clinical Mental Health Counseling -			3			
CNSL 594: Supervised Clinical Practice-Professional Counseling *(two semesters fall & spring for a total of 6 credits)			3			
CNSL 598: Research Methods in Counseling			3			
Core Course Prerequisites				**Elective Courses in the Field**		
CNSL 500 - Admission to the graduate program and/or permission of department chair			**3**	**Clinical Mental Health Counseling and Clinical Addictions Recovery Counseling Track (24 credits)**		
CNSL 501 - Admission to M.S. in Counselor Education or Marriage and Family Therapy			6	CNSL 525: Multicultural Counseling		3
CNSL 503 - Written permission from advisor			3	CNSL 560: Introduction to Rehabilitation Counseling		3
CNSL 504 - Matriculation into the graduate program			3	CNSL 561: Advanced Rehabilitation Counseling		3
CNSL 505 - none			3	CNSL 563: Medical Aspects of Rehabilitation Counseling		3
PSY 512 - Admission to graduate program or permission of instructor			3	CNSL 571: Mental Health Counseling		3
CNSL 521 - CNSL 501			3	CNSL 572: Assessment, Treatment and Recovery in Counseling		3
CNSL 522 - CNSL 501			3	CNSL 575: Counseling Individuals with Co-occurring Mental Health and Substance Use Disorders		3
CNSL 568 - CNSL 501 (minimum grade of B) or permission of department chairperson			3	~~CNSL 573: Counseling Families~~		~~3~~
CNSL 569 - Admission to the M.S. in Counseling program			3	**MFT 541: Introduction to Theories of Family Systems**		**3**
CNSL 594 - Permission of instructor			3	**Clinical Rehabilitation Counseling Track (21-24 credits)**		
CNSL 598 - none			3	CNSL 525: Multicultural Counseling		3

		CNSL 560: Introduction to Rehabilitation Counseling		3
		CNSL 561: Advanced Rehabilitation Counseling		3
		CNSL 563: Medical Aspects of Rehabilitation Counseling		3
		CNSL 564: Rehabilitation and Disability Case Management Practices – OR- CNSL 571: Mental Health Counseling		3
		CNSL 572: Assessment, Treatment and Recovery in Counseling		3
		CNSL 575: Counseling Individuals with Co-occurring Mental Health and Substance Use Disorders		3
		Gerontology Counseling Track (21 credits)		
		CNSL 525: Multicultural Counseling		3
		CNSL 560: Introduction to Rehabilitation Counseling		3
		CNSL 561: Advanced Rehabilitation Counseling		3
		CNSL 563: Medical Aspects of Rehabilitation Counseling		3
		CNSL 571: Mental Health Counseling		3
		GERO 510: Policy, Aging, and Ethics		**3**
		PSY 511: Psychology of Aging		**3**
		~~CNSL 565: Foundations of Gerontology Counseling~~		~~3~~
		~~CNSL 566: Community Resources, Systems, and Challenges in Counseling the Older Adult~~		3

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. Exhibit behaviors and attitudes appropriate to the clinical professional counseling profession;
2. Demonstrate pertinent and professionally relevant foundation knowledge, contextual dimensions, and practices within the 9 NBCC and 8 CACREP standard curriculum content areas and specialty counseling areas (e.g., clinical mental health; clinical rehabilitation, and/or addictions recovery);
3. Demonstrate professional behaviors (including the ability to articulate a personal theory of counseling) and multicultural competent practice in clinical professional counseling settings (mental health, rehabilitation or addictions recovery);
4. Application of knowledge, skills, and attitudes of current ethical and legal issues that influence one's behavior as a counselor;
5. Promote multicultural competence in systemic clinical counseling practice.

Bolded courses replace ~~struck-through~~ courses.

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BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University	Date of Submission to CSCU Office of the Provost: April 22, 2020
Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019	

Original Program Characteristics

CIP Code No. 13.1324 Title of CIP Code Drama and Dance Teacher Education
Name of Program: **Dance Education**
Degree: Title of Award *(e.g. Master of Arts)* **BS**
Stand-Alone Certificate: *(specify type and level)*
Date Program was Initiated: Fall 2016 OHE#: 18177
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 41-42
Credits in Program Core Courses: 42
Credits of Electives in the Field: 0
Credits of Free Electives: 2-3
Cr Specialization Requirements *(include internship, etc.):* 34 (concentration)
Total # Cr in the Program *(sum of all #Cr above)*: 120
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Modified Program Characteristics

Name of Program: **Dance Education**
Degree: Title of Award *(e.g. Master of Arts)* **BS**
Certificate[1]: *(specify type and level)*
Program Initiation Date: Fall 2020
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Modified Program Credit Distribution

Credits in General Education: 41-42
Credits in Program Core Courses: 41
Credits of Electives in the Field: 0
Credits of Free Electives: 3-4
Cr Specialization Requirements *(include internship, etc.):* 34 (concentration)
Total # Cr in the Program *(sum of all #Cr above)*: 120
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):
Program Discontinued: CIP: OHE#: Accreditation Date:
Phase Out Period Date of Program Termination

Rationale for Modification

The Dance Education major consists of a core of dance education major and two specializations in teacher preparation to enable initial PK-12 certification for students wishing to teach in public and/or private schools and in Entrepreneurship for those students who are looking to pursue a business-based dance career. The core is being modified to better align with national dance standards. After receiving feedback from our first students finishing the upper-level requirements of the teacher preparation concentration, we revised the teacher preparation specialization to better prepare students for practice. The proposed modification will assist students in preparing for the CT state-mandated Performance Arts edTPA.

Specifically, within core credits, DAN 257 (Intermediate Jazz) is being reduced from 2 credits to 1 credit. DAN 480 (Dance Project) is being reduced from 3 credits to 1 credit. DAN 110 (Introduction to Dance Education; 2 credits) is being added.

[1] If creating a Stand-Alone Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information about that program in the "Original Program" section.

Within the special requirements of the concentration, three 3-credit courses (PE 299: Psycho-Social Aspects of Physical Education; PE 405: Elementary Methods; and PE 406: Adapted Physical Education) are being replaced by three 3-credit courses (DAN 298: Psycho-Social Aspects of Dance Education; DAN 300: Elementary Methods in Dance Education; and SPED 315: Introduction to Education Learners with Exceptionalities). Total credit change is 14 credits (5 in the core; 9 in the concentration).

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

At most, this change will necessitate one additional course (three credits) every semester, for a total of no more than six credits over the academic year. We will incur six credits of part-time faculty expense either for direct instruction within this program or as replacement cost for a full-time faculty member teaching within the program. Total lecturer expense in AY 2020-21 will not exceed $14,407 (Class C lecturer rate of $1,833 per credit plus 31% estimated fringe).

Institutional Contact for this Proposal: **Dr. Kimberly Kostelis, Dean; Professor Catherine Fellows, Dance Director**

Tel.: 860-832- 2101 e- mail: Kimberly.Kostelis@ccsu.edu; fellowsc@ccsu.edu

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: **School of Education and Professional Studies, main campus**

SECTION 2: Curriculum Details for a Program Modification

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related Requirements**		
DAN 110 Introduction to Dance Education			**2**	BIO 111 or 121 or BMS 101	--	3
DAN 151 Beginning Modern Dance			2	STAT 104 or 200 or 215	--	3
DAN 152 Beginner Ballet			2	PHYS 111	--	3
DAN 157 Beginner Jazz			1	PSY 136	--	3
DAN 200 Dance Practicum			2	HIST 161 or 162		3
DAN 230 Afro-Caribbean Dance and Culture			2	COMM 115 or 140		3
DAN 234 Ballroom Dance			1	MUS 109		3
DAN 235 Movement for Performers			2	ANTH 170		3
DAN 236 Principles of Choreography		DAN 235	2			
DAN 252 Intermediate Ballet			2			
DAN 257 Intermediate Jazz			~~2~~ 1			
DAN 272 Creative Dance in Education			2			
DAN 299 Dance History			3			
DAN 377 Modern Dance & Theory		DAN 272	2			
DAN 398 Contemporary Dance Technique		DAN 272	2			
DAN 477 Dance Methods			3			
DAN 480 Dance Project			~~3~~ 1			
EXS 207 Anatomy & Physiology I in Exercise Science		BIO 111/121 or BMS 102	3			
EXS 216 Biomechanics		EXS 207 & PHYS 111	3			
PE 416 Organization of Curriculum & Program Development		PE 406	3			
Core Course Prerequisites				**Special Requirements**		
See above.				**Teacher Education Concentration (34 Credits)**		
				DAN 298 Psycho-Social Aspects of Dance Education		**3**
				DAN 300 Elementary Methods in Dance Education		**3**
				EDF 215 Education in a Multi-cultural Society		3
				EDSC 417 Elementary Student Teaching		6
				EDSC 419 Secondary Student Teaching		6
				EDT 315 Technology in Sec. Classroom		1
				EDTE 314 Applied Educational Theory		3
				~~PE 299: Psycho-Social Aspects of Physical Education~~		~~3~~
				PE 305 Assessments in Physical and Health Education		3
				PE 320 Motor Development		3
				~~PE 405 Elementary Methods~~		~~3~~
				~~PE 406 Adapted Physical Education~~		~~3~~

		SPED 315 Introduction to Education Learners with Exceptionalities		**3**
		Entrepreneurship Concentration (34 credits)		
		ENT 296 Main Street Business Ownership and Management		3
		ENT 350 Financing Entrepreneurial Ventures		3
		MKT 295 Fundamentals of Marketing		3
		DAN 200 Dance Practicum		2
		6 credits of:		6
		ENT 330 Entrepreneurship and New Venture Creation		
		ENT 355 Managing a Growing Business		
		MKT 301 Creativity in Marketing		
		MKT 306 Advertising and Promotion		
		MKT 350 Social media Marketing		
		MKT 359 Special Events Marketing		
		Electives in consultation with faculty advisor		17

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. *Elements and Skills:* Students will identify and perform movement elements and dance skills.
2. *Choreography:* Students will identify and apply choreographic principles, processes, and structures.
3. *Meaning:* Students will recognize how dance creates and communicates meaning.
4. *Healthy Living:* Students will make connections between dance and healthful living.
5. *Connections:* Students will make connections between dance, other disciplines, and daily life.

Bolded courses are additions; ~~struck-through~~ courses are reductions.

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Connecticut State Colleges & Universities
BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics
CIP Code No. 45.0701 Title of CIP Code Geography
Name of Program: Geography
Degree: Title of Award *(e.g. Master of Arts)* **BA**
Stand-Alone Certificate: *(specify type and level)*
Date Program was Initiated: Jan 01, 1976 OHE#: 00105
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution
Credits in General Education: 38-40
Credits in Program Core Courses: 6-12
Credits of Electives in the Field: 27-33
Credits of Free Electives: 20-25
Cr Special Requirements *(include internship, etc.):* 18-21 (minor)
Total # Cr in the Program *(sum of all #Cr above)*: 120
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Modified Program Characteristics
Name of Program: Geography
Degree: Title of Award *(e.g. Master of Arts)* **BA**
Certificate[1]: *(specify type and level)*
Program Initiation Date: Fall 2020
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Modified Program Credit Distribution
Credits in General Education: 38-40
Credits in Program Core Courses: 6-12
Credits of Electives in the Field: 27-33
Credits of Free Electives: 20-25
Cr Special Requirements *(include internship, etc.):* 18-21 (minor)
Total # Cr in the Program *(sum of all #Cr above)*: 120
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):
Program Discontinued: CIP: OHE#: Accreditation Date:
Phase Out Period Date of Program Termination

Rationale for Modification

The program is making small changes in offerings within Electives in the Field in three specializations: General/Regional Geography, Environmental Geography and Sustainability, and Tourism. Within the General/Regional Geography specialization, eight courses are being added as alternatives to the three-credit elective slot of Geographic Information Science. Courses in Sustainability are identified as alternatives to a geography course within the three-credit elective slot of Physical Geography and within the three-credit elective slot of Regional Geography. Total credit slots involved: 9 credits.

Within the Environmental Geography and Sustainability specialization, two three-credit courses are added as alternatives to a nine-credit elective slot of Geographic Information Science. Within the 15-credit "open" electives slot, two three-credit courses are added as alternatives and the same courses in Sustainability mentioned above

[1] If creating a Stand-Alone Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information about that program in the "Original Program" section.

are identified as alternatives to geography courses. Total credit slots involved: 12 credits.

Within the Tourism specialization, one three-credit course is added as an alternative to a three-credit elective slot in Regional Geography. Further, one three-credit course is added as an alternative to a 15-credit "open" elective slot. Here again, the aforementioned courses in Sustainability serve as alternatives to geography courses. Total credit slots involved: 6 credits.

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

None. All courses are standard offerings and cycle according to demand.

Institutional Contact for this Proposal: Charles E. Button Title: Chair Tel.: 860-832-2788 e- mail: Buttonche@ccsu.edu

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: College of Liberal Arts & Social Science; CCSU main campus

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Curriculum Details for a Program Modification *(to be used as appropriate for specific modification request)*[2]
(GENERAL/REGIONAL GEOGRAPHY)

Course Number and Name [3]	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
GEOG 110 Introduction to Geography – OR – GEOG 120 World Regional Geography	1,2		3			
GEOG 130 Introduction to Geographic Information Science	3,4,5		3			
3 credits of Physical Geography:						
GEOG 270 Geography of Hazards	1,3		3			
GEOG 272 Physical Geography	1,3		3			
GEOG 275/SUST 275 Soils and Vegetation Sustainability	1,3,4		3			
GEOG 374 Climatology	1,3		3			
GEOG 433 Issues in Environmental Protection	4,5		3			
GEOG 472 Topics in Physical Geography -or- **SUST 472 Topics in Sustainabilty**	various		3			
GEOG 473 Geography of Natural Resources	3,4,5		3			
GEOG 475/SUST 475 Energy Resources and Climate Change	3,4,5,6		3			
3 credits of Cultural Geography:						
GEOG 220 Human Geography			3			
GEOG 223 Geography of the Popular Music Industry			3			
GEOG 244 Economic Geography			3			
GEOG 290 Geography of Tourism			3			
GEOG 291 National Parks and World Heritage Sites			3			
GEOG 333 Political Geography			3			
GEOG 451 Tourism Development in Southern New England			3			
GEOG 453 Recreation and Resort Planning			3			
GEOG 454 Geography of Tourism Marketing			3			
GEOG 455 New Directions in Tourism			3			
GEOG 470 Geography of Health and			3			

[2] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**
[3] Make any detailed annotations for individual courses as needed to understand the curricular modifications taking place

Disease						
3 credits of Planning						
GEOG 241 Introduction to Planning			3			
GEOG 439 Urban Geography			3			
GEOG 440 Rural Land Use Planning			3			
GEOG 441 Community & Regional Planning			3			
GEOG 445 Environmental Planning			3			
GEOG 450 Tourism Planning			3			
GEOG 483 Topics in Planning	various		3			
3 credits of Geographic Information Science						
GEOG 266 Introduction to Remote Sensing	1,2,3		3			
GEOG 276 Elementary Cartography	1,3		3			
GEOG 378 Geographic Information Systems	3,4,5		3			
GEOG 442 Field Methods in Geography -or- **SUST 442 Field Methods in Sustainability**	4,5,6		3			
GEOG 460 GIS Applications in Crime Mapping	3,4,5		3			
GEOG 463 GIS Applications in Public Health	3,4,5		3			
GEOG 464 GIS Applications in Resource Assessment	3,4,5		3			
GEOG 466 Advanced Remote Sensing	3,4		3			
GEOG 468 GIS Applications in Urban Planning	3,4,5					
GEOG 476 Advanced Cartography	3,4		3			
GEOG 478 GIS Design and Implementation	4,5,6		3			
GEOG 479 Geographic Information Systems Applications	4,5,6		3			
GEOG 480 Topics in GIS	various		3			
3 credits of Regional Geography						
GEOG 330 United States and Canada			3			
GEOG 434 Mexico, Central America and the Caribbean			3			
GEOG 435 Japan and Korea			3			
GEOG 436 South America			3			
GEOG 437 China			3			
GEOG 444 European Union			3			
GEOG 446 Sub-Saharan Africa			3			

GEOG 448 Russia and Neighboring Regions			3			
GEOG 459 Field Studies in Regional Geography -or- **SUST 459 Field Studies in Sustainability**	1,2,5,6		3			
GEOG 481 Topics in Regional Geography	various		3			
Core Course Prerequisites				**Elective Courses in the Field (15 credits)**		
GEOG 272 (prereq. GEOG 110 or permission)			3	GEOG elective (various 3 credit)	various	15
GEOG 464 (prereq. GEOG 378)			3			
GEOG 478 (prereq. GEOG 378)			3			
GEOG 479 (prereq GEOG 378)			3			
GEOG 480 (prereq. GEOG 378)			3			
GEOG 430 (prereq. Permission of dept. chair)			3			
SUST 430 (prereq. Permission of dept. chair)			3			
GEOG 445 (prereq. GEOG 110)			3			
SUST 472 (prereq. GEOG 272, 275, 374, or permission)			3			
GEOG 472 (prereq. GEOG 272, 275, 374, or permission			3			
GEOG 473 (prereq. GEOG 110 or permission)			3			
GEOG 475 (prereq. GEOG 272, 374, ESCI 129, or permission)			3			
SUST 475 (prereq. GEOG 272, 374, ESCI 129, or permission)			3			
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Demonstrate knowledge of the basic concepts of physical and human geography and geographic techniques.
2. Show an understanding of the nature of Geography as an academic discipline, including familiarity with its history and major subfields
3. Display competency in the graphic expression of spatial data (i.e., maps, photographs, graphs and database)
4. Apply geographic theories, principles and data to solve spatial problems.
5. Understand and apply basic research skills, including the ability to (a) critically evaluate the research of others and (b) effectively design a research project on one's own.
6. Display competency in oral or written expression in regards to clarity, logical expression and effective argument.
7. Demonstrate knowledge and skills that are sufficient to allow one pursue advanced study in geography or find employment in a geography-related field.

***Bolded courses are new additions.**

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Curriculum Details for a Program Modification *(to be used as appropriate for specific modification request)*[4]
(ENVIRONMENTAL GEOGRAPHY & SUSTAINABILITY)

Course Number and Name [5]	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
GEOG 110 Introduction to Geography	1,2		3			
GEOG 130 Introduction to Geographic Information Science	3,4,5		3			
9 credits of Physical Geography:						
GEOG 270 Geography of Hazards	1,3		3			
GEOG 272 Physical Geography	1,3		3			
GEOG 275/SUST 275 Soils and Vegetation Sustainability	1,3,4		3			
GEOG 374 Climatology	1,3		3			
9 credits of Geographic Information Science:						
GEOG 266 Introduction to Remote Sensing	1,2,3		3			
GEOG 276 Elementary Cartography	1,3		3			
GEOG 378 Geographic Information Systems	3,4,5		3			
GEOG 464 GIS Applications in Resource Assessment	3,4,5		3			
GEOG 466 Advanced Remote Sensing	3,4		3			
GEOG 476 Advanced Cartography	3,4		3			
GEOG 478 GIS Design and Implementation	4,5,6		3			
GEOG 479 Geographic Information Systems Applications	4,5,6		3			
GEOG 480 Topics in GIS	various		3			
15 credits from the following:						
GEOG 430 Internship in Geography -or- SUST 430 Internship in Sustainability	5,6,7		3			
GEOG 433 Issues in Environmental Protection	4,5		3			
GEOG 442 Field Methods in Geography -or- SUST 442 Field	4,5,6		3			

[4] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**
[5] Make any detailed annotations for individual courses as needed to understand the curricular modifications taking place

Methods in Sustainability						
GEOG 445 Environmental Planning	4,5		3			
GEOG 459 Field Studies in Regional Geography -or- SUST 459 Field Studies in Sustainability	1,2,5,6		3			
GEOG 472 Topics in Physical Geography OR SUST 472 Topics in Sustainability	various		3			
GEOG 473 Geography of Natural Resources	3,4,5		3			
GEOG 475/SUST 475 Energy Resources and Climate Change	3,4,5,6		3			
Core Course Prerequisites				**Elective Courses in the Field**		
GEOG 272 (prereq. GEOG 110 or permission)			3			
GEOG 464 (prereq. GEOG 378)			3			
GEOG 478 (prereq. GEOG 378)			3			
GEOG 479 (prereq GEOG 378)			3			
GEOG 480 (prereq. GEOG 378)			3			
GEOG 430 (prereq. Permission of dept. chair)			3			
SUST 430 (prereq. Permission of dept. chair)			3			
GEOG 445 (prereq. GEOG 110)			3			
SUST 472 (prereq. GEOG 272, 275, 374, or permission)			3			
GEOG 472 (prereq. GEOG 272, 275, 374, or permission			3			
GEOG 473 (prereq. GEOG 110 or permission)			3			
GEOG 475 (prereq. GEOG 272, 374, ESCI 129, or permission)			3			
SUST 475 (prereq. GEOG 272, 374, ESCI 129, or permission)			3			
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Demonstrate knowledge of the basic concepts of physical and human geography and geographic techniques.
2. Show an understanding of the nature of Geography as an academic discipline, including familiarity with its history and major subfields
3. Display competency in the graphic expression of spatial data (i.e., maps, photographs, graphs and database)
4. Apply geographic theories, principles and data to solve spatial problems.
5. Understand and apply basic research skills, including the ability to (a) critically evaluate the research of others and (b) effectively design a research project on one's own.
6. Display competency in oral or written expression in regards to clarity, logical expression and effective argument.
7. Demonstrate knowledge and skills that are sufficient to allow one pursue advanced study in geography or find employment in a geography-related field.

***Bolded courses are new additions.**

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Curriculum Details for a Program Modification *(to be used as appropriate for specific modification request)*[6]
(TOURISM)

Course Number and Name [7]	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
GEOG 110 Introduction to Geography	1,2		3			
GEOG 120 World Regional Geography	1,2		3			
GEOG 130 Introduction to Geographic Information Science	3,4,5		3			
GEOG 430 Internship in Geography			3			
15 credits from the following:						
GEOG 290 Geography of Tourism			3			
GEOG 291 National Parks and World Heritage Sites			3			
GEOG 450 Tourism Planning			3			
GEOG 451 Tourism Development in Southern New England			3			
GEOG 453 Recreation and Resort Planning			3			
GEOG 454 Geography of Tourism Marketing			3			
GEOG 455 New Directions in Tourism			3			
GEOG 456 Tourism Management			3			
3 credits of Regional Geography						
GEOG 330 United States and Canada			3			
GEOG 434 Mexico, Central America and the Caribbean			3			
GEOG 435 Japan and Korea			3			
GEOG 436 South America			3			
GEOG 437 China			3			
GEOG 438 Australia, New Zealand, and Oceania			3			
GEOG 444 European Union			3			
GEOG 446 Sub-Saharan Africa			3			
GEOG 448 Russia and Neighboring Regions			3			
GEOG 459 Field Studies in Regional Geography -or- **SUST 459 Field Studies in Sustainability**	1,2,5,6		3			
GEOG 481 Topics in Regional	various		3			

[6] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**
[7] Make any detailed annotations for individual courses as needed to understand the curricular modifications taking place

Geography						
3 credits of Physical Geography:						
GEOG 270 Geography of Hazards	1,3		3			
GEOG 272 Physical Geography	1,3		3			
GEOG 275/SUST 275 Soils and Vegetation Sustainability	1,3,4		3			
GEOG 374 Climatology	1,3		3			
GEOG 472 Topics in Physical Geography OR **SUST 472 Topics in Sustainability**	various		3			
GEOG 473 Geography of Natural Resources	3,4,5		3			
GEOG 475/SUST 475 Energy Resources and Climate Change	3,4,5,6		3			
Core Course Prerequisites				**Elective Courses in the Field**		
GEOG 272 (prereq. GEOG 110 or permission)			3			
GEOG 464 (prereq. GEOG 378)			3			
GEOG 478 (prereq. GEOG 378)			3			
GEOG 479 (prereq GEOG 378)			3			
GEOG 480 (prereq. GEOG 378)			3			
GEOG 430 (prereq. Permission of dept. chair)			3			
SUST 430 (prereq. Permission of dept. chair)			3			
GEOG 445 (prereq. GEOG 110)			3			
SUST 472 (prereq. GEOG 272, 275, 374, or permission)			3			
GEOG 472 (prereq. GEOG 272, 275, 374, or permission			3			
GEOG 473 (prereq. GEOG 110 or permission)			3			
GEOG 475 (prereq. GEOG 272, 374, ESCI 129, or permission)			3			
SUST 475 (prereq. GEOG 272, 374, ESCI 129, or permission)			3			
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Demonstrate knowledge of the basic concepts of physical and human geography and geographic techniques.
2. Show an understanding of the nature of Geography as an academic discipline, including familiarity with its history and major subfields
3. Display competency in the graphic expression of spatial data (i.e., maps, photographs, graphs and database)
4. Apply geographic theories, principles and data to solve spatial problems.
5. Understand and apply basic research skills, including the ability to (a) critically evaluate the research of others and (b) effectively design a research project on one's own.
6. Display competency in oral or written expression in regards to clarity, logical expression and effective argument.
7. Demonstrate knowledge and skills that are sufficient to allow one pursue advanced study in geography or find employment in a geography-related field.

***Bolded courses are new additions.**

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PROGRAM MODIFICATION

DSECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 30.2001 Title of CIP Code International/ Globalization Studies

Name of Program: International Studies

Degree: Title of Award *(e.g. Master of Arts)* **BA**

Stand-Alone Certificate: *(specify type and level)*

Date Program was Initiated: 06/15/1994 OHE#: 02693

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 44-46

Credits in Program Core Courses: 18

Credits of Electives in the Field: 21

Credits of Free Electives: 14-19

Cr Special Requirements *(include internship, etc.):* 18-21 (minor)

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Modified Program Characteristics

Name of Program: International Studies

Degree: Title of Award *(e.g. Master of Arts)* **BA**

Certificate[1]: *(specify type and level)*

Program Initiation Date: Fall 2020

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 120

Other:

Modified Program Credit Distribution

Credits in General Education: 44-46

Credits in Program Core Courses: 18

Credits of Electives in the Field: 21

Credits of Free Electives: 14-19

Cr Special Requirements *(include internship, etc.):* 18-21

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):

Program Discontinued: CIP: OHE#: Accreditation Date:

Phase Out Period Date of Program Termination

Rationale for Modification

A three-credit methods class (IS 400: Practicing International Studies) will replace the option of selecting one of four courses within other disciplines (ANTH 374: Field Research Methods; GEOG 442: Field Methods in Geography; HIST 301: The Historical Imagination; and PS 250: Approaches to Political Science). In addition, IS 498 (Research in International Studies) is added as a three-credit alternative to IS 499 (International Studies Senior Project). These proposed changes will clarify the methods/capstone pathway in the major, which has caused confusion for some students in recent years in its current form.

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

At most, this change will necessitate one additional course (three credits) every academic year. We could incur three credits of part-time faculty expense either for direct instruction within this program or as replacement cost for a full-time faculty member teaching within the program. Total lecturer expense in AY 2020-21 will not exceed $7,204 (Class C lecturer rate of $1,833 per credit plus 31% estimated fringe).

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Institutional Contact for this Proposal: Dr. Paul Petterson Professor of Political Science; 860-832-2969; pettersonp@ccsu.edu

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Ammon College of Liberal Arts and Social Sciences; main campus

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SECTION 2: Curriculum Details for a Program Modification

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses			**18**	**Other Related/Special Requirements**		
IS 225: The World as a Total System	1, 3		3			
6 credits from IS 150: Introduction to International Studies OR GEOG: 120 World Regional Geography OR HIST 122: World Civilization II OR PS 104: The World's Political Systems	1, 3		6			
IS 400: Practicing International Studies	1-4		3			
IS 360/HUM360: International Studies Through Travel OR IS 450: Internship in International Studies OR IS 490: Field Study Abroad	1-4		3			
IS 498: Research in International Studies OR IS 499: International Studies Senior Project	1-4		3			
Core Course Prerequisites				**Elective Courses in the Field**		
None				Geographical Area	Various	15
				Transnational Theme	Various	6
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. Describe histories, institutions, values, and norms of various cultures
2. Apply theories in international studies to interpret current global issues
3. Analyze issues from the perspectives of other cultural traditions
4. Defend views on international cultures or issues with clear and well-reasoned arguments

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SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 27.0101 Title of CIP Code Mathematics, General

Name of Program: Mathematics

Degree: Title of Award *(e.g. Master of Arts)* **BS (Ed)**

Stand-Alone Certificate: *(specify type and level)*

Date Program was Initiated: 01/01/1976 OHE#: 00084

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 40-41

Credits in Program Core Courses: 43

Credits of Electives in the Field: 5

Credits of Free Electives: 0-3

Cr Special Requirements *(include internship, etc.):* 30

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Modified Program Characteristics

Name of Program: Mathematics

Degree: Title of Award *(e.g. Master of Arts)* **BS (Ed)**

Certificate[1]: *(specify type and level)*

Program Initiation Date: Fall 2020

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 120

Other:

Modified Program Credit Distribution

Credits in General Education: 40-41

Credits in Program Core Courses: 43

Credits of Electives in the Field: 5

Credits of Free Electives: 0-2

Cr Special Requirements *(include internship, etc.):* 30-31

Total # Cr in the Program *(sum of all #Cr above)*: 120

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):

Program Discontinued: CIP: OHE#: Accreditation Date:

Phase Out Period Date of Program Termination

Rationale for Modification

The change adds a new 1-credit course (MATH 422: Introduction to Mathematical Software) to the list of electives that satisfy the 5 credits of electives in the field.

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

MATH 422 is a 1-credit course offered each Spring and can also be taken for graduate credit. The anticipated number of sections is one per academic year. The cost of 1 credit of instruction based on the median salary of full-time faculty within the department plus 73.28% estimated fringe is $6,682.

Institutional Contact for this Proposal: Dr. Marian Anton Title: Associate Professor of Mathematics Tel.: 860-832-1941 e- mail: anton@ccsu.edu

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: School of Engineering, Science, and Technology, main campus

SECTION 2: Curriculum Details for a Program Modification						
Course Number and Name	**L.O. #**	**Pre-Requisite**	**Cr Hrs**	**Course Number and Name**	**L.O. #**	**Cr Hrs**
Program Core Courses				**Other Related/Special Requirements (Teacher Preparation – 30 credits)**		
MATH 120: Problem Solving I	4, 6		1	SPED 315: Introduction to Educating Learners with Exceptionalities	--	3
MATH 152: Calculus I	1		4	EDTE 316: Principles of Learning in Diverse Settings (Secondary)	--	4
MATH 211: Clinical Experience in Mathematics Education I	6		1	LLA 440: Literacy instruction in the Secondary School	--	3
MATH 218: Discrete Mathematics	2		4	EDSC 425: Multicultural, Interdisciplinary Teaching at the Secondary Level	--	3
MATH 220: Problem Solving II	4, 6		1	MATH 413: Teaching Mathematics in the Secondary School	--	4
MATH 221: Calculus II	1		4	EDSC 435: Secondary Education Student Teaching	--	9
MATH 228: Introduction to Linear Algebra	2		4	MATH 426: Student Teaching Seminar	--	1
MATH 313: Number Systems from an Advanced Viewpoint	5		3	EDF 215 Education in a Multicultural Society	--	3
MATH 320: Problem Solving III	4. 6		1			
MATH 327: Curriculum & Technology in Secondary Mathematics I	5		3	**Encumbered General Education**		
MATH 328: Curriculum & Technology in Secondary Mathematics II	5		3	(CHEM 161: General Chemistry AND CHEM 162: General Chemistry Laboratory AND CHEM 200: Foundations of Analytical Chemistry AND CHEM 201: Foundations of Analytical Chemistry Laboratory) OR (PHYS 125: University Physics I AND PHYS 126: University Physics II)	--	8
MATH 366: Introduction to Abstract Algebra	2, 3		4	CS 151: Computer Science I OR CS 213: Applications of Computing I	--	3
MATH 377: Introduction to Real Analysis	1, 3		4	HIST 161: American History to 1877 OR HIST 162: American History from 1877 to Present	--	3
MATH 383: College Geometry	3		3	PSY 136: Life-Span Development	--	3
STAT 314: Introductory Statistics for Secondary Teachers	2, 4		3			
Core Course Prerequisites				**Elective Courses in the Field (5 credits)**		
MATH 120 - MATH 115 (C- or higher) or MATH 119 (C- or higher) or placement exam			1	MATH 222: Calculus III	1	4

MATH 152 - MATH 115 (C- or higher) and MATH 116 (C- or higher), or MATH 119 (C- or higher)	4	MATH 311: Clinical Experience in Mathematics Education II	6	1
MATH 211 - MATH 152 and MATH 120 (C- or higher)	1	MATH 344: Mathematics and Diverse Cultures	6	3
MATH 218 - MATH 152 with a grade of C- or higher	4	MATH 355: Introduction to Differential Equations with Applications	3	4
MATH 220 - MATH 120 and MATH 152 both with grades of C- or higher.	1	MATH 411: Clinical Experience in Mathematics Education III	6	1
MATH 221 - MATH 152 (C- or higher)	4	MATH 421: History of Mathematics	3	3
MATH 228 - MATH 152 and MATH 218 both with grades of C- or higher	4	**MATH 422: Introduction to Mathematical Software**	3	**1**
MATH 313 - MATH 211 and MATH 218 and MATH 221 (all with a grade of C- or higher)	3	MATH 440: Selected Topics in Mathematics	**3**	1 to 3
MATH 320 - MATH 220 (C- or higher) and MATH 228 (C- or higher)	1	MATH 465: Introduction to Fractal Geometry and Chaos	3	3
MATH 327 - MATH 218 (C- or higher) or MATH 221 (C- or higher)	3	MATH 468: Symbolic Logic	2, 3	3
MATH 328 - MATH 218 (C- or higher) or MATH 221 (C- or higher)	3	MATH 469: Number Theory	2, 3	3
MATH 366 - MATH 218 (C- or higher)	4	MATH 477: Numerical Analysis	1, 3	3
MATH 377 - MATH 218 (C- or higher) and MATH 221 (C- or higher)	4	MATH 491: Advanced Vector Calculus	1, 3	3
MATH 383 - MATH 328 or MATH 366 or MATH 377 (all with C- or higher)	3	STAT 315: Mathematical Statistics I	2	3
STAT 314 - MATH 218 and MATH 221	3	STAT 416: Mathematical Statistics II	2	3
		STAT 453: Applied Statistical Inference	2, 4	3
		STAT 455: Experimental Design	3, 4	3
		STAT 456: Statistical Computation	3	3
		STAT 465: Nonparametric Statistics	3	3
Total Other Credits Required to Issue Modified Credential				

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. Understand basic analytic arguments using such common notions as epsilon/delta, infinite sums, and limits.
2. Understand basic algebraic and discrete notions, such as facts about vector spaces and counting arguments.
3. Be able to independently investigate more advanced topics in mathematics and present their results to others in a clear way.
4. Apply mathematical principles to the solution of problems, including real world applications.
5. Understand issues concerning the mathematics curriculum for grades 7-12.
6. Develop skills necessary to become an effective teacher of mathematics.

***Bolded courses are additions to the curriculum.**

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 52.1201 Title of CIP Code Management Information Systems, General
Name of Program: Management Information Systems
Degree: Title of Award *(e.g. Master of Arts)* **BS**
Stand-Alone Certificate: *(specify type and level)*
Date Program was Initiated: 11/19/1985 OHE#: 02380
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 44-46
Credits in Program Core Courses: 45
Credits of Electives in the Field: 12
Credits of Free Electives: 14-16
Cr Special Requirements *(include internship, etc.):* 3
Total # Cr in the Program *(sum of all #Cr above)*: 120
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Modified Program Characteristics

Name of Program: Management Information Systems
Degree: Title of Award *(e.g. Master of Arts)* **BS**
Certificate[1]: *(specify type and level)*
Program Initiation Date: 11/19/1985
Modality of Program: X On ground Online Combined
If "Combined", % of fully online courses?
Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*:
Other: Adding 12-credit Individualized Specialization

Modified Program Credit Distribution

Credits in General Education: 44-46
Credits in Program Core Courses: 45
Credits of Electives in the Field: 12
Credits of Free Electives: 14-16
Cr Special Requirements *(include internship, etc.):* 3
Total # Cr in the Program *(sum of all #Cr above)*: 120
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):
Program Discontinued: CIP: OHE#: Accreditation Date:
Phase Out Period Date of Program Termination

Rationale for Modification

The MIS BS program already contains four 12-credit specializations (Business Analytics; Security and Infrastructure; Application Development; and Enterprise Resource Planning). The fifth specialization will be an "Individualized" option, which provides greater flexibility to students. In addition, the directed elective list within the specializations has changed to include MIS220 (Introductory Business Applications Development) and remove MIS210 (Application Program Development I).

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

None. All of the courses are already offered within the existing specializations.

Institutional Contact for this Proposal: Michael Gendron Title: Professor and Department Chair, Management Information Systems Tel.: 860-832-3293 e- mail: gendronm@ccsu.edu

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: School of Business; main campus

SECTION 2: Curriculum Details for a Program Modification

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
AC 211: Introduction to Financial Accounting			3	**Business Analytic Specialization (12 cr.)**		
AC 212: Introduction to Managerial Accounting			3	MIS 400: Business Analytics and Decision Support	2 3	3
BUS 480: Capstone Seminar			0	MIS 450: Enterprise Strategies and Transformations	1 2 3	3
FIN 295: Managerial Finance			3	MIS 463: Analytics Applications	3	3
LAW 250: Legal Environment of Business			3	Directed Elective	1 2 3	3
MC 207: Managerial Communication I			3	**Information Security and Infrastructure Specialization (12 cr.)**		
MGT 295: Fundamentals of Management and Organizational Behavior			3	MIS 410: Business-Driven Infrastructure Design	1	3
MGT 480: Strategic Management			3	MIS 450: Enterprise Strategies and Transformations	1 2 3	3
MIS 201: Introduction to Management Information Systems	1		3	MIS 464: Information Systems Security and Assurance for Business	1 2	3
MKT 295: Fundamentals of Marketing			3	Directed Elective	1 2 3	3
MIS 300: Project Management for Business	1		3	**Business Application Development Specialization (12 cr.)**		
MIS 305: E-Business	1 2		3	MIS 410: Business-Driven Infrastructure Design	1	3
MIS 310: Contemporary Business Applications Development I	2		3	MIS 462: IT Project Management and System Implementation	2 3	3
MIS 312: Contemporary Business Applications Development II	2		3	MIS 465: Mobile Development for Business	1 2 3	3
MIS 315: Database Management Systems	2		3	Directed Elective	1 2 3	3
MIS 361: Systems Analysis and Design for Business	1 2 3		3	**Enterprise Resource Planning Systems Specialization (12 cr.)**		
				MIS 400: Business Analytics and Decision Support	2 3	3
				MIS 450: Enterprise Strategies and Transformations	1 2 3	3
				MIS 466: Enterprise Systems	1 2 3	3
				Directed Elective	1 2 3	3
				Individualized Specialization (12 credits from the following)		
				MIS 220: Introductory Business Applications Development	2	3
				MIS 400: Business Analytics and Decision Support	2 3	3
				MIS 410: Business-Driven Infrastructure Design	1	3
				MIS 450: Enterprise Strategies and Transformations	1 2 3	3
				MIS 460: Emerging Technologies for Business	1 2 3	3
				MIS 462: IT Project Management and System Implementation	2 3	3
				MIS 463: Analytics Applications	3	3
				MIS 464: Information Systems Security and Assurance for Business	1 2	3
				MIS 465: Mobile Development for Business	1 2 3	3
				MIS 466: Enterprise Systems	1 2 3	3

				MIS 494: Independent Study in Management Information Systems	1 2 3	3
				MIS 496: Practicum in Management Information Systems	1 2 3	3
				MIS 498: Information and Decision Sciences Seminar	1 2 3	3
Core Course Prerequisites				**Elective Courses in the Field**		
AC 211 - MATH 101, or MATH 102, or MATH 103 (C- or higher)			3			
AC 212 - AC 211 (with C- or higher)			3			
BUS 480 - Grades of at least C- in FIN 295, LAW 250, MC 207, MIS 201, MGT 295, MKT 295, and the 8 pre-major courses; acceptance into upper-division of School of Business; meeting upper-division Business School GPA requirements; and senior standing			0			
FIN 295 - AC 211; and one of the following: STAT 104, STAT 200, STAT 215, STAT 314, or STAT 315; all with grades of C- or higher			3			
LAW 250 - 30 credits completed before beginning course work			3			
MC 207 - ENG 110 and sophomore standing			3			
MGT 295 - ENG 110 or ENG 202 or HON 140 with a grade of C- or higher and sophomore standing			3			
MGT 480 - Grades of at least C- in FIN 295, LAW 250, MIS 201, MGT 295, MKT 295, STAT 201 and the eight pre-major courses; acceptance into upper-division of School of Business; meeting upper-division Business School GPA requirements; and senior standing			3			
MIS 300 - MIS 201 (C- or higher) or permission of department chair, and admission to the upper division of the Business School			3			
MIS 305 - MIS 201 (C- or higher) or permission of department chair			3			
MIS 310 - MIS 201 (C- or higher)			3			
MIS 312 - MIS 310 (C- or higher)			3			
MIS 315 - MIS 201 (C- or higher) or permission of department chair			3			
MIS 361 - MIS 315 (can be taken concurrently; C- or higher) or permission of department chair			3			
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. Understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision making.
2. Analyze and synthesize business information and systems to facilitate evaluation of strategic alternatives.
3. Effectively communicate strategic alternatives to facilitate decision making.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 42.0101 Title of CIP Code Psychology, General

Name of Program: **Psychology**

Degree: Title of Award *(e.g. Master of Arts)* **MA**

Stand-Alone Certificate: *(specify type and level)*

Date Program was Initiated: 01/01/1976 OHE#: 00099

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 0

Credits in Program Core Courses: 12

Credits of Electives in the Field: 24-27

Credits of Free Electives: 0

Cr Special Requirements *(include internship, etc.):* 0

Total # Cr in the Program *(sum of all #Cr above)*: 36-39

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **36-39**

Modified Program Characteristics

Name of Program: Psychology

Degree: Title of Award *(e.g. Master of Arts)* **MA**

Certificate[1]: *(specify type and level)*

Program Initiation Date: Fall 2020

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 36-39

Other: **General Psychology Specialization only – 36 credits**

Modified Program Credit Distribution

Credits in General Education: 0

Credits in Program Core Courses: 18

Credits of Electives in the Field: 18

Credits of Free Electives: 0

Cr Special Requirements *(include internship, etc.):* 0

Total # Cr in the Program *(sum of all #Cr above)*: 36

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **36**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):

Program Discontinued: CIP: OHE#: Accreditation Date:

Phase Out Period Date of Program Termination

Rationale for Modification

The change involves adding 3 credits to the core of the General Psychology specialization. The new core requirement will be satisfied by one of three courses (PSY530 – Introduction to Clinical Psychology; PSY545 - Psychopathology: PSY550 – Community Psychology). Directed electives in the field are reduced by 3 credits. This change helps ensure that students are exposed to more content that may be required for future graduate study.

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

None. These courses are already offered regularly as part of the curriculum.

Institutional Contact for this Proposal: Dr. Carolyn R. Fallahi, 860-832-3114, fallahic@ccsu.

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Ammon College of Liberal Arts and Social Sciences; main campus

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BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 2: Curriculum Details for a Program Modification						
Course Number and Name	**L.O. #**	**Pre-Requisite**	**Cr Hrs**	**Course Number and Name**	**L.O. #**	**Cr Hrs**
Program Core Courses – General Psychology Specialization				**Other Related/Special Requirements**		
PSY 501: Thesis and Capstone Preparation	1, 5		1			
PSY 596: Psychological Research: Design and Analysis I	1, 2, 3		4			
PSY 597: Psychological Research: Design and Analysis II	1, 2, 3		4			
PSY 599: Thesis or capstone	1,3,5		3			
PSY 512: Seminar in Developmental Psychology	4		3			
PSY 530: Psychopathology – OR -PSY 545: Introduction to Clinical Psychology – OR - PSY 550: Community Psychology	5		3			
Core Course Prerequisites				**Elective Courses in the Field**		
PSY 501 - Admission to M.A. in Psychology or permission of instructor. Must be taken before or concurrently with PSY 596			1	Directed electives	various	12
PSY 596 - Admission to M.A. program in psychology or permission of instructor			4			
PSY 597 - PSY 596			4			
PSY 599 - 21 credits of graduate work, PSY 501, and a 3.00 overall GPA. Students must consult with their advisor before registering for thesis credits			3			
PSY 512, 530, 545, 550 - Admission to graduate program or permission of instructor			3			

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. Summarize and critically evaluate scholarly literature.
2. Design, conduct, and analyze scientific empirical research.
3. Communicate with professional-level skill in oral and written contexts.
4. Critically analyze and integrate psychological theory in applied and/or real-life situations.
5. Demonstrate expertise within an area of psychology (community, health, or other focus).

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities
BELOW THRESHOLD INFORMATION REPORT FORM
PROGRAM MODIFICATION

SECTION 1: GENERAL INFORMATION

Institution: Central Connecticut State University | Date of Submission to CSCU Office of the Provost: April 22, 2020

Most Recent NECHE Institutional Accreditation Action and Date: April 12, 2019

Original Program Characteristics

CIP Code No. 13.1001 Title of CIP Code Special Education and Teaching, General

Name of Program: Special Education

Degree: Title of Award *(e.g. Master of Arts)* **MS**

Stand-Alone Certificate: *(specify type and level)*

Date Program was Initiated: 07/01/1968 OHE#: 00048

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Locality of Program: X On Campus Off Campus Both

Original Program Credit Distribution

Credits in General Education: 0

Credits in Program Core Courses: 6

Credits of Electives in the Field: 15

Credits of Free Electives: 0

Cr Special Requirements *(include internship, etc.): 9*

Total # Cr in the Program *(sum of all #Cr above)*: 30

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **30**

Modified Program Characteristics

Name of Program: Special Education

Degree: Title of Award *(e.g. Master of Arts)* **MS**

Certificate[1]: *(specify type and level)*

Program Initiation Date: 07/01/1968

Modality of Program: X On ground Online Combined

If "Combined", % of fully online courses?

Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 30

Other: Establishing advising tracks within the Specialization for Special Education Teachers

Modified Program Credit Distribution

Credits in General Education: 0

Credits in Program Core Courses: 3

Credits of Electives in the Field: 18

Credits of Free Electives: 0

Cr Special Requirements *(include internship, etc.):* 9

Total # Cr in the Program *(sum of all #Cr above)*: 30

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **30**

If program modification is concurrent with discontinuation of related program(s), list information for such program(s):

Program Discontinued: CIP: OHE#: Accreditation Date:

Phase Out Period Date of Program Termination

Rationale for Modification

Program revision reflects deceasing core requirements from 6 to 3 credits and increasing directed electives from 15 to 18 credits. These changes clarify tracks for advising, making it more marketable to special educators and responsive to workforce development needs for special educators. This program revision includes the addition of three new 3-credit graduate classes: two focused on specialized reading instruction for students with dyslexia (SPED 528: Multisensory Structures Language Instruction; SPED 529: Multisensory Structured Language Instruction Practicum) and one focused on executive function and ADHD (SPED 537: Executive Function, ADHD, and Learning).

Description of Resources Needed *(As appropriate summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.)*

At most, this change will necessitate one additional course (three credits) every semester, for a total of no more than six credits over the academic year. We will incur six credits of part-time faculty expense either for direct instruction within this program or as replacement cost for a full-time faculty member teaching within the program. Total lecturer expense in AY 2020-

21 will not exceed $14,407 (Class C lecturer rate of $1,833 per credit plus 31% estimated fringe).
Institutional Contact for this Proposal: Dr. Joan Nicoll-Senft Title: Professor of Special Education & Interventions Tel.: 860.832.2403 e- mail: Nicoll-senftj@ccsu.edu Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: School of Education and Professional Studies, main campus

SECTION 2: Curriculum Details for a Program Modification						
Course Number and Name	**L.O. #**	**Pre-Requisite**	**Cr Hrs**	**Course Number and Name**	**L.O. #**	**Cr Hrs**
Program Core Courses				**Other Related/Special Requirements**		
SPED 532: Contemporary Issues in Special Education			3	SPED 596: Capstone Intervention Project I		3
~~SPED 566: Legal and Administrative Issues in Special Education~~			~~3~~	SPED 597: Capstone Intervention Project II		3
				SPED 598: Research in Special Education		3
Core Course Prerequisites				**Elective Courses in the Field**		
SPED 532 - Certification in education				**Language Arts Instruction for Learners with Exceptionalities Track (18 credits)**		
				SPED 506: Foundations of Language for the Exceptional Child		3
				SPED 517: Special Educational Methods in Teaching Reading (K-12)		3
				SPED 518: Special Educational Methods in Teaching Reading (K-12)		3
				SPED 529: Multisensory Structured Language Instruction Practicum -OR- SPED 528: Multisensory Structured Language Instruction		3
				And up to 6 credits in Literacy Education		6
				STEM Instruction for Learners with Exceptionalities Track (18 credits)		
				SPED 519: Special Education Methods in Content Area Instruction (K-12)		3
				SPED 581: Assistive Technology in Special Education		3
				STEM 506: Problem Based Learning in STEM Education		3
				STEM 520: STEM Practices in the Physical Sciences -OR- STEM 530: STEM Practices in the Earth/Space Sciences -OR- STEM 540 STEM Practices in the Life Sciences		3
				And 6 credits in consultation with an advisor		6
				Advanced Studies in Disability Track (18 credits)		
				SPED 504 Universal Design, Inclusion and Accessibility in Learning, Teaching, and Beyond		3
				SPED 506 Foundations of Language for the Exceptional Child		3
				SPED 536 Autism Spectrum Disorder		3
				SPED 537: Executive Function, ADHD, and Learning		3
				And 6 credits in consultation with an advisor		6
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(List up to three of the most important student learning outcomes for the program, and any changes introduced)*

1. Students will demonstrate knowledge of foundational issues in special education and their impact on the field.

2. Students will demonstrate knowledge of the development and characteristics of learners, individual learning differences, and appropriate instructional strategies.
3. Students will demonstrate the ability to analyze multiple forms of standardized and curriculum-based assessments and use that information for a variety of educational decisions.

~~Struck through~~ courses are removed.