Massachusetts Board of Higher Education Academic Affairs Committee Meeting Minutes June 13, 2017

The June 13, 2017 meeting of the Academic Affairs Committee was held in the DHE Conference Room on the 14th floor of the McCormack Bldg, One Ashburton Place, Boston, Massachusetts.

Committee Members Present:	Sheila Harrity, Vice Chair; Fernando Reimers; Henry Thomas; Secretary of Education Designee Tom Moreau.
Committee Members Absent:	Committee Chair Nancy Hoffman; Board Chair Chris Gabrieli; Robert Johnson; Student Board Member Jasson Alvarado Gomez.
Department Staff Present:	Commissioner Carlos Santiago; Deputy Commissioner for Academic Affairs and Student Success Patricia Marshall; Robert Awkward; David Cedrone; Kate Flanagan; Winifred Hagan; Alex Nally; Constantia Papanikolaou; Brendan Peltier; Elena Quiroz-Livanis; Angela Williams; Christine Williams.

I. CALL TO ORDER

Vice Committee Chair, Sheila Harrity, called the meeting to order at 10:09 a.m.

II. ACCEPTANCE OF MINUTES

On a motion duly made and seconded, the minutes of the May 2, 2017 meeting of the Academic Affairs Committee were unanimously approved.

III. COMMITTEE CHAIR'S REMARKS

Vice Chair Harrity turned the meeting over to Deputy Commissioner Patricia Marshall for her remarks.

IV. DEPUTY COMMISSIONER FOR ACADEMIC AFFAIRS REMARKS

Deputy Commissioner Patricia Marshall remarked upon the success of the well-attended Veterans Affairs School Certifying Official conference at Fitchburg State, an event which welcomed approximately 80 participants from Massachusetts, Rhode Island and New Hampshire. Dr. Marshall praised the DHE's Veterans Affairs team for the event's success. Dr. Marshall also highlighted the annual Civic Learning and Engagement Conference, held at the Edward M. Kennedy Institute. The event was attended by over 140 participants, and Mass Maritime has already agreed to host the event next year. Next, Dr. Marshall highlighted the work of the Program Review Team. In this past year, the Review Team brought 16 programs forward to the Board for action, including a new institution (Sattler College) and handled 115

public program approvals internally. The Team conducted 15 Notice of Intent reviews and 7 expedited external reviews for the independent and out-of-state institutions. Additionally, with the assistance of DHE legal counsel, the Team met with representatives from several institutions to discuss mergers, closures, and other issues related to compliance, consumer protection, and ensuring academic quality. Dr. Marshall reminded the Committee of the second meeting of the Early College Joint Committee (ECJC), which occurred on May 31. At the May 31 meeting, the ECJC voted to endorse the process and criteria for an early college designation. The ECJC will present the designation criteria to the full board next week for approval. Dr. Marshall thanked both the DESE and DHE staffs for their work and, in particular, Christine Williams. Dr. Marshall also mentioned the upcoming launch of the 4th 100 Males to College program at Bridgewater State University. This event will double the number of the 100 Males to College programs in Massachusetts. Later this month, DHE staff will hold a retreat to discuss the future of the Commonwealth Commitment.

V. MOTIONS

List of documents used: AAC Meeting PowerPoint, June 13, 2017 AAC Motions 17-18 through 17-22 new program motions and new institution approval AAC Motions 17-24 through 17-27 on renewal of the Commonwealth Honors Programs AAC 17-29 Community College Transfer Principals AAC 17-30 Amendment to MassTransfer Policy to include STEM General Education Foundation

A. AAC 17-18 Massachusetts College of Liberal Arts Bachelor of Science in Community Health Education

Associate Commissioner of Academic Affairs and Student Success, Winnie Hagan presented the program. The Community Health Education program will prepare students for work in the field of community health education, and for graduate programs in health promotion or public health and disease prevention. MCLA intends the interdisciplinary program to allow students to take the Certified Health Education Specialist exam, qualifying them to work in the field of community health education. Students will be expected to gain knowledge of community health, human biology, psychology, sociology, statistics, epidemiology and other fields and to gain hands-on practical experience in health promotion through coursework and internships. Students will be expected to have a focus on professional communication, health promotion, community wellness and evidence-based practice.

The DHE review team determined that existing resources are in place for the program, administrative support is substantial and the proposed CHE major has the capability to deliver a high quality program. The program was found to have a coherent design and be characterized by appropriate depth and breadth. The reviewers recommended program approval.

Board Member Henry Thomas inquired about the program focus on graduating students for indemand STEM fields. Monica Joslin, MCLA's Dean of Academic Affairs, replied saying the school worked with employers in the development of the program to ensure a direct education to career pipeline. She also stated that health care is a primary economic driver in Western Massachusetts with great demand for skilled workers in the health care sector. MCLA has direct contacts with many health employers to ensure job placements for graduating students. Board Member Thomas expanded on his comment to express his concern that health education students might not realize their potential to apply their education to a variety of STEM career opportunities.

Board Member Fernando Reimers raised concerns about program sustainability when considering the low projected program enrollment of just 32 students and 8 graduates per year. Dr. Joslin replied that MCLA's projected enrollment is conservative, and she expects many more students to enter the program. Dr. Reimers also wanted to know how MCLA will ensure that all students are served well, as he does not want to create a situation where the students have no institutional help with job opportunities. Dr. Joslin said that MCLA hired a special program coordinator for the new Health Education program. This person's role will be to advise students on education and career opportunities. MCLA will also group students in cohorts for added support. Professor Anne Goodwin, MCLA's biology chair, addressed Dr. Reimer's sustainability question saying the expected increase in students enrolled in the program was strongly aligned to career pathways. The answer was "yes" with the expectation that some students will pursue careers in industry and some will go on to graduate school.

On a motion duly made and seconded, the following motion was approved unanimously by all board members present:

AAC 17-18 APPLICATION OF MASSACHUSETTS COLLEGE OF LIBERAL ARTS TO AWARD THE BACHELOR OF ARTS IN COMMUNITY HEALTH EDUCATION

MOVED: The Board of Higher Education hereby approves the application of Massachusetts College of Liberal Arts to award the Bachelor of Science in Community Health Education

> Upon graduating the first class for this program, the University shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources, and program effectiveness.

- Authority: Massachusetts General Laws Chapter 15A, §9(b).
- Contact: Winifred M. Hagan, Ed.D. Associate Commissioner for Academic Affairs & Student Success

B. AAC 17-19 Massachusetts College of Liberal Arts Bachelor of Science in Health Sciences

Associate Commissioner of Academic Affairs and Student Success, Winnie Hagan presented the program. The Health Education program will provide a high-quality education and preparation for graduates to excel in a variety of health-related careers with strong skills in critical thinking, the scientific method and application of fundamental scientific concepts. It is anticipated that students will gain practical skills through laboratory activities and high-impact experiences such as internships and independent research. It is intended that the proposed program will prepare students for graduate study and careers in various health fields, such as physician assistant, physical therapy, occupational therapy, nurse practitioner, nutrition and medical technology.

The review team found the program to have a coherent design characterized by appropriate breadth, and sequential progression with a clear structure and requirements appropriate for students and career goals. The team noted that the proposed health sciences program and concentrations are built on the strong core of required biology and allied science, and that related courses are characterized by appropriate breadth, depth, continuity, sequential progression and synthesis typical of well-designed undergraduate programs. The reviewers recommended program approval.

Vice Chair Harrity asked if the program will have industry recognized credentials and if MCLA has a master articulation agreement that encompasses both programs. Monica Joslin, Dean of Academic Affairs, replied in the affirmative on both inquiries and mentioned the strong articulation agreement with their regional higher education partners such as Berkshire Community College.

The following motion was duly made, seconded and approved unanimously by all board members present:

AAC 17-19 APPLICATION OF MASSACHUSETTS COLLEGE OF LIBERAL ARTS DESIGN TO AWARD THE BACHELOR OF SCIENCE IN HEALTH SCIENCES

MOVED: The Board of Higher Education hereby approves the application of the Massachusetts College of Liberal Arts to award the Bachelor of Science in Health Sciences.

Upon graduating the first class for these programs, Massachusetts College of Liberal Arts shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources, and program effectiveness.

- Authority: Massachusetts General Laws Chapter 15A, §9(b).
- Contact: Winifred M. Hagan, Ed.D. Associate Commissioner for Academic Affairs & Student Success

C. AAC 17-20 University of Massachusetts Amherst Bachelor of Science, Master of Science, and Doctor of Philosophy in Biomedical Engineering

Associate Commissioner of Academic Affairs and Student Success, Winnie Hagan presented the program. The proposed baccalaureate program in Biomedical Engineering will be a foundational undergraduate degree program where students learn to solve engineering problems in biology and medicine. It is intended that students will be able to apply knowledge of mathematics, science, and engineering; to identify, formulate, and solve engineering problems; to design and conduct experiments; design systems, components, or processes to meet needs, to work in teams, to communicate effectively, to conduct themselves professionally and ethically, and to understand the need for life-long learning. It is expected

that graduates of the proposed undergraduate program will be prepared for a broad range of careers, including those in medical equipment and supply manufacturing, scientific research and development services, pharmaceutical and medicine manufacturing, and for work with medical professionals. In all cases, it is intended that students have a rigorous foundation in math, sciences, information technology, and engineering that ensures that they are competitive in the labor market.

The proposed M.S. and Ph.D. biomedical engineering programs are graduate programs in which students learn the knowledge and skills to conduct research at the intersection of biology, medicine, and engineering. UMass Amherst expects that graduates of the MS program will be prepared for occupations in the life science industry and for graduate studies in biomedical engineering and related fields. UMass Amherst anticipates that graduates of the Ph.D. program will be prepared for occupations in the life science industry, research labs, and academia with state-of-the-art knowledge in math, sciences, information technology, and engineering, including research in industry, postdoctoral research positions, and academic positions.

The external reviewers found that the programs to be well designed and a valuable addition to UMass Amherst and that the curriculum is consistent with the stated goals. The reviewers recommended program approval.

Vice Chair Harrity complimented the program's strong workforce development component and asked why students are not allowed to transfer into the program. Associate Dean, Dave McLaughlin, answered by saying he thought the reason was due to space considerations but he does not see that as a problem and will change the criteria to allow transfer students. Secretary of Education Designee Tom Moreau asked about in-state compared to out-of-state enrollment. The projection is 15 in-state and 30 out-of-state enrollees. Board Member Thomas asked about planned or existing articulation with MCLA and their new health science program. UMass responded that they didn't have an agreement currently in place but welcomed the discussion with MCLA.

The following motion was duly made, seconded and approved unanimously by all board members present:

AAC 17-20 APPLICATION OF THE UNIVERSITY OF MASSACHUSETTS AMHERST TO AWARD THE BACHELOR OF SCIENCE, MASTER OF SCIENCE, AND DOCTOR OF PHILOSOPHY IN BIOMEDICAL ENGINEERING

MOVED: The Board of Higher Education hereby approves the application of the University of Massachusetts Amherst to award the Bachelor of Science, Masters in Science, and Doctor of Philosophy in Biomedical Engineering. in Environmental Studies & Sustainability

> Upon graduating the first class for this program, the University shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources, and program effectiveness.

Authority: Massachusetts General Laws Chapter 15A, §9(b).

Contact: Winifred M. Hagan, Ed.D. Associate Commissioner for Academic Affairs & Student Success

D. AAC 17-21 University of Massachusetts Dartmouth Doctor of Philosophy in Integrative Biology

Associate Commissioner of Academic Affairs and Student Success, Winnie Hagan presented the program. The purpose of the proposed program is to foster the training and experience of students across biological sub-disciplines. The main objectives are to provide students with a scientific background that spans the three broad categories of Molecular and Cellular Biology, Organismal and Developmental Biology, and Evolution and Ecology with deep content knowledge in one of these areas. This integrated training will characterize the program and differentiate graduates who are capable of thinking beyond the traditional boundaries of biology subfields. UMass Dartmouth intends that synthesizing concepts from sub-disciplines will enable graduates to investigate life and perform independent research with a full range of modern techniques used across disciplines. UMass Dartmouth further intends that graduates will develop competency in scientific communication with a focus on publication, presentation, public rhetoric, ethics, and civic engagement. It is anticipated that graduates will be prepared for professions in industry, government and academia.

The external review team found congruity and alignment of the curriculum, with the program goals and the campus strategic plan. They also found the admission and degree requirements of sufficient rigor to produce competitive graduates; research and teaching faculty to be of sufficient quality; breadth and depth to mount the proposed program, strong institutional support, the availability of adequate facilities, equipment, and library resources, and a compelling need and demand for the proposed program. The reviewers recommended program approval.

Secretary of Education Designee Tom Moreau expressed his surprise to learn of no comparable programs in the region, based on Dr. Hagan's comments, and asked if the comparison included out-of-state, yet geographically close, schools. Secretary of Education Designee Moreau also wanted to know how "comparable programs" were defined. Dr. Hagan replied saying that for the purpose of BHE staff review of proposed programs, factors such as costs, access, and the delivery structure are how comparisons are made. UMass Dartmouth representatives added to the discussion by highlighting specific characteristics of the school that make it unique, including its integrative program intentionally designed to appeal to a broader and more diverse range of students than those typically participating in the hard sciences, its high concentration of in-state students (93%) and its high ratio of minority students and low-income students who receive Pell Grants. UMass Dartmouth expects to draw comparatively more women into the program based on the current undergraduate program in biology, which is 66% women. Compared to other hard science program of similar schools, UMass Dartmouth is unique and offers broad academic pathways. Secretary of Education Designee Moreau asked if the NEBHE Regional Student Program would cover this level of granularity. Dr. Marshall replied that in most cases it would.

Dr. Harrity asked about the program's projected enrollment numbers, wondering if the school was concerned about the projected four students in the first year and eight in the second. The UMass Dartmouth representatives responded that it was normal to have such low enrollment at the beginning of new programs and that they fully expect the program to grow and be self-sustaining through tuition.

The following motion was duly made, seconded and approved unanimously by all board members present:

AAC 17-21 APPLICATION OF THE UNIVERSITY OF MASSACHUSETTS DARTMOUTH TO AWARD THE DOCTOR OF PHILOSOPHY IN INTEGRATIVE BIOLOGY.

MOVED: The Board of Higher Education hereby approves the application of the University of Massachusetts Dartmouth to award the Doctor of Philosophy in Integrative Biology.

Upon graduating the first class for these programs, Massachusetts College of Art and Design shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources, and program effectiveness.

- Authority: Massachusetts General Laws Chapter 15A, §9(b).
- Contact: Winifred M. Hagan, Ed.D. Associate Commissioner for Academic Affairs & Student Success

After the vote was taken, Commissioner Santiago noted that he would prefer that review teams had external reviewers from at least two different institutions and asked Dr. Hagen to add this to the DHE formal criteria for external reviewers.

E. AAC 17-22 University of Massachusetts Lowell Bachelor of Science in Environmental Engineering

Associate Commissioner of Academic Affairs and Student Success, Winnie Hagan presented the program. The purpose of the proposed program is to prepare students for careers including areas of hazardous waste site remediation, environmental fate and transport of pollutants, emerging pollutants and micro pollutants, energy recovery from wastewater treatment facilities, and water and waste water treatment. It is also intended to prepare graduates to address issues of environmental challenges related to climate change.

The external reviewers supported the establishment of the proposed program noting that it will serve the needs of the Massachusetts engineering community. The reviewers expect the curriculum is sufficient to initiate the B.S. in Environmental Engineering, provided that faculty lines are integrated in the program. Staff thoroughly reviewed all documentation submitted by the University of Massachusetts Lowell and the external reviewers. Staff recommendation is for approval of the proposed Bachelor of Science in Engineering in Environmental Engineering program.

Dr. Harrity opened up the floor to discussion but no questions were raised. On a motion duly made and seconded, the following motion was approved unanimously:

AAC 17-22 APPLICATION OF THE UNIVERSITY OF MASSACHUSETTS LOWELL TO AWARD THE BACHELOR OF SCIENCE IN ENVIRONMENTAL ENGINEERING

MOVED: The Board of Higher Education hereby approves the application of the University of Massachusetts Lowell to award the Bachelor of Science in Environmental Engineering.

Upon graduating the first class for these programs, Massachusetts College of Art and Design shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources, and program effectiveness.

- Authority: Massachusetts General Laws Chapter 15A, §9(b).
- Contact: Winifred M. Hagan, Ed.D. Associate Commissioner for Academic Affairs & Student Success

The following motion was brought forth, seconded and unanimously approved:

F. AAC 17-23 CONSENT AGENDA

MOVED:	The Board of Higher Education approves the following motions on consent agenda:	
	AAC 17-18	Massachusetts College of Liberal Arts Bachelor of Science in Community Health Education
	AAC 17-19	Massachusetts College of Liberal Arts Bachelor of Science in Health Sciences
	AAC 17-20	University of Massachusetts Amherst Bachelor of Science, Master of Science, and Doctor of Philosophy in Biomedical Engineering
	AAC 17-21	University of Massachusetts Dartmouth Doctor of Philosophy in Integrative Biology
	AAC 17-22	
Authority:	Article III, Se	ection 6, By-Laws
Contact:	Winifred M. Hagan, Ed.D., Associate Commissioner for Academic Affairs & Student Success	

Deputy Commissioner Patricia Marshall introduced this next agenda item by reminding Committee Members that they expressed interest in learning more about the Commonwealth Honors Program (CHP) last year. Dr. Marshall gave a brief Power Point presentation on CHP. The presentation included an overview of the program, highlights of student benefits, DHE data collection efforts that commenced in the Fall of 2016 with preliminary outcomes, and an overview of the process for program re-approval.

G. AAC 17-24 Renewal of Middlesex Community College membership in the Commonwealth Honors Program

Deputy Commissioner Marshall presented the next motion, AAC 17-24. Vice Chair Harrity asked if the CHP takes the John and Abigail Adams student scholarship recipients into consideration when recruiting students for the CHP. Dr. Marshall asked representative from the four institutions to comment on local recruitment practices. General Counsel Papanikolaou clarified that eligibility for the Adams scholarship is based on MCAS scores and that recipients do not necessarily meet the criteria for the CHP.

On a motion duly made and seconded, the following motion was approved unanimously:

AAC 17-24 RENEWAL OF MIDDLESEX COMMUNITY COLLEGE MEMBERSHIP IN THE COMMONWEALTH HONORS PROGRAM

- MOVED: The Board of Higher Education accepts the report of the Commonwealth Honors Program Executive Committee and renews the membership of **Middlesex Community College** in the **Commonwealth Honors Program** for six years, effective June 13, 2017.
- Authority: Commonwealth Honors Program Approval Process Guidelines as revised by the Board of Higher Education in November 2006; G.L.c.15A, Section 9.
- Contact: Patricia A. Marshall, Ph.D., Deputy Commissioner for Academic Affairs & Student Success

H. AAC 17-25 Renewal of North Shore Community College membership in the Commonwealth Honors Program

Deputy Commissioner Marshall presented the motion. Board Member Thomas asked how the college plans to increase awareness/the profile of the program. Representatives from North Shore Community College responded that they have created a web presence on their official website and are working with their student advising to help disseminate program information. The College also surveyed students to get their opinion on strategies to increase awareness of the program and they suggested the College purchase sweatshirt with the program's logo. Dr. Thomas asked about the possibility of campus radio advertizing. Representatives from NSCC stated that they do not have a radio station.

On a motion duly made and seconded, the following motion was approved unanimously:

AAC 17-25 RENEWAL OF NORTH SHORE COMMUNITY COLLEGE MEMBERSHIP IN THE COMMONWEALTH HONORS PROGRAM

- **MOVED:** The Board of Higher Education accepts the report of the Commonwealth Honors Program Executive Committee and renews the membership of **North Shore Community College** in the **Commonwealth Honors Program** for six years, effective June 13, 2017.
- Authority: Commonwealth Honors Program Approval Process Guidelines as revised by the Board of Higher Education in November 2006; G.L.c.15A, Section 9.

Contact: Patricia A. Marshall, Ph.D., Deputy Commissioner for Academic Affairs & Student Success

I. AAC 17-26 Renewal of Quinsigamond Community College membership in the Commonwealth Honors Program

Deputy Commissioner Marshall presented the motion. There were no Board questions or discussion. On a motion duly made and seconded, the following motion was approved unanimously:

AAC 16-30 RENEWAL OF QUINSIGAMOND COMMUNITY COLLEGE MEMBERSHIP IN THE COMMONWEALTH HONORS PROGRAM

- **MOVED:** The Board of Higher Education accepts the report of the Commonwealth Honors Program Executive Committee and renews the membership of **Quinsigamond Community College** in the **Commonwealth Honors Program** for six years, effective June 13, 2017.
- Authority: Commonwealth Honors Program Approval Process Guidelines as revised by the Board of Higher Education in November 2006; G.L.c.15A, Section 9.
- Contact: Patricia A. Marshall, Ph.D. Deputy Commissioner for Academic Affairs and Student Success

J. AAC 17-27 Renewal of Salem State University's membership in the Commonwealth Honors Program

Deputy Commissioner Marshall presented the program. Vice Board Chair Harrity asked how many honors courses students must take to complete the program. The response by the representative from the University was 7 courses. Dr. Harrity then asked how many students participate in the program. The representative from SSU responded that there are approximately 300 students in their program. Secretary of Education Designee Tom Moreau asked when Salem State holds the retreat for Honors Students, and the institutional representative stated that they hold the retreat about two weeks before classes start. He also added that the retreat is funded by a generous private donor who has been funding the retreat for the past 20 years. Outcome data show the retreat has a strong positive impact on the students. With the passing of the long-time donor, Salem is seeking new funding streams. Secretary of Education Designee Moreau inquired about increasing the program coordinator's hours. Salem State University's representative responded by saying this past fiscal year was the first year they had a dedicated coordinator so they are in the process of expanding that role.

On a motion duly made and seconded, the following motion was approved unanimously:

AAC 17-27 RENEWAL OF SALEM STATE UNIVERSITY MEMBERSHIP IN THE COMMONWEALTH HONORS PROGRAM

MOVED: The Board of Higher Education accepts the report of the Commonwealth Honors Program Executive Committee and renews the membership of **Salem State**

	University in the Commonwealth Honors Program for six years, effective June 13, 2017.
Authority:	Commonwealth Honors Program Approval Process Guidelines as revised by the Board of Higher Education in November 2006; G.L.c.15A, Section 9.

Contact: Patricia A. Marshall, Ph.D. Deputy Commissioner for Academic Affairs and Student Success

K. AAC 17-28 Approval of Academic Affairs Committee Motions 17-24 through 17-27 on a Consent Agenda

On a motion duly made and seconded, the following motion to place AAC17-24 through AAC 17-27 on a consent agenda was approved unanimously:

AAC 17-28 CONSENT AGENDA

- **MOVED:** The Board of Higher Education approves the following motions to be placed on a consent agenda:
 - AAC 17-24 Renewal of Middlesex Community College membership in the Commonwealth Honors Program
 - AAC 17-25 Renewal of North Shore Community College membership in the Commonwealth Honors Program
 - AAC 17-26 Renewal of Quinsigamond Community College membership in the Commonwealth Honors Program
 - AAC 17-27 Renewal of Salem State University's membership in the Commonwealth Honors Program

Authority: Article III, Section 6, By-Laws

Contact: Patricia A. Marshall, Ph.D. Deputy Commissioner for Academic Affairs and Student Success

L. AAC 17-29 Community College Transfer Principles

Deputy Commissioner Marshall introduced the motion and said the new transfer principles represent an important step forward in our work to create seamless pathways for our transfer students. Without transfer policies, students can be faced with real barriers. The shared principles help reduce the time and cost of completing a college degree and reduce the frustrations of students caught in the middle of inconsistent policies. Dr. Marshall concluded her remarks by passing the meeting over to Chief of Staff and Director of Academic Policy and Student Success, Elena Quiroz-Livanis.

Ms. Quiroz-Livanis stated that the principles seek to do three things: ensure that credit accepted reflects appropriate levels of academic quality and is applicable to students' programs, reduces

unnecessary barriers to protect the colleges' academic quality and integrity, and provides standards for the evaluation of alternative sources of credit. She reminded the AAC that all 15 community colleges have already adopted the principles and that the hope was to codify them through Board policy.

Vice Chair Harrity asked how many programs are now transferable and Ms. Quiroz-Livanis responded by saying that there were six statewide transfer pathways and another 10 would be completed by the end of the summer. Secretary of Education Designee Tom Moreau praised the transfer work and its impact. Commissioner Santiago added that the MassTransfer Pathways project was the foundation for the Commonwealth Commitment.

Dr. Harrity asked if the work group considered including identifying common course numbers and titles as part of the work. Ms. Quiroz-Livanis shared that Massachusetts does have common course numbering through the course equivalency database. While campuses do not need to adopt identical course numbers, prefixes, and titles, the course equivalency database assigns a course number, prefix, and title to each course in order to develop system-wide equivalencies. Secretary of Education Designee Moreau suggested DHE present the transfer work to the state legislature so they could have a better sense of the good work being done in higher education to build academic pathways and seamless transitions for transfer students.

The following motion to adopt the Community College Transfer Principles was duly made, seconded and unanimously approved:

AAC 17-29 STATEWIDE POLICY ON COMMUNITY COLLEGE TRANSFER PRINCIPLES

- **MOVED:** The Board of Higher Education hereby adopts the attached statewide Community College Transfer Principles and calls upon the Commissioner and the Community College Presidents to work together to implement the Community College Transfer Principles by September 2017.
- Authority: Massachusetts General Laws Chapter 15A, § 9(u) and (v)

Contact: Elena Quiroz-Livanis, Chief of Staff and Director of Academic Policy and Student Success

M. AAC 17-30 Amendment to Mass Transfer Policy to include STEM General Education Foundation

Deputy Commissioner Marshall introduced the motion and remarked that, much like the Community College Transfer Principles, the STEM General Education Foundation reflects our emphasis on the experiences of our students as they transfer between institutions. She added that the DHE discovered that the traditional general education foundation was not serving our STEM students as well as it could, so during the spring the DHE took a closer look through the creation of a committee, called Exploring STEM Foundations for Transfer Students led by DHE staff Elena Quiroz-Livanis and Allison Little. The outcome of their work was a model that essentially reduces the number of general education credits completed at the community colleges to allow students to complete more courses in their major prior to transfer. Dr. Marshall then handed over the presentation over to Ms. Quiroz-Livanis.

Ms. Quiroz-Livanis thanked her colleague Allison Little, Executive Director of STEM, for leading this work. She then stated that the STEM Gen Ed Foundation was intended to help better

support community college students interested in STEM. With an alternative Gen Ed Foundation, these students will be able to take more courses within their disciplines and have an experience that is more similar to students who begin at four-year institutions. Ms. Quiroz-Livanis pointed out that this was a collaborative approach to a complex problem and thanked members who served on the Exploring STEM Gen Ed Foundations Committee. She added that the Committee had representation from the community colleges, state universities, and University of Massachusetts campuses. Campuses would work to implement the STEM Gen Ed Foundation during AY17-18 so that students entering into the community colleges fall 2018 could take advantage of the new Foundation.

No questions or discussion followed the presentation, and the motion was unanimously approved.

AAC 17-30 MASSTRANSFER POLICY AMENDMENT

MOVED: In June 2008, the Board accepted the Final Report of the Commonwealth Transfer Advisory Group (CTAG) and adopted the MassTransfer Policy. In furtherance of the CTAG recommendations, the Board directed the Department to continue ongoing efforts to create a seamless system of transfer.

To that end, in Spring 2017 the Commissioner convened the "Exploring STEM Foundations for Transfer Students Committee" (the Committee), a group of campus stakeholders charged with exploring and making recommendations to address the unique challenges faced by STEM students seeking to transfer from a community college to a state university or a University of Massachusetts campus. As outlined in the attached background document, the Committee has completed its work and is recommending amendments to the MassTransfer Policy to improve its effectiveness.

The Board thanks the Committee for its work and, consistent with the Committee's recommendations, hereby amends the MassTransfer Policy, as follows:

- The number of General Education (Gen Ed) Foundation courses will be reduced from 34 credits to 28 credits for students in A2B STEM pathways.
- 2. The reduction will take place in two categories: behavioral and social sciences and humanities and fine arts. Community college students enrolled in A2B STEM pathways will be required to complete at least six credits in each of these categories.
- 3. The receiving institutions can require up to an additional four courses in order to satisfy their general education requirements.

The Board directs the Commissioner to work with the campuses to implement these policy amendments by the Fall of 2018, to continue ongoing efforts to create a seamless system of transfer, and to periodically report back to the BHE on the Department's progress in this regard.

Authority: Massachusetts General Laws Chapter 15A, § 9(u) and (v)

Contact: Allison Little, Executive Director of STEM

Elena Quiroz-Livanis, Chief of Staff and Director of Academic Policy and Student Success

VI. PRESENTATIONS

A. Revised Program Approval for Public Institutions

The presentation of the public comment on the "Revised Program Approval for Public Institutions" was tabled until the fall to allow Committee Chair Nancy Hoffman to preside over the conversation, while giving Board Members the opportunity to fully review and assimilate the feedback received.

B. Developing Multiple Math Pathways

Deputy Commissioner Marshall introduced the presentation by remarking that the work to develop multiple math pathways is aligned with the Department's efforts to reduce remediation. She added that we know students who are placed in remedial courses are less likely to finish their degrees. Thus the DHE has been working with Complete College America and the University of Texas at Austin Dana Center to develop a multi-pronged approach to reducing the number of students who end up in developmental math. To advance the work, the DHE created the Task Force on Transforming Developmental Math Education. Chief of Staff and Director of Academic Policy and Student Success, Elena Quiroz-Livanis, leads this work. Dr. Marshall turned the meeting over to Ms. Quiroz-Livanis to present the Department's work in developing multiple math pathways.

Ms. Quiroz-Livanis said that there were three major elements to the multi-pronged approach: 1) assessing students properly for credit-bearing courses by utilizing multiple measures, 2) ensuring students are completing the appropriate math for their major and, 3) giving students who require remediation access to co-requisite courses in math, reading, and writing. Ms. Quiroz-Livanis said that that the DHE had been focused on the first approach after the Task Force report had been accepted and was now moving forward with the other two approaches.

To that end, a Math Pathways subcommittee was formed and chaired by Linda Dart-Kathios, Middlesex Community College, and Maura Murray, Salem State University. She thanked Ms. Dart-Kathios and Dr. Murray for their extensive contributions to this work as well as the members of the subcommittee. The subcommittee met over the course of the spring and developed a series of recommendations intended to advance the work. A list of some of the recommendations appears below:

- Students who require remediation should have the opportunity to complete a collegelevel math course within one year of enrollment;
- Campuses should adopt two majors pathways: STEM and Non-STEM;
- Equivalencies should be based on content and outcomes, not pre-requisites;
- DHE should develop a flag for courses that satisfy a campuses' quantitative reasoning requirement.

Ms. Quiroz-Livanis concluded the presentation by outlining next steps which included: drafting a subcommittee report and working with the campuses and Dana Center to refine and finish the report by early Fall, co-hosting two conferences with the Dana Center, one in mid-Fall to begin

conversations about implementation and one in the Spring to begin enhancing alignment with high schools.

Secretary of Education Designee Moreau asked about on and off ramps with the pathways. Ms. Quiroz-Livanis replied saying the need for remediation often stopped students from completing their degrees, citing that they were often in courses that did not properly prepare them for their discipline. Math pathways ensure that students are learning the necessary skills to be successful in their majors and prevents them from taking unnecessary courses, both developmental and college-level.

Board Member Thomas suggested adding a recommendation that spoke more specifically to the need to align pathways with K-12. Ms. Quiroz-Livanis thanked Board member Thomas for the suggestion and added that the Committee had one member was from the Department of Elementary and Secondary Education and two high school math teachers. This was intended to help facilitate future conversations around the need to strengthen curricular alignment between high schools and postsecondary institutions. Board Member Thomas stressed the need for greater alignment and said that there are an unacceptable number of urban students who can only afford community colleges so remedial courses often derail them. Society needs to get serious about addressing this need or the workforce and country will suffer. Commissioner Santiago voiced his agreement with this concern and highlighted programs, like 100 Males to College, that address the need.

Board Member Reimers highlighted the lack of deeper engagement by the private higher education institutions for low-income and minority students. Vice Chair Harrity added that in addition to the system-wide efforts, there were several regional examples of efforts intended to reduce the need for remediation.

VII. OTHER BUSINESS

No other business was raised.

VIII. ADJOURNMENT

Vice Chair Harrity adjourned the meeting at 12:05 p.m.