



April 1, 2024

Sanjay Rai, PhD
Acting Secretary of Higher Education
Maryland Higher Education Commission
6 N. Liberty St.
Baltimore, MD 21201

Dear Dr. Rai,

Frederick Community College (FCC) is requesting MHEC approval of the following new proposed stand-alone certificate program: **Tactical Strength and Conditioning**

The proposed certificate program is designed to prepare students to further their careers in the military, fire and rescue, law enforcement, protective services, and other emergency personnel as a Tactical Strength and Conditioning Facilitator. Having individuals trained to be specialists will better support these populations to reduce injury, prevent and treat life-style related diseases, increase job performance, and reduce health care costs for local, state, and federal agencies. This program will prepare students to become credentialed with nationally recognized organizations and successfully enter the workforce based on the needs of local, regional, and global communities.

Thank you for your consideration of this proposal. If you have any questions regarding this request for approval, please do not hesitate to call me at 301-846-2491.

Payment in the amount of **\$850** has been transmitted electronically in accordance with the MHEC fee schedule.

Sincerely,

Dr. Anne P. Davis
Provost and Vice President for Teaching, Learning and Student Success
adavis@frederick.edu

pc: Erin Peterson, FCC (epeterson@frederick.edu)
Dr. Sandy McCombe Waller, FCC (smccombewaller@frederick.edu)



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**Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program**

Institution Submitting Proposal	Frederick Community College
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Each action below requires a separate proposal and cover sheet.

- | | |
|--|---|
| <input type="radio"/> New Academic Program | <input type="radio"/> Substantial Change to a Degree Program |
| <input type="radio"/> New Area of Concentration | <input type="radio"/> Substantial Change to an Area of Concentration |
| <input type="radio"/> New Degree Level Approval | <input type="radio"/> Substantial Change to a Certificate Program |
| <input checked="" type="radio"/> New Stand-Alone Certificate | <input type="radio"/> Cooperative Degree Program |
| <input type="radio"/> Off Campus Program | <input type="radio"/> Offer Program at Regional Higher Education Center |

Payment <input checked="" type="radio"/> Yes	Payment <input type="radio"/> R*STARS #	Payment \$850	Date
Submitted: <input type="radio"/> No	Type: <input checked="" type="radio"/> Check # 198705	Amount:	Submitted: 3/29/24

Department Proposing Program	Health Science
Degree Level and Degree Type	Lower Division Certificate
Title of Proposed Program	Tactical Strength and Conditioning
Total Number of Credits	24
Suggested Codes	HEGIS: 5299.06 CIP: 31.0501
Program Modality	<input checked="" type="radio"/> On-campus <input type="radio"/> Distance Education (fully online) <input type="radio"/> Both
Program Resources	<input checked="" type="radio"/> Using Existing Resources <input type="radio"/> Requiring New Resources
Projected Implementation Date <small>(must be 60 days from proposal submission as per COMAR 13B.02.03.03)</small>	<input checked="" type="radio"/> Fall <input type="radio"/> Spring <input type="radio"/> Summer Year: 2024
Provide Link to Most Recent Academic Catalog	URL: https://frederick-public.courseleaf.com/

Preferred Contact for this Proposal	Name: Erin Peterson
	Title: Assistant Dean, Curriculum Systems and Scheduling
	Phone: (301) 846-2651
	Email: epeterson@frederick.edu

President/Chief Executive	Type Name: Dr. Annesa Cheek
	Signature: Date: 3/25/24
	Date of Approval/Endorsement by Governing Board: 03/20/2024

Revised 1/2021

**MHEC Academic Program Proposal
Frederick Community College
Tactical Strength and Conditioning Certificate
New Stand-Alone Certificate**

A. Centrality to Institutional Mission and Planning Priorities:

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.

The proposed Tactical Strength and Conditioning certificate program is designed to prepare students to further their careers in the military, fire and rescue, law enforcement, protective services, and other emergency personnel as a Tactical Strength and Conditioning Facilitator. Having individuals trained to be specialists will better support these populations to reduce injury, prevent and treat lifestyle related diseases, increase job performance, and reduce health care costs for local, state, and federal agencies. This new program supports the mission of Frederick Community College through preparation of students to become credentialed with nationally recognized organizations and successfully enter the workforce based on needs of local, regional, and global communities.

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

This proposed program directly supports the mission of Frederick Community College by helping students meet their career goals and aligns with the following FCC Forward Strategic Plan 2020-2025.

- 1) Enhance student success and completion through collaborative and effective academic support by creating a more succinct academic pathway
- 2) Increase access, affordability, and retention through planned academic advising and degree pathways.
- 3) Promote excellence in the design and delivery of curriculum, and support of student learning.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.)

The proposed new Tactical Strength and Condition Certificate program will be funded by tuition and fees collected by students enrolled within the program. FCC currently has sufficient full-time and part-time faculty and administrative staff to meet the needs of the program, no new hiring will be necessary. The Health and Exercise Sciences program recently received \$149,213 in Perkins grant funding to update lab equipment to current state of the art instrumentation and course development costs. This program will utilize the same labs.

4. Provide a description of the institution's a commitment to:

a) ongoing administrative, financial, and technical support of the proposed program

The current Program Manager for Health and Exercise reports to the Associate Vice President for Teaching, Learning and Student Success/Dean of Health, Business, Technology, and Science. The Program Manager leads the development of specific curriculum and courses, procurement of programmatic equipment and supplies, and will actively contribute to the ongoing administrative, financial, and technical support of the proposed programs.

b) continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

FCC is committed to the success of all students and anticipates the continuation of this proposed program beyond the time needed for students to complete the program. College policy allows up to a five-year teach-out period. The College offers a variety of support programs including tutoring, academic success, program specific advisors, and faculty advisors.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan (effective December 2022, must reference new plan & specific outcomes):

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:

- a) The need for the advancement and evolution of knowledge**
- b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education**
- c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs**

The need for advancement and evolution of knowledge in this field and the contribution to societal needs is evidenced by the heightened focus on public health, preventive care, and holistic well-being of workers, families, and communities that has emerged post-pandemic.

The impetus for development of this certificate program stems from outreach to Mid-Atlantic Center for Emergency Management & Public Safety (MACEM & PS) from the Maryland State Police requesting advanced training for their academy instructors in tactical strength and conditioning to help reduce injury risk, improve performance, and improve the attrition rate in the training academy. As part of a subsequent environmental scanning to assess regional workforce needs in this area, an opportunity was identified for providing advanced training in strength and conditioning for military, fire and rescue, law enforcement, protective services, and other emergency personnel to reduce injury risk and limit the onset of lifestyle-related disease

across the career span.

Due to the high stress, mental and physical demands, and irregular work schedules of military, fire and rescue, law enforcement, protective services, and other emergency personnel, workers are often at risk for lifestyle-related diseases, such as heart disease and stroke, as well as personal injury. Agencies are placing a heightened focus on wellness and conditioning to prevent these lifestyle-related diseases and reduce workplace injuries and thus have a need for specially trained tactical fitness professionals who can play a critical role in preventative based care and behavior modification as well as tactical training beyond traditional fitness training.

The proposed program will provide state of the art and evidence-based content that aligns with the National Strength and Conditioning Association Tactical Strength and Conditioning Facilitator Certification, the gold standard for training tactical populations.

2. Provide evidence that the perceived need is consistent with the [2022 State Plan](#) (be sure to relate at least one priority)

The Maryland State Plan for Postsecondary Education outlines the below goals and strategies:

Access: Ensure equitable access to affordable and quality postsecondary education for all Maryland residents.

Success: Promote and implement practices and policies that will ensure student success.

Innovation: Foster innovation in all aspects of Maryland higher education to improve access and student success.

Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland.

The proposed new program will create better prepared and credentialed graduates which will allow stronger employability with local and regional fitness centers, healthcare providers, and corporate wellness. These updates improve workforce development and increase workforce readiness.

By increasing the number of prepared graduates in the fitness industry and healthcare, we will contribute to meeting the needs for qualified fitness professionals.

These curricula align with Committee on Accreditation for Exercise Sciences (CoAES) and Council on Education for Public Health (CEPH) standards and guidelines which ensure high-quality educational content.

Priority 6: Improve systems that prevent timely completion of an academic program

The proposed program creates a clear pathway to graduation with specific course requirements in sequential order.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (ex: *mid-level management*) for graduates of the proposed program.

Employment opportunities in tactical strength and conditioning include police and fire academy instructors, health and wellness or worksite fitness coordinators, physical training coordinators, or corporate contractors with agencies. These positions are rarely advertised where agencies hire or transfer positions within agency. Law enforcement, Fire, Military, and EMS outsource their training for these positions and outreach to Maryland State Police, Washington DC Fire and EMS, Frederick County Sheriff, Howard County Police, Montgomery County Police, Frederick County Fire, National Fire Academy, US Treasury Department, Secret Service Academy, and Bureau of Alcohol, Tobacco, and Firearms SWAT Academy indicate high interest in academic training at FCC where individuals will receive college credit and certifications.

Additionally, the healthcare industry is a rapidly growing aspect of need for fitness professionals as the emergence of physician referred exercise programs continues, this is true in tactical populations. Since individuals completing this program will already be in a tactical career, their level of entry is dependent upon current rank and years of service.

2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

As stated above, the impetus for development of this certificate program stems from outreach to Mid-Atlantic Center for Emergency Management & Public Safety (MACEM & PS) at FCC from the Maryland State Police requesting advanced training for their academy instructors in tactical strength and conditioning to help reduce injury risk, improve performance, and improve the attrition rate in the training academy.

The U.S. Bureau of Labor Statistics projects this field to grow “much faster than average” for all occupations between 2021 and 2031, predicted to be 19%. As of 2021 there were 306,400 jobs in the field, and this is predicted to increase by 57,800 jobs by 2031. In 2018 there were 38,477 health/fitness clubs with 62.3 million members for a total U.S. fitness industry revenue of \$32.3 Billion. The District of Columbia ranks 2nd nationally for annual mean wage for Exercise Trainers. (<https://www.bls.gov/ooh/personal-care-and-service/fitness-trainers-and-instructors.htm>)

3. Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

FCC’s close proximity to the Baltimore-Washington metropolitan area, where the location quotient is in the top 5 nationally, is a dense concentration of fitness industry jobs (US Bureau of Labor and Statistics, 2021). This will be a consistent and growing demand over the next five years. Location quotient, as defined by the Bureau of Economic Analysis, is an analytical

statistic that measures a region’s industrial specialization relative to a larger geographical unit, usually the nation. FCC is also centrally located to the military, fire and rescue, law enforcement, protective services, and other emergency personnel at local, county, state, and federal levels.

4. Provide data showing the current and projected supply of prospective graduates.

Given interest expressed by local and regional agencies, we anticipate 12 students enrolled in the initial cohort with an additional 10% each year until cohorts of 20 are achieved. We also have a goal of 100% certification rate upon completion of the program and 100% employment rate. These estimates come from interest in local, state, and federal agencies that have expressed needs for qualified tactical strength and conditioning professionals including Maryland State Police, Washington DC Fire and EMS, Frederick County Sheriff, Howard County Police, Montgomery County Police, Frederick County Fire, National Fire Academy, US Treasury Department, Secret Service Academy, and Bureau of Alcohol, Tobacco, and Firearms SWAT Academy.

Additionally, with only two other college based academic programs nationally that focus on tactical strength and conditioning, and the geographical location of FCC we have reasonable access to over 75 agencies at the local, state, and federal level.

Current and Projected Supply of Prospective Graduates					
	Year 1 (AY 2024-25)	Year 2 (AY 2025-26)	Year 3 (AY 2026-27)	Year 4 (AY 2027-28)	Year 5 (AY 2028-29)
Proposed Enrollment	12	15	18	20	20
Prospective Graduates*	10	12	14	16	16
*assumes 80% completion rate					

This data will be collected by the Health and Exercise Science program manager and be reported to the Program Advisory Committee annually, as well as to the Health, Business, Technology, and Science Dean, and Faculty and Staff.

This 24-credit program will be completed in one year with 9 credits in Fall, 9 credits in Spring, and 6 credits in Summer with a focus on working professionals. Fall will require 75 minutes per week on campus in EXSC 227 with other courses being offered online. Spring will require 150 minutes on campus per week with TSAC 231 and EXSC 240. Summer courses will be offered completely online.

D. Reasonableness of Program Duplication:

- 1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.**

No similar program exists in the state of Maryland and only 2 exist nationally – Georgia Southern University Tactical Athlete Certificate and Oklahoma State University Tactical Fitness and Nutrition program.

- 2. Provide justification for the proposed program.**

The proposed certificate in Tactical Strength and Conditioning will meet the workforce need for advanced training in strength and conditioning for military, fire and rescue, law enforcement, protective services, and other emergency personnel. Providing well-trained professionals within these organizations can help reduce lifestyle-related diseases and workplace injuries and improve preventative-based care and behavior modification.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

- 1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.**

The proposed new program would have minimal impact on programs at HBIs. There may be a slight positive effect, as the improved skill and quantity of FCC program graduates might, in turn, increase the number of students available to transfer to similar programs at HBIs. However, only one 4-year exercise science program at a Maryland HBI (University of Maryland - Eastern Shore) exists, thus the impact will be minimal.

F. Relevance to the identity of Historically Black Institutions (HBIs)

- 1. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.**

Given the aforementioned lack of 4-year HBI programs in this area, the level of interaction between this proposal and any elements of Maryland 4-year HBIs should be minimal and, as 4-year institutions, the modification of this FCC 2-year program should in no way preclude those schools from developing similar programs in their own style. Indeed, the establishment of such programs would be welcome, as it would permit additional transfer opportunities for FCC students, particularly those of color.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

- 1. Describe how the proposed program was established, and also describe the faculty who will oversee the program.**

The Health and Exercise Sciences program updates were proposed through a Perkins grant for the 2022/2023 academic year. The proposed work was to completely overhaul the Health and Exercise Science program at FCC. These updates include the curriculum updates to fit within CoAES accreditation guidelines and build two new academic labs – cardiometabolic and strength labs – with state of the art, modern equipment. The program also realigned affiliation with leading academic and credentialing organizations to the American College of Sports Medicine (ACSM) and the National Strength and Conditioning Association (NSCA). This program will focus in parallel to the Fitness/Personal Trainer Certificate and utilize the same labs space.

The curriculum development and lab design were completed by Noah Gibson, Program Manager for Health and Exercise Sciences and will continue program operations and accreditation work. Mr. Gibson has been teaching in the Health and Exercise Sciences for 15 years, is a published author on Exercise Oncology focusing on the effects of exercise on cardiovascular health with cancer treatments, and he is certified by the NSCA as a Certified Strength and Conditioning Specialist and USA Weightlifting Sports Performance Coach, both since 2007.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

The curriculum will align with the knowledge and skills outlined in the Tactical Strength and Conditioning Facilitator Certification.

Program Learning Outcomes:

1. Describe the role of the strength and conditioning professional in the prevention and care of injury and lifestyle related disease in tactical populations.
2. Define and conduct a needs analysis to initiate appropriate physical testing and assessment strategies in the tactical environment.
3. Describe specific physiological challenges faced in various tactical populations.
4. Identify occupational and lifestyle factors that affect fitness, exercise adherence, sleep, nutrition, and overall health of the tactical professional.
5. Apply strategies to promote behavior modification and lifestyle related wellness.

This curriculum will prepare students to pass the gold standard industry credentials from the National Strength and Conditioning Association (NSCA). These certifications demonstrate that the student passing the exam has all skills necessary to be successful in the fitness industry. Furthermore, students will have the opportunity to study for and take specialized fitness certifications.

3. Explain how the institution will:

- a) **provide for assessment of student achievement of learning outcomes in the program**

The College assesses the effectiveness of its academic programs using a well-structured five-year review process. The process consists of an analysis of program mission, goals, and objectives, assessment of the program according to internal and external data, assessment of the curriculum, assessment of student learning outcomes, assessment of resources and viability, a summary of key findings and recommendations, a review by two external reviewers, and a submission of a formal action plan. The action plan then serves as the foundation for improvements made to the program over the next four years.

b) document student achievement of learning outcomes in the program

Programs collect data from individual courses to record student achievement of learning outcomes based on the established cycles, relevant to the measures identifiable above for each of the learning objectives and program goals. The data collected are evaluated to determine the level of student achievement that has occurred based on the learning outcomes. Data will be analyzed, and updates will be made as deemed necessary.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements

Tactical Strength and Conditioning Certificate Program Requirements:

Departmental Requirements

Select one of the following:		3
BSCI 107	Study of the Human Body	
BSCI 117	Human Biology	
BSCI 201	Anatomy and Physiology I	
EXSC 180	Care and Prevention of Athletic Injuries	3
EXSC 227	Principles of Resistance Training Technique and Program Design (Spring)	3
EXSC 240	Fitness Assessment and Programming (Fall)	3
NUTR 102	Nutrition in a Changing World	3
or NUTR 200	Principles and Application of Nutrition	
TSAC 231	Tactical Fitness Instruction and Application	3
TSAC 241	Psychological Resilience in Tactical Populations	3
TSAC 251	Essentials of Tactical Strength and Conditioning	3
Total Credits		24

Course Descriptions:

BSCI 107 - Study of the Human Body (3)

Gen Ed Science

Prerequisites: ENGL 70 or ENGL 75 or (ESOL 72 and ESOL 73) or ESOL 100 AND [(Prerequisite: MATH 101A or MATH 120A or MATH 145S) OR (Prerequisite or Co-requisite: MATH 101 or higher credit level (non-A or S) MATH course) OR (appropriate score on mathematics placement test)] *MATH 101A, MATH 120A, MATH 145S can serve as prerequisites only, not co-requisites*

(formerly BI 117)

Examines the human body and its relationships to health, disease, and the environment. Covers basic concepts of anatomy, physiology, genetics, cancer, disease, immunology, aging, human evolution, and/or other related topics. For the non-science major. Students cannot receive credit for both BSCI 117 and BSCI 107.

Or

BSCI 117 - Human Biology (4)

Gen Ed Science

Prerequisites: ENGL 70 or ENGL 75 or (ESOL 72 and ESOL 73) or ESOL 100 AND [(Prerequisite: MATH 101A or MATH 120A or MATH 145S) OR (Prerequisite or Co-requisite: MATH 101 or higher credit level (non-A or S) MATH course) OR (appropriate score on mathematics placement test)] *MATH 101A, MATH 120A, MATH 145S can serve as prerequisites only, not co-requisites*

(formerly BI 107)

Presents a study of the human body and its relationships to health, disease, and the environment. Covers basic concepts of anatomy, physiology, genetics, cancer, disease, immunology, aging, human evolution, and/or related topics. For the non-science major. Meets the requirement for a general education science lab course. Students cannot receive credit for both BSCI 107 and BSCI 117.

Or

BSCI 201 - Anatomy and Physiology I (4)

Gen Ed Science

Prerequisites: ENGL 70 or ENGL 75 or (ESOL 72 and ESOL 73) or ESOL 100 AND [(Prerequisite: MATH 120A or MATH 145S) OR (Prerequisite or Co-requisite: MATH 120 or higher credit level (non-A or S) MATH course) OR (appropriate score on mathematics placement test)] AND (BSCI 55 or BSCI 150 or BI101 or BSCI 223 or BI 120 or CHEM 101) *MATH 120A, MATH 145S can serve as prerequisites only, not co-requisites*

(formerly BI 103)

Presents a study of physiology according to the body systems approach. Emphasizes relationships between form and function at both the microscopic and gross levels of organization. Includes basic anatomical terminology, concepts of cell biology, histology, integumentary

system, skeletal system, muscular system, nervous system, special senses, and endocrine system. BSCI 201 is the first course in a two-semester sequence and is intended for STEM (science, technology, engineering, and math) majors and pre-allied Health majors. Meets the requirement for a general education science lab course.

EXSC 180 - Care and Prevention of Athletic Injuries (3)

Prerequisite or Co-requisite: ENGL 75 or ESOL 100

(formerly PHED 180)

Introduces the basic principles for care and prevention of athletic injuries. Emphasis will be placed on scientific applications for recognition, diagnosis, classification, treatment and rehabilitation of musculoskeletal injuries.

EXSC 227 - Principles of Resistance Training Technique and Program Design (3)

Prerequisite: EXSC 170 or department consent; Prerequisite or Co-requisite: BSCI 117 or BSCI 201

Examines resistance training techniques and program design. Emphasizes developing skills, instructional techniques, theoretical knowledge of anatomical and biomechanical principles, and practical application of effective program design, progression, and periodization.

EXSC 240 - Fitness Assessment and Programming (3)

Prerequisites: (BSCI 201 or BI 103 or BSCI 117 or BI 107) and EXSC 170

(formerly PHED 240)

Presents theoretical knowledge and practical assessment techniques for cardiorespiratory fitness, body composition and metabolic testing, interpretation of results, and development of effective individualized cardiorespiratory exercise programs.

NUTR 102 - Nutrition in a Changing World (3)

Gen Ed Wellness

Prerequisites: ENGL 70 or ENGL 75 or (ESOL 72 and ESOL 73) or ESOL 100 OR Co-requisite: ENGL 75 or ESOL 100

(formerly HE 102)

Presents the basic principles of human nutrition with emphasis on the nutrients and factors that affect their use in the human body.

Or

NUTR 200 - Principles and Application of Nutrition (3)

Prerequisite: BSCI 100 or BSCI 150 or BI 101 or BSCI 201 or BI 103 or BSCI 107 or BI 117
(formerly HE 200)

Introduces the principles of nutrition for the maintenance of good health throughout the life-cycle. Applications of nutritional principles are presented via the connection between diet and the prevention and treatment of disease. Investigates the socioeconomic, ecological and political factors that shape national nutritional policy and ultimately affect personal health.

TSAC 231 - Tactical Fitness Instruction and Application (3)

Prerequisite or Co-requisite: EXSC 227

Applies scientific knowledge to physically train the military, fire and rescue, law enforcement, protective services, and other emergency personnel to improve performance, promote wellness, and decrease injury risk across the career. Emphasis will be on the application of strength and conditioning techniques in small to large group settings, occupational and physiological issues related to tactical populations, wellness interventions, exercise considerations across the career, exercise science topics, and program organization and administration.

TSAC 241 - Psychological Resilience in Tactical Populations (3)

Prerequisites or Co-requisites: (BSCI 107 or BSCI 117 or BSCI 201) and TSAC 231

Examines the role and repercussions of stress, and the process by which individuals cope and can build resilience in military, fire and rescue, law enforcement, protective services, and other emergency personnel. There will be an in-depth exploration and understanding of psychological and physiological reactions to stress and negative life events. This course will address concepts, theories, and empirical research related to resiliency factors, coping, and well-being in tactical populations.

TSAC 251 - Essentials of Tactical Strength and Conditioning (3)

Prerequisites: TSAC 231, EXSC 227, and EXSC 240

Explores the field of tactical strength and conditioning. The course will focus on tactical strength and conditioning professionals and their role and responsibilities working within tactical organizations. Emphasis will be placed on understanding human performance including testing and evaluation, exercise technique, program design, basic nutrition, coaching and communication skills, and human performance training in different tactical settings. This course prepares students to take the National Strength and Conditioning Association's Tactical Strength and Conditioning Facilitator Exam.

5. Discuss how general education requirements will be met, if applicable.

Since this is a certificate program, it does not need to include general education courses, although some of the courses required in this certificate program are general education courses that can be applied toward the proposed Health Sciences A.S. degree for those certificate students wishing to pursue a degree.

6. Identify any specialized accreditation or graduate certification requirements for this program and its students.

The gold standard credential can be obtained at the culmination of the program. Material will be directly presented to pass these. Core material for specialized credentials will be taught and can be obtained. The National Strength and Conditioning Association's Tactical Strength and Conditioning Facilitator is the only recognized credential focusing on tactical populations.

7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.

N/A

- 8. Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

Communication at the program and institutional level is accomplished through publication on the college website, brochures, semester schedules, and the College academic catalog. The College will provide resources to students in the program that other programs offer at the College to provide clear, complete, and precise information. Information regarding curriculum, courses, degree requirements, including suggested sequence pathways, program brochures and handbook, admission information, financial aid resources, and cost and payment policies are available on the college websites.

Information related to faculty/student interactions, assumption of technology competence and skills, technical equipment requirements, and the learning management system can be found under the Resources tab on the college website.

All students will receive an assigned advisor based out of the Office of Career and Academic Planning Services. This advisor will work closely with the Health and Exercise Science program manager to ensure that all information, including information related to transfer is up to date and communicated to the student.

Not only is it essential that the College measure student achievement, but it must also provide students with clear information on how they are expected to achieve each core learning outcome. This is accomplished at the course level through information communicated in the syllabi.

- 9. Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.**

The FCC website is managed by the College marketing department and the academic catalog is managed by the Assistant Dean, Curriculum Systems and Scheduling. Updates of essential program and course information are made in collaboration with all College departments to include Teaching, Learning and Student Success, Student Affairs, Financial Aid, Registration and Records, Student Development, and Enrollment Services. This process ensures the materials available are clear and accurate and contain pertinent information regarding all program offerings and services available. Upon confirmation of a new Tactical Strength and Conditioning program, the Institutional Effectiveness Department at FCC would activate an integrated marketing plan.

H. Adequacy of Articulation (effective December 2022, must include either a program-specific articulation agreement or a justification for why an articulation agreement is not feasible

or applicable; the articulation agreement must be specific to the proposed academic program and must be with another public institution in Maryland.)

1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.

There are no articulation agreements for the certificate program since it is a career program and not a transfer program.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faculty member will teach (in this program).

The proposed Tactical Strength and Conditioning Certificate will require oversight by one full-time faculty who also serves as the program manager. The program manager has been teaching in the Health and Exercise Sciences for 15 years, is a published author on Exercise Oncology focusing on the effects of exercise on cardiovascular health with cancer treatments, and he is certified by the NSCA as a Certified Strength and Conditioning Specialist and USA Weightlifting Sports Performance Coach, both since 2007.

Further, all other program faculty have appropriate degrees, applicable certifications, and practical experience in the field along with substantial teaching experience.

Faculty Name	Appointment Type	Terminal Degree Title and Field	Academic Rank/Title	Status	Courses to be Taught
Noah Gibson	Faculty	MS in Applied Health Physiology 48 Doctoral Credits in Exercise Physiology	Assistant Professor/Program Manager	Full-time	Able to teach all Health and Exercise Courses – EXSC 240 and 227
Jan Redmond	Adjunct	PhD in Exercise Physiology	Level 2 Adjunct	Part-Time	TSAC 251

Brian Taylor	Adjunct	MS in Exercise Science MS in Security Management	Level 1 Adjunct	Part-Time	TSAC 231
Rachel Attya	Adjunct	PhD in Clinical Psychology	Level 1 Adjunct	Part-Time	TSAC 241
Isaac Colbert	Adjunct	MS in Health Promotion and Sport Administration	Level 3 Adjunct	Part-Time	EXSC 180

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:

- a) Pedagogy that meets the needs of the students**
- b) The learning management system**
- c) Evidenced-based best practices for distance education, if distance education is offered.**

Through the Center for Teaching and Learning (CTL) and the Diversity, Equity, and Inclusion office, Teaching, Learning and Student Success offers adjunct and full-time faculty a responsive, innovative system of professional development in teaching and learning that reflects the characteristics and needs of FCC students. Blackboard is used as the College's learning management system.

Pedagogy and evidence-based practices programming includes:

- New full-time faculty orientation, a yearlong series focused on introducing new full-time faculty and learning administrators to best practices in teaching and learning, and the policies, procedures, and practices of the College
- New adjunct faculty orientation, adjunct faculty professional development evenings, and for adjuncts only monthly themed gatherings
- Professional development services, provides teaching and learning resources, consultations, facilitates conference funding approval, houses Alternative Credit Approval Team (ACAT), and supports the organization of Academic Affairs Faculty and Leadership Retreats.
- Teaching and Learning Hours, four tracks of professional development sessions designed to inspire faculty to engage student minds and support their success through active learning, innovation, and scholarship, including Culturally Responsive Teaching and

Cultural and Global Competence Development; Scholarship of Teaching and Learning; Technology, Teaching and Innovation; and Faculty Leadership and Academic Management.

- CTL Faculty Scholars Program, designed to support the professional development needs of full-time and adjunct faculty by providing faculty subject matter experts the opportunity to create and deliver Teaching and Learning Hours in support of professional development priorities.
- Academic department chairs, program managers, and fellow faculty provide discipline specific training and professional development for adjunct and full-time faculty such as lab safety, clinical orientation, outcomes assessment, curricular requirements, and equipment use.
- Further, full-time faculty are supported in their pathways to promotion through the Faculty Appointment and Promotion Process. The myriad pathways to promotion include alternative credit options which are approved by ACAT.
- Finally, in collaboration with Human Resources Employee Development Advisory Team (EDAT) and other college stakeholders, Academic Affairs ensures that development of faculty and staff by supporting the orientation of new employees; the ongoing training of faculty and staff on college policies and procedures, business practices, wellness, and hiring.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12).

- 1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program. *If the program is to be implemented within existing institutional resources, include a supportive statement by the President for library resources to meet the program's needs.***

No new holdings will be needed for this program update. The Library subscribes to database content that would support this program and has a robust collection of print and ebooks. Collection development guidelines are focused on supporting the curriculum of the College, and resources are allotted to fulfill faculty and program requests to update materials as needed.

The President supports the adequacy of library resources to meet this program's needs.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

- 1. Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences. *If the program is to be implemented within existing institutional resources, include a supportive statement by the President for adequate equipment and facilities to meet the program's needs.***

The program received a Perkins innovations grant to equip lab facilities and create two new labs – a cardiometabolic lab and strength lab. This includes funds to purchase a metabolic cart, BODPOD air displacement plethysmograph, 8 cycle ergometers, and two clinical grade treadmills. Additionally, the program received funding to purchase an electrocardiograph stress testing console, and all necessary equipment for a new strength lab.

The President supports the adequacy of equipment and facilities to meet this program’s needs.

- 2. Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:**
 - a) An institutional electronic mailing system, and**
 - b) A learning management system that provides the necessary technological support for distance education**

While the proposed program is not distance education/fully online, some courses in the program may be offered online and/or have a companion Blackboard course site. At the time of registration, all students will sign up for their myFCC account to gain access to the myFCC Student Portal. All students make a Required Orientation, Advising and Registration (R.O.A.R.) appointment. At this time, they are issued an FCC email address for electronic mail communication. During their respective orientations and regularly thereafter, students and faculty are strongly encouraged to sign up to the College emergency and closing alert system “FCC Alerts”. In the event of a campus emergency or weather-related school closing, FCC Alert subscribers receive text, phone calls, and/or email notifications.

FCC utilizes Blackboard as its Learning Management System (LMS) and provides IT assistance to students for technological support. Blackboard LMS allows faculty to administer and teach courses online by providing students with access to course materials and the ability to interact with their peers/faculty through the LMS. Blackboard Collaborate is the primary web conferencing platform for instruction. Zoom is also available for programs with specific requirements that cannot be met through Blackboard Collaborate.

The student portal has easy access links to the LMS Online Learning tool, Microsoft Outlook Email, PeopleSoft Registration and Student Account, IT Help Desk, and more.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

- 1. Complete [Table 1: Resources and Narrative Rationale](#). Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.**

TABLE 1: PROGRAM RESOURCES					
Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	\$0	\$0	\$0	\$0	\$0
2. Tuition/Fee Revenue (c + g below)	\$45,601.92	\$57,002.40	\$68,402.88	\$76,003.20	\$76,003.20
a. Number of F/T Students	12	15	18	20	20
b. Annual Tuition/Fee Rate	\$3,800.16	\$3,800.16	\$3,800.16	\$3,800.16	\$3,800.16
c. Total F/T Revenue (a x b)	\$45,601.92	\$57,002.40	\$68,402.88	\$76,003.20	\$76,003.20
d. Number of P/T Students	0	0	0	0	0
e. Credit Hour Rate	0	0	0	0	0
f. Annual Credit Hour Rate	0	0	0	0	0
g. Total P/T Revenue (d x e x f)	0	0	0	0	0
3. Grants, Contracts & Other External Sources	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
4. Other Sources	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL (Add 1 – 4)	\$70,601.92	\$82,002.40	\$93,402.88	\$101,003.20	\$101,003.20

RESOURCES NARRATIVE RATIONALE

Reallocated Funds

No funds will need to be reallocated.

Staffing (Administrative, Faculty, and Support)

Currently the program has in place 1 fulltime faculty member and 3 adjuncts who will be used to teach courses within this program no additional funding will be required. We have administrative and support staff who are already assigned to work and support this program.

Tuition and Fee Revenue

The College is expecting enrollment in the Health & Exercise Science AAS, with AOC in Exercise Science will start with a class of 6 students to start in Fall 2023. By the fourth year, the College plans to expand the program by offering a day as well as an evening

classes when enrollment reaches 16 students. This will expand the total number of students by year 5 to 20. Calculations utilize current tuition and fees.

Grants and Contracts

The Health & Exercise Science AAS, with AOC in Exercise Science has received a CTE Innovation Grant for \$150,000 and HEERF funding in the amount of \$96,559 to provide the equipment and supplies needed to support the start-up and development of the program. Additional funds from Perkins have been identified to support the career program in years two through five.

Other Sources

Not Applicable

Total Year

Total Year financial resources amount to \$403,608 over the first five years of the program. This includes already awarded grant funding in year 1 and eligible allocations of grant funding for each year afterwards.

**** No assumptions have been made for tuition, fees, salaries or general expenditure cost and increases.**

2. Complete [Table 2: Program Expenditures and Narrative Rationale](#). Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.

TABLE 2: PROGRAM EXPENDITURES:					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	89,039	91,708	94,459	97,292	100,210
a. Number of FTE	1	1	1	1	1
b. Total Salary	66,126	68,109	70,152	72,256	74,423
c. Total Benefits	22,913	23,599	24,307	25,036	25,787
2. Admin. Staff (b + c below)	0	0	0	0	0
a. Number of FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0

3. Support Staff (b + c below)	45,446	46,450	47,843	49,295	50,757
a. Number of FTE	.60	.60	.60	.60	.60
b. Total Salary	33,774	34,514	35,549	36,615	37,714
c. Total Benefits	11,672	11,936	12,294	12,680	13,043
4. Technical Support and Equipment	0	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	18,900	18,900	18,900	18,900	18,900
TOTAL (Add 1 – 7)	153,385	157,058	161,202	165,487	169,867

PROGRAM EXPENDITURES NARRATIVE RATIONALE

Faculty

There is one full-time faculty member. Costs include salary, 3% COLA added to current salary for year 1 and then each year after. The benefits are based on 7.65% FICA and 27% benefits.

Administrative Staff

The full-time faculty member is also the program manager, so that is why the administrative staff costs are 0.

Support Staff

These figures combine costs of 3 employees providing support divided over 6 programs. The salaries include a 3% COLA added in each year. The salaries and the cost of benefits are divided over the 6 programs they support.

Other Expenses

This includes the cost of 21 adjunct credits each year at approximately \$900 per credit.

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

- 1. Discuss procedures for evaluating courses, faculty and student learning outcomes.**
- 2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

Continuous Program Evaluations

Data for Review	Frequency	Timeframes	Data Source	Data Collector	Reporting
Student Course Evals	Each semester	1 week after term ends	Evaluation Kit in Blackboard	Faculty and HES Program Manager	Included in faculty evaluations, faculty meetings, PAC Meetings
Faculty Observations/Evaluations	Annually for faculty	Faculty evaluations – week after term ends	Direct classroom observations, student course evals	Program Manager	Annual Faculty Evaluation
Graduation Exit Survey	Annually	Last week of graduation term	Survey results	Program Manager	Faculty Meetings, PAC Meetings
6-month graduate survey	Annually	6-months following end of graduation term	Survey results	Program Manager	Faculty Meetings, PAC Meetings
Enrollment Data	Each semester	1 week after term start	PeopleSoft (PS)	Program Manager	Faculty Meetings, PAC Meetings
Graduation Data	Annually	June	PS/OPAIR	OPAIR Staff	Faculty Meetings,

					PAC Meetings
Retention Rate	Annually	June	PS/OPA IR	OPAIR staff	Faculty Meetings, PAC Meetings
Completion Rate	Annually	June	PS/OPA IR	OPAIR Staff	Faculty Meetings, PAC Meetings
Program Mission, Goals, Student Learning Outcomes	Annually	Fall PAC Meeting	Various	Program Manager and other faculty	Website, Faculty meetings, PAC Meeting
Formal Program Review	Every 5 years	October-June	All data sources identified	Faculty; PAC subcommittee	PAC Meetings; Dean of Health, Business, Technology, and Science
Additional Tracking	Ongoing	Throughout each term		HES Faculty and Staff	

N. Consistency with the State’s Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05).

- 1. Discuss how the proposed program addresses minority student access & success, and the institution’s cultural diversity goals and initiatives.**

FCC has long been committed to the recruitment and retention of minority students and providing a learning environment that is open, welcoming, and supportive of cultural diversity. FCC's Strategic Plan for 2022-2025 identifies the following goals and strategies.

Model educational excellence by designing and delivering student learning experiences, pathways, and programs that increase student access, success, and completion. [MSCHE Standards III and V].

b. strengthen faculty and staff technology skills, cultural competence, instructional effectiveness, leadership, and innovation

d. eliminate the achievement and opportunity gaps for underrepresented students and emerging populations

g. increase student cultural and global competence through innovation and alignment of curricular and co-curricular programming.

Support the student learning experience through data-informed enrollment management, responsive programming, and efficient systems [MSCHE Standard IV]

optimize enrollment in all learning environments with intentional focus on underrepresented and emerging populations by enhancing access, improving success, and accelerating completion.

O. Relationship to Low Productivity Programs Identified by the Commission:

- 1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.**

Not applicable. The proposed program is not related to an identified low productivity program.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

- 1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.**

While the proposed program is not a distance education/fully online, program, FCC has been approved to offer distance education programs by both the Maryland Higher Education Commission and the Middle States Commission on Higher Education.

Quality assurance of the online courses is maintained formally with the Quality Matters (QM) course review protocol. The Colleges Institutional Values, Mission, Vision, and Strategic Goals guide the delivery of all instruction regardless of the delivery format. For more than 15 years, the College has demonstrated a commitment to offering a successful, high-quality online program with an appropriate academic and technical infrastructure.

Online learning has become an integral part of teaching and learning at FCC. Budget allocations support a staff in the Center for Distributed Learning as well as online program initiatives already in place such as curriculum development, Quality Matter course reviews, faculty

training, and learning object database subscriptions. As part of the Center for Teaching and Learning, the Online Learning and Learning Innovation (OLLI) is fully integrated into the curriculum, governance, and administrative processes of the College. FCC faculty teaching online courses receive individual training and course development and guidelines from OLLI.

\$158,340	\$300,846	\$338,847.60	\$367,348.80	\$392,683.20
50	95	107	116	124
\$3,166.80	\$3,166.80	\$3,166.80	\$3,166.80	\$3,166.80
\$158,340	\$300,846	\$338,847.60	\$367,348.80	\$392,683.20
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$183,340.80	\$325,847.80	\$363,847	\$392,348.80	\$417,683.20

2. Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.

In compliance with C-RAC guidelines, all online instructors are subject to a peer course evaluation, and instructors can apply for Quality Matters certification. Students evaluate each course at the end of each semester. Program managers, department chairs, the AVP/Deans in Academic Affairs and the Provost have access to each student course evaluation in their area. Student feedback is used for course and program improvement, and faculty are expected to reflect on student evaluations in their annual self-evaluation. Program-level evaluation for Distributed Learning is ongoing and is documented in detail in a series of annual or bi-annual reports by the Center for Distributed Learning. The Quality Matters (QM) Peer Review protocol is at the center of the College’s quality assurance efforts in course design. The QM protocol is based on a rubric with 43 key quality standards for an online course. The standards are used to peer-review existing online courses at FCC, to guide the design of new courses, and shape the training of online faculty. Sixty-nine percent of fully online courses have been formally QM reviewed.

A protocol for re-reviewing QM courses with expired review terms is in place. The College has made every effort to comply with relevant federal and state regulations for its Program of Online Courses, for example, the efforts to comply with Substantive Change in Degree Programs, ADA compliance requirements, compliance with the federal definition of a Credit Hour, compliance with current copy right provisions, and USDOE's State Authorization Regulations. As a member of Maryland Online (MOL), FCC is part of two interconnected contractual arrangements with MOL and Quality Matters (QM). The MOL course-sharing initiative (Seatbank) provides students from different Maryland Community Colleges with greater access to distance learning opportunities. Colleges share distance learning courses with the expectation that the shared courses meet the same quality standards as articulated in the rubric updated biannually for QM's peer review process.