

certification examination, and higher employment rates when compared to students enrolled in such bachelor's degrees (Cavallario & Van Lunen, 2015).

The proposed MAT program will follow a competency based program delivery framework that coincides with the curriculum and competencies set forth by the Program Accreditation Committee of the CATA. As such, there are 165 competencies that must be instructed and assessed at introductory levels, through application, and at entry level competence. The 165 competencies set forth by the CATA are distributed in the following areas: Athletic Therapy Expert, Communicator, Collaborator, Scholar, Leader, Health Advocate, and Professional. Through the Scholar area, Athletic Therapy students should demonstrate competence by (among others):

1. following ethical procedures (i.e., Tri-Council Policy Statement 2) when conducting research
2. understanding different research methodology, critically appraising research design, statistical analyses, and levels of evidence to evaluate research to inform athletic therapy practice
3. incorporating best available evidence into decision making for injury prevention, assessment, management, and rehabilitation
4. educating health care professionals based on contemporary evidence and innovation related to athletic therapy practice
5. incorporating best available evidence (e.g., reliability, sensitivity, specificity) to select evaluation and diagnostic procedures
6. finding the best available evidence to answer a clinical question in athletic therapy practice by identifying key concepts and using appropriate key words, subject headings, and limits to search relevant databases.
7. contributing to the improvement of athletic therapy and/or health care delivery through ethical research and scholarly endeavours that facilitate knowledge creation, knowledge translation, and/or practice integration
8. recognizing knowledge gaps in professional encounters and exploring or generating focused questions that contribute to athletic therapy practice and health care delivery

Based on the competencies highlighted above, this suggests a rationale for graduate level professional education to allow athletic therapy students to engage in ethical research and scholarly encounters that generate knowledge translation as related to the practice of athletic therapy.

Further, learning and scholarship must be demonstrated in the following subject matter areas:

- (1) concussion assessment and management
- (2) prevention of athletic injuries/illness
- (3) assessment of athletic injuries/illness
- (4) emergency care
- (5) therapeutic modalities
- (6) rehabilitation principles

- (7) taping and bracing
- (8) ethics, professionalism, and cultural competency
- (9) patient education and advocacy
- (10) therapeutic exercise
- (11) strength and conditioning
- (12) business of athletic therapy
- (13) human anatomy
- (14) human physiology
- (15) exercise physiology
- (16) biomechanics
- (17) food and nutrition
- (18) sport and exercise psychology
- (19) pharmacology
- (20) pathology
- (21) research methods and statistics
- (22) health
- (23) adapted physical activity
- (24) motor control and learning
- (25) indigenous studies
- (26) leadership and communication

Clinical and field practica will be integrated and sequenced simultaneously with other theoretical and experiential learning in the curriculum. The curriculum will include provision for multiple clinical and field practica under a clinical educator in acceptable clinical and field settings and a final immersive athletic therapy practicum experience. This immersive experience will allow students to experience the totality of patient care through participation in the day-to-day experiences of patient centred care while engaging with their clinical supervisor for an entire term. Students who participate in immersive experiences indicate increased exposure to the profession and improved preparation for transition to clinical practice (Grimes et al. 2021). In addition, since this is a master's level program, advanced research (scholarly) competencies will be addressed by a required Major Research Paper (MRP), which will also serve as the capstone course of the program.

The proposed MAT will comprise of 6 full time terms over 2 years, for a total of 18 half-credit courses, including practica, plus a 2 credit MRP course offered over the last 4 terms of the program. MAT applicants will hold a bachelor's degree in kinesiology, physical education, human kinetics, exercise science or equivalent and be expected to demonstrate successful preparation (75% or higher) in the following prerequisites: Human Anatomy (with lab), Human Physiology (with lab), Biomechanics, Exercise Physiology, Nutrition, Psychology, and Motor Control/Learning. These incoming competencies will allow the proposed program to deliver a graduate level understanding, including mastery-level content in the CATA required competencies and the above-noted MRP.

A preliminary listing of the courses includes:

Clinical Anatomy for Athletic Therapists I and II
Foundations of Athletic Therapy I and II
Emergency Management in Athletic Therapy
Therapeutic Modalities

Therapeutic Interventions I and II
 Professional Practice in Athletic Therapy
 Clinical Research in Athletic Therapy
 Health and Wellness Considerations for Athletic Therapists
 Current Trends in Athletic Therapy
 Athletic Therapy Practicum I, II, III, IV
 Immersive Athletic Therapy Experience
 Major Research Paper

Explain how the proposed program fits with the University’s strategic plan.

The **Vision** of Brock University is that Brock University *is a dynamic, comprehensive university that makes a positive difference in the lives of individuals in our Brock community, the Niagara Region, Canada and the world through leadership, innovation and excellence in learning, teaching, research, scholarship and creativity across disciplines.*

The **Mission** of Brock University includes that *we provide undergraduate, graduate, and professional education of the highest quality. Our graduate programs enhance Brock’s growing reputation for excellence in teaching, research, creativity, and innovation. We provide a transformative experience for our students inside and outside the classroom by helping to develop their full potential as educated and engaged citizens in local and global communities. Brock graduates go out into the world as leaders, with a track record of entering fulfilling careers across all disciplines.*

The proposed MAT program is consistent with both the vision and mission of the institution in that a post graduate program in athletic therapy will add a sought after and valued professional education program that builds on the strong history of the Faculty, will contribute to the comprehensive University vision, and will produce qualified professionals in an area that will contribute to the service and well-being of the Niagara region.

Furthermore, the proposed program aligns with the **Strategic Priorities** of (1) *offering a transformational and accessible academic and university experience*, and (2) *enhancing the life and vitality of the local region and beyond*. Table 1 illustrates how the proposal MAT program aligns with these priorities and can help to achieve goals through the actions described in the Strategic Plan.

Table 1

| Priority: Offering a transformational and accessible academic and university experience | | |
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| Goal: Deliver high-quality programs that meet the interests and needs of students and support them to achieve their potential in life. | Action | Proposed MAT program |
| | Review and renew academic programs regularly and expeditiously to ensure they reflect students’ interests and animate their desire to expand and challenge their abilities and perspectives. | As there are no comparable graduate programs in the Niagara Region, the proposed MAT program will increase student enrollment in an in-demand program with no geographic competitors. There are two undergraduate programs that offer athletic therapy in the Toronto area. This proposed graduate level athletic |

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| | | <p>therapy program will provide graduates from our (and other institutions) undergraduate Kinesiology program a way to meet interest of pursuing athletic therapy as a profession while obtaining a master's degree rather than a second bachelor's degree. Anecdotally, some of our Kinesiology graduates are choosing to obtain a second undergrad degree in Athletic Therapy, or attend institutions in the United States in order to obtain a master's degree that can allow them to practice athletic therapy in Canada. Furthermore, Brock has a strong history of athletic therapy embedded in the Kinesiology curriculum which this program will build on, and the 2-year master's program is a new and marketable option that is being endorsed by CATA.</p> |
| | <p>Develop programs that meet labour market and societal needs by tailoring them to provide students with the skills required for current and potential areas of growth.</p> | <p>This program is a competency-based curriculum that will produce graduates with marketable clinical skills.</p> |
| | <p>Increase experiential learning and high-impact practices across all academic programs.</p> | <p>As per CATA guidelines, the MAT program will include clinical and field practica, integrated and sequenced simultaneously with other theoretical and experiential learning in the curriculum. The curriculum shall include provision for various clinical and field practica under clinical educators in acceptable clinical and field settings.</p> |
| <p>Goal: Expand Brock's lifelong learning opportunities for our students and members of the community.</p> | <p>Adopt flexible and inclusive courses and program delivery formats, including a tri-semester schedule, to better meet the needs of a broader demographic.</p> | <p>The MAT program will be based on a trimester system, and as mentioned above, delivery formats will include a competency based model with experiential learning.</p> |

| Priority: Enhancing the life and vitality of the local region and beyond. | | |
|---|--|---|
| <p>Goal: Increase and enhance enriching opportunities for our students, alumni, faculty, and staff to engage with the community.</p> | <p>Establish a mechanism to create and sustain long-term, mutually beneficial community partnerships that will:</p> <p>Expand knowledge mobilization and application through collaborations, both on and off campus.</p> <p>Develop Brock-Niagara community-based accessible programming and resources.</p> <p>Encourage active participation in student life ranging from volunteer and employment opportunities to clubs, intramurals, and Brock Sports.</p> | <p>The proposed MAT program will foster ongoing community partnerships through placements with local clinics, teams, sport organizations, and competitions. Brock will become a needed resource in the local sporting community.</p> <p>The program will have an immediate and significant effect on Brock Sports through radically improving the quality and quantity of athletic therapy students available to all varsity and club sports.</p> <p>Further, this program will provide the opportunity for ongoing professional development programming within sport medicine/athletic therapy professions across the Niagara community.</p> |
| | <p>Encourage and enhance community use of University services and facilities.</p> | <p>Investment in the facilities and infrastructure required of this program will benefit Brock Sports and Campus Recreation Services.</p> |
| <p>Goal: Support regional economic, social, and cultural vitality.</p> | <p>Increase access to programs that are in high demand from students and by society that will increase the employability of graduates.</p> | <p>As noted above MAT is a growing graduate choice and career path. Informal data gathering suggests that there is high demand for athletic therapy as indicated by the volume of applicants to another athletic therapy program in Ontario (i.e., Sheridan College), which receives 350 - 400 applicants per cohort. This has driven their enrollment intake to increase from 36 to 72 students per cohort. Implementation of this program will have a significant and marketable impact on the employability of graduates.</p> |

Details of Resource Implications
 Provide details of the existing and new resources (human, physical and budgetary) required to mount the program.

The Director of the MAT program must also be a full-time, tenure-track faculty and a current certified athletic therapist of CATA for a minimum of 10 years. The full-time core athletic therapy teaching faculty must be a current certified athletic therapist of the Association for a minimum 3 years. Academic qualifications for the core athletic therapy teaching faculty are

PhD preferred, thesis-based Master's required. There must also be a designated MAT Practicum Coordinator and an Institution-Faculty Practicum Liaison, both of whom must be certified athletic therapists, and can be part of the teaching faculty.

Number of faculty appointments: There must be a minimum of two full-time core athletic therapy teaching faculty and this can include the Director. A student to instructor overall ratio of 8:1 is expected for accreditation. Thus, with an intake expectation of 20 students, in the first year we will need a minimum of 3 core athletic therapy faculty to be in compliance. This means that we would need to hire 2 new core athletic therapy faculty in the first year and select a core athletic therapy director from our current faculty compliment in the Department of Kinesiology. We will then need 2 additional core athletic therapy faculty in second year and 1 such appointment in third year to account for the enrollment increments.

One administrative staff and one clinical laboratory demonstrator should also be available to the program.

Additional required resources as noted by the CATA accreditation standards:

Professional Development

Where collective agreements are silent on professional development, all full-time athletic therapy faculty teaching athletic therapy core curriculum should be afforded professional development opportunities by the sponsoring institution.

Financial Resources

The financial resources for the athletic therapy educational program must be ensured to fulfil obligations for ongoing program development and delivery.

Physical Resources

a) Facilities

The classrooms, laboratories, clinical and other facilities, faculty and administrative offices must provide experiential learning opportunities for all students enrolled within the athletic therapy program to support the knowledge, skills and aptitudes needed for a competent entry-level athletic therapist.

b) Equipment and Supplies

There must be appropriate and sufficient equipment, supplies, and storage space to provide experiential learning opportunities to support the knowledge, skills, and aptitudes needed for a competent entry-level athletic therapist. There must be appropriate instructional and audio-visual aids included, but not limited to, clinical specimens, anatomical models, modalities, tables, tape, emergency care and rehabilitation tools to support the applied learning experiences delineated by the educational components of the curriculum.

Therapeutic Modalities and Rehabilitation: There must be a wide range of contemporary therapeutic modalities and rehabilitation tools available for instructional and practice purposes.

First Aid and Emergency Care Equipment: There must be a range of contemporary equipment and supplies in emergency care for instructional and practice purposes.

c) Learning Resources

Students in the MAT program must have ready access, in time and location, to a supply of current books, journals, periodicals, and other reference materials related to the curriculum.

Evidence of Consultation with Affected Academic Units

Include the results of any consultation with other units that will be impacted by the proposed program. Include evidence indicating the extent to which any participating Department(s)/Centre(s) is prepared to contribute to the proposed program.

The units to be most impacted by this program are the Masters of Professional Kinesiology (MPK) and the undergraduate degrees in Kinesiology (BKin, BScKin, BPhed), which currently contains a Sport Injury Management minor. These programs are under the umbrella of the Department of Kinesiology and the Department has deliberated and agreed that the proposed MAT program would be a valuable addition to the Department. Internal consultation has determined that the proposed program can exist with and would benefit these other programs. Specifically, it will be a valued post-graduate option for graduates of the undergraduate programs, particularly those who complete the Sport Injury Management minor. Furthermore, it will appeal to a different graduate population than those who apply to the MPK. The outcome and career pathway for MPK students is as a registered Kinesiologist, whereas athletic therapy is a distinct profession from Kinesiology. While programs exist to serve students interested in athletic therapy, they are currently at the undergraduate level and not located in the Niagara Region. Anecdotally, pursuing a second undergraduate degree in athletic therapy is a deterrent to Brock Kinesiology students who are in some cases choosing to complete a second undergraduate degree elsewhere in Canada or attend US based institutions in order to obtain a graduate degree in athletic training (the US analogous to athletic therapy in Canada). It is also worth noting that the MPK can benefit from the proposed MAT program, in terms of shared staffing, courses, infrastructure, and interprofessional educational experiences.

Evidence of Consultation Regarding Space Needs for the Proposed Program

Include the results of any consultation with the Advisory Committee on Space regarding the space needs for the proposed program.

This program will require another teaching lab space setup like a clinic and a graduate student area. In addition, to accommodate 3 new faculty and 2 new staff appointments (administrative coordinator and lab technician), as well as the part-time instructors and teaching assistants, 7-8 new offices and 1-2 research labs will be needed for this program. These spaces should preferably be in or near the Walker Complex to maximize equipment and other resources. Upon consultation with Space Management and Planning, we are offering two potential opportunities to address the program space needs:

1. Small scale (for the Department of Kinesiology only) construction of new space in the vicinity of Walker Sports Complex. This option will add approximately 4,400 square feet of office and laboratory space addressing both the required space for MAT and the ongoing space shortage in the Faculty of Applied Health Sciences (FAHS). The cost of this option will be in the range of \$3,000,000 to \$5,000,000.
2. Renovate existing space in the Brock Research & Innovation Centre (BRIC) and exchange space with the Faculty of Social Sciences, namely the Social Equity Lab with FAHS space in the BRIC. The cost of this option will be in the range of \$300,000 to \$500,000. However, this option does not address other space needs, it will need the cooperation of the Faculty of Social Sciences and will be short lived.

Evidence of Student Demand, including projected enrollments

Projected enrollment: 26 per year at steady state.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year |
|----------------------|---------------|---------------|---------------|---------------|---------------|------------------|
| Domestic Intake | 17 | 17 | 21 | 21 | 21 | 24 |
| International Intake | 3 | 3 | 5 | 5 | 5 | 6 |
| | | | | | | |

Evidence of Societal Need

“Once reserved for elite athletes, demand for athletic therapists is on the rise thanks to a growing recognition of their value at all levels of sports, as well as their application in non-sport settings” (Globe and Mail, October 2, 2020)

According to Government of Canada Job Bank website, the projected job opportunities across Canada for the next three years range from ‘fair’ to ‘good’. Currently, the average athletic therapist salary in Canada is \$53,450 per year or \$27.41 per hour. Entry-level positions start at \$45,045 per year, while most experienced workers make up to \$66,337 per year (Talent.com).

Duplicative Similarities

Provide evidence that any duplicative similarities to existing programs, internally, provincially or nationally, are justifiable for reasons of public funding.

There are no duplicate or similar programs internally. The Department of Kinesiology has a long history of offering undergraduate experiential education in athletic therapy, but this has never been a degree option. In 2021, the Department approved a minor (Sport Injury Management) in this area, which can serve as a stream for future interest and enrollment in the proposed MAT program. This master’s program will be a unique addition to the current available athletic therapy education programs in Canada. There are currently two other programs seeking future accreditation through the CATA to educate athletic therapy students at the master’s level, both of which are located out of province in Quebec. Additionally, one institution in Alberta offers a CATA accredited 2-year post-bachelor’s certificate program. This program also has an undergraduate program in Athletic Therapy. Each year this program receives approximately 500 applications for their undergraduate Athletic Therapy program for 30 available spots. In the undergraduate program they have about 40 – 50% attrition by year three. The post-bachelor’s certificate program applicants are then used to fill the remaining seats for the last two years of the program. They receive approximately 70 post bachelor’s certificate applications and on any given year have approximately 10 – 15 seats available for these applicants. In short, the addition of this master’s degree in athletic therapy will place Brock at the forefront of an emerging level of educating these professional program students.

Decanal Comments

Include certification from the relevant Dean(s) that the new degree/major is an appropriate and desirable addition to the academic programs of the University and is in line with the strategic direction of the Faculty. As well a clear commitment that the new program will be appropriately resourced. For undergraduate programs, the relevant Dean(s) shall be the Dean(s) of the Faculty within which the program resides. For graduate programs, the appropriate Deans shall be both the Dean of Graduate Studies and the Dean(s) of the relevant Faculty or Faculties.

See attached letters from the Dean of the Faculty of Applied Health Sciences and the Dean of Graduate Studies.