

**FORM A**  
**Board of Regents, State of Iowa**

**REQUEST TO IMPLEMENT A NEW BACCALAUREATE, MASTERS,  
DOCTORAL, OR FIRST PROFESSIONAL DEGREE PROGRAM**  
**January 28, 2015**

THE PURPOSE OF ACADEMIC PROGRAM PLANNING: Planning a new academic degree program provides an opportunity for a Regent university to demonstrate need and demand as well as the university's ability to offer a quality program that is not unnecessarily duplicative of other similar programs offered by colleges and universities in Iowa.

Institution: Iowa State University

CIP Discipline Specialty Title: Athletic Training/Athletic Trainer

CIP Discipline Specialty Number (six digits): 51.0913

Level: Master's

Title of Proposed Program: Master of Athletic Training

Degree Abbreviation (e.g., B.S., B.A., M.A., Ph.D.): M.A.T.R.

Approximate date to establish degree:           Month                           May                           Year 2020

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College that will administer new program: College of Human Sciences

Please provide the following information (use additional pages as needed). Do not use acronyms without defining them.

1. Describe the proposed new degree program, including the following:
  - a. **A brief description of the program. If this is currently being offered as a track, provide justification for a standalone program.**

Athletic trainers are allied health care professionals who collaborate with physicians to provide preventative services, emergency care, clinical diagnosis, treatment, therapeutic rehabilitation and intervention of injuries, and medical conditions. Athletic training programs prepare individuals to work with and under the supervision of physicians to prevent and treat sports injuries and associated conditions. The Commission on Accreditation of Athletic Training Education (CAATE) is the national accrediting organization that establishes professional standards and regulations for athletic training programs. Students who want to become certified athletic trainers must earn a degree from a nationally accredited program.

The athletic training education program at Iowa State University is not a new program. The Department of Kinesiology currently offers the B.S. in Athletic Training. The program has been in existence since the early 1980s, was initially accredited in April 2001, and has since had two successful reaccreditations. Recently, CAATE mandated athletic training education programs must transition to professional master programs to sustain accreditation. Quoting from CAATE:

“CAATE accredited professional athletic training programs must result in the granting of a master’s degree in Athletic Training. The program must be identified as an academic athletic training degree in institutional academic publications. The degree must appear on the official transcript similar to normal designations for other degrees at the institution. Baccalaureate programs may not admit, enroll, or matriculate students into the athletic training program after the start of the fall term 2022” (<https://caate.net/becoming-an-athletic-trainer/>). Graduating students cannot become a candidate to sit for the BOC examination and become a certified athletic trainer and licensed in the profession unless they complete an accredited athletic training education program. This proposal for a new graduate degree program in Athletic Training is in direct response to the CAATE requirement.

The proposed program is a year-round, 24-month, 58-credit professional master’s degree in Athletic Training, for which we will seek accreditation from CAATE. Based on a 2018 review of 78 existing professional master’s programs in Athletic Training nationally, credit requirements ranged from 39 to 86 semester credits (mean = 58.3 credits, median = 59 credits) Thus, the 58-credit requirement of the proposed program is consistent with national trends. The overall academic goal is to prepare students for successful completion of the Board of Certification (BOC) examination and to enter the athletic training profession as skilled and prepared clinicians. Students will be taught essential athletic training didactic knowledge and clinical skills based on the Athletic Training Education Competencies established by CAATE. Students will be exposed to higher level graduate coursework and experiences including evidence-based practice and research, critical analysis of evidence, and common clinical conditions seen in varying areas of physically active patients. A strong inter-professional collaboration within the medical community will be part of the curriculum and immersive clinical experiences. The students will gain clinical experiences in several areas, on and off campus.

**b. A statement of academic objectives;**

Specific objectives of the program are to: 1) prepare athletic training students for the BOC certification examination; 2) produce high quality athletic trainers prepared for employment in educational, clinical, and professional settings; 3) promote professional and ethical conduct; 4) provide students equal opportunity to develop their skills both in the classroom and in the clinical settings; 5) continually update the curricular offerings to provide the athletic training student current evidence-based knowledge in the profession; 6) provide high quality instruction in the classroom and clinical experiences; 7) assist students in gaining employment upon graduation; 8) promote development of professional networking through attendance at professional and educational meetings; 9) foster appreciation of athletic training as a component of sports medicine; and 10) foster the affective, caring side of athletic training.

Learning outcomes reflect specific educational competencies and clinical proficiencies established by CAATE programmatic accreditation standards. Currently, accredited professional master’s degree programs are to abide by the 2020 accreditation standards. There are 105 standards organized into the following five categories: 1) program design and quality, 2) program delivery, 3) curricular content, 4) institutional organization and administration, and 5) program resources.

Outcomes will be assessed and measured by several methods including written examinations, clinical practicum examinations, and other hands-on clinical proficiencies, laboratory projects, and completion of the required coursework. Accreditation standards require program-specific outcomes and include measures such as student learning, quality of instruction, and overall program effectiveness. Programs must measure program graduation rate, retention rate, and graduate placement rate. Board of Certification pass rate must meet or exceed a three-year aggregate of 70% first-time pass rate on the BOC examination. The ISU Athletic Training

Program has an 88% first-time pass rate on the BOC certification for the most recent three-year period.

**c. What the need for the program is and how the need for the program was determined;**

Iowa State University has a successful athletic training program educating and preparing athletic training students for entry into the profession. Our graduation, job placement, and pass rate for the Board of Certification examination are all well above the national average and our alumni are successful in diverse job settings in the state and around the country. The recent accreditation requirement for a degree transition from a bachelor's degree to a professional master's degree is the driving force to seek this new degree. Interest from prospective students continues to be strong and supports the need to transition the ISU program to a professional master's program.

**d. The relationship of the proposed new program to the institutional mission and how the program fits into the institution's and college's strategic plan;**

The mission of the proposed program (to provide high quality education striving to instill in the students the intellectual curiosity, knowledge and skills essential for their development) is consistent with Iowa State University's mission to "create, share, and apply knowledge to make Iowa and the world a better place." The proposed program contributes to Iowa State University and the College of Human Science's mission by meeting the needs of communities, schools, and other organizations by linking discovery, science, creativity, and practice; applying the knowledge of learning in all endeavors; and developing leaders for roles in education, business and industry, and health and human services. Members of the College of Human Sciences community strive to improve the quality of people's lives-helping them learn better, live longer and healthier, and lead lives that are more productive and fulfilling. The athletic training profession fits very well into the College mission and the overall service philosophy and in making the world a better place.

The strategic plans of ISU, College of Human Sciences, Department of Kinesiology, and the Athletic Training Education Program overlap in focusing on people and their potential, improving lives, and creating and expanding knowledge. Land-grant principles and outreach activities are interspersed throughout the program and emphasized to students, faculty, and staff.

**e. The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university. Will the proposed program duplicate existing programs at the university?**

The Athletic Training Education Program has benefited from a well-established, strong, and collaborative relationship between the Department of Kinesiology and ISU Athletics. The Department of Kinesiology will serve as the academic home for the new degree program. Although the MATR will be the department's only professional master's program, it will fit well with other graduate program specializations in the Department of Kinesiology. Athletic training graduate students will take several common graduate courses within the department while also completing highly specialized athletic training coursework to meet program requirements. Outside the academic program, athletic training graduate students will gain clinical experience by providing first aid services in a structured educational setting for other departments, academic clubs, social organizations, intramural and club activities, and other groups. The students also participate in various outreach activities within the university, community, and state (e.g., Special Olympics) to develop their management, leadership, interpersonal, and problem-solving skills.

f. **The relationship of the proposed new program to existing programs at other colleges and universities in Iowa, including how the proposed program is different or has a different emphasis than the existing programs.**

The University of Northern Iowa has a professional master's athletic training program (effective summer 2018). Loras College has a 3+2 dual degree program in athletic training and are now (fall 2018) accepting applications for their Master of Athletic Training. Grand View University and Drake University are now seeking accreditation by CAATE for professional master's programs. The University of Iowa, Northwestern College, and Upper Iowa University have indicated their intent to establish professional master's programs and are at various stages of the program development, approval, and accreditation process.

Iowa State University was the second institution in Iowa to achieve external accreditation for an undergraduate athletic training education program. Due to stringent accreditation standards, the degree programs at all three Regent institutions are similar in their didactic requirements. Nevertheless, differences exist in clinical experiences, student recruitment areas, and program philosophies. Enrollment limitations exist in all programs because of CAATE policies regarding supervision of athletic training students in the clinical settings and in their clinical experiences. CAATE recommends a ratio of no more than eight students per clinical preceptor.

ISU has a collegial relationship with the other athletic training programs in the state. Most of our graduating students seek employment as an athletic trainer in the collegiate setting, whereas other schools in the state have a stronger emphasis on placing students in physical therapy school or in the high school setting following graduation.

g. **Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.**

Iowa State University is the land grant institution in Iowa and is one of a few institutions to provide athletic training students extensive hands-on clinical experience early in their academic preparation. A clear strength of the current undergraduate program and proposed MATR is the strong relationship between the Department of Kinesiology and ISU Athletics. This relationship results in numerous opportunities for clinical experiences with collegiate athletes under the supervision full time clinical athletic trainers who have 20 or more years of clinical experience and have served as didactic instructors and clinical preceptors for our students. While many of our students come from Iowa and surrounding states (e.g. Minnesota, Illinois, Wisconsin), we also draw students from around the country (e.g., Washington, California, Virginia, Arizona, Tennessee, Michigan, Colorado) and occasionally international students (e.g., Malaysia, Sweden, Kazakhstan). We are unique in that our program has eight former students or staff who are in the National Athletic Trainers Association Hall of Fame, which is reflection of the long and successful history of our program in preparing highly competent athletic training clinicians and individuals who are committed to leadership and service to the profession on a national scale.

h. **Are the university's personnel, facilities, and equipment adequate to establish and maintain a high quality program?**

Through the partnership between the Department of Kinesiology and ISU Athletics, our students are educated in well-equipped clinical and teaching facilities. The Department of Kinesiology currently has two full-time athletic training faculty and has a plan for the addition of a third faculty member dedicated to the didactic portion of the program. Once the third faculty member is recruited, program resources will exceed minimum CAATE requirements. Four additional clinical athletic trainers in ISU Athletics, each with more than 20 years of clinical experience, have been identified as potential graduate lecturers for the MATR program. These certified athletic trainers currently serve various athletic teams and are clinical preceptors for athletic training students. These clinical professionals have multiple certifications in a broad spectrum of

specialty treatment techniques. Clinical preceptors from Ames High School, McFarland Clinic, and Mary Greeley Medical Center further broaden and strengthen the clinical experiences of the athletic training students.

Eight athletic training clinical facilities, including a newly renovated athletic training space in Forker Building (home of the Department of Kinesiology), are located on and in close proximity to campus and provide state of the art equipment and facilities for the clinical experiences of the students. Clinical facilities at McFarland Clinic and Ames High School also support clinical experiences for the athletic training students. Thus, students are exposed to the latest technologies and therapeutic techniques. Academic advising, administrative staff support, and teaching supplies are also available to support the program.

**i. How does student demand for the proposed program justify its development?**

Interest by prospective students in our athletic training program has exceeded program capacity for many years. Students currently matriculate into a pre-athletic training option in the B.S. in Kinesiology and Health and then must apply for formal admission into the B.S. in Athletic Training at the conclusion of their first year after completing required preliminary coursework. In fall 2018, the B.S. in Athletic Training has 42 students formally enrolled in B.S. in Athletic Training; approximately 50 students are in the pre-athletic training option. Typically less than 50% of pre-athletic training students are admitted into the B.S. in Athletic Training each year through a highly selective process. While these numbers reflect healthy enrollments, we have seen a modest decline in student numbers in the past few years. We attribute this decline to the impending program transition and some uncertainty as to the timing of the transition to a professional master's. Nevertheless, there has been much interest in our program's future. Prospective students and family members have been emailing and contacting the Department of Kinesiology with questions and interest.

**2. Describe the state and/or national workforce need and/or demand for graduates of the proposed program currently and in the foreseeable future (provide documentation about the current sources of data used to estimate need and demand).**

Occupational employment statistics from the U.S. Department of Labor Bureau of Labor Statistics provides national estimates for the Athletic Training profession (<https://www.bls.gov/oes/current/oes299091.htm#nat>). The Bureau of Labor Statistics projects a favorable job market for athletic training: "Employment of athletic trainers is projected to grow 23 percent from 2016 to 2026, much faster than the average for all occupations" (<https://www.bls.gov/oes/current/oes299091.htm#tab-6>).

Bureau of Labor Statistics national employment and salary estimates for athletic training:

		Percentile wage estimates for athletic training				
Total employment	Mean annual wage	10%	25%	50%	75%	90%
25,010	\$48,630	\$30,740	\$38,250	\$46,630	\$57,160	\$69,530

Graduates from the program seek employment in numerous settings, including:

- **Secondary schools:** Public and private secondary schools offer abundant job opportunities for certified athletic trainers (ATCs). Many ATCs teach classes at the high school level. The American Medical Association recognizes athletic training as an allied health care profession, and recommends certified athletic trainers be in every high school.
- **Colleges and universities:** Certified athletic training jobs in colleges and universities generally fall into two categories: athletic department staff and combination teacher/athletic trainer.
- **Professional sports:** ATCs work year-round conditioning, evaluating, treating, and rehabilitating professional athletes in a wide variety of professional sports.
- **Sports medicine clinics:** This continually growing setting provides ATCs the opportunity to work with a number of different health care professionals and a diverse patient population. In addition to athletic injury rehabilitation, many clinics provide athletic training services for secondary schools, club sports and tournaments via outreach programs.
- **Military:** Each branch of the U.S. military is increasing its use of athletic trainers. ATCs can be found as part of the health care team for active-duty injured service people, on-and off-base fitness and wellness centers, new-recruit readiness programs and pre-enlistment readiness programs, in addition to established military school sports teams.
- **Industrial and commercial:** These settings include both outreach clinical and full-time ATC employees to deliver services. Athletic trainers are a key component to the health care team and work with physicians and other allied health personnel. ATCs are first-responder medical personal who are experts in injury assessment, treatment, and rehabilitation, particularly for orthopedic and musculoskeletal injuries.

Industries with the highest concentration of employment in athletic training are: 1) colleges and universities, 2) general medical and surgical hospitals, 3) offices of physicians and other health practitioners, 4) elementary and secondary schools, and 5) other recreation industries including spectator sports.

3. **List all other public and private institutions of higher education in Iowa currently operating programs similar to the proposed new degree program. (For comparison purposes, use a broad definitional framework, e.g., such identification should not be limited to programs with the same title, the same degree designation, having the same curriculum emphasis, or purporting to meet exactly the same needs as the proposed program.)**

The following Iowa institutions have CAATE-accredited professional master's degree programs in Athletic Training:

Loras College  
University of Northern Iowa

The following institutions have indicated they are at some stage of establishing accredited professional master's programs in Athletic Training:

Drake University  
Grand View University  
Northwestern College  
University of Iowa  
Upper Iowa University

**If the same or similar program exists at another public or private institution of higher education in Iowa, respond to the following questions:**

- a. **Could the other institution reasonably accommodate the need for the new program through expansion? Describe collaboration efforts with other institutions.**

It seems unlikely that other athletic training programs could accommodate the demand for athletic training education opportunities through expansion due to CAATE restrictions on the number of students supervised by clinical preceptors. Each program has their own niche of students and individual program philosophies. For these same reasons, there has been no need for significant direct collaboration among athletic training education programs in Iowa. There has been discussion between program leaders at Iowa State University, the University of Northern Iowa, and the University of Iowa to collaborate in the future on a study abroad program that has been proposed by Iowa State University.

- b. **With what representatives of these programs has there been consultation in developing the program proposal? Provide a summary of the response of each institution consulted.**

There has been positive communication between Iowa State University, University of Iowa, and University of Northern Iowa regarding the ISU program proposal. We have received letters of support from both the University of Iowa and the University of Northern Iowa. Faculty of the ISU athletic training education program periodically interact with colleagues in other programs around the state and maintain collegial relationships with these program faculties.

- c. **Has the possibility of an inter-institutional program or other cooperative effort been explored? What are the results of this study? (Consider not only the possibility of a formally established inter-institutional program, but also how special resources at other institutions might be used on a cooperative basis in implementing the proposed program solely at the requesting institution.)**

There have been no discussions of an inter-institutional program or cooperative effort between institutions due to the proximity of Iowa State University to the other institutions. Athletic training education programs require extensive hands-on clinical experiences for the students with direct supervision by clinical preceptors. This is true at ISU and each of the other institutions offering athletic training education programs. An inter-institutional program has not been deemed practical. As noted previously, however, the three BOR-linked programs may collaborate on a study abroad program in the future.

- d. **Do other colleges in Iowa offer programs similar to the proposed program at comparable quality and cost?**

The quality of the educational experience, tuition, and other program costs are similar for Iowa State University, the University of Iowa, and the University of Northern Iowa. Tuition and other programs costs at private institutions (e.g., Drake University, Grand View University, Loras College) would be significantly higher than those at the three state institutions.

- e. **Are letters of support included with the program proposal?**

Letters of support have been received from the University of Iowa and the University of Northern Iowa. These are included in the supplemental materials section.

4. **Estimate the number of majors and non-majors students that are projected to be enrolled in the program during the first seven years of the program.**

a. Undergraduate

Not applicable.

b. Graduate

Graduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	5	10	20	25	30	30	30
Non-Majors	0	0	0	0	0	0	0

c. **What are the anticipated sources of these students?**

We anticipate the majority of prospective students will come from the state of Iowa. We also anticipate that a revised pre-athletic training option in the B.S. in Kinesiology and Health will be the primary source for new students. Past history has demonstrated that we attract some students from all areas of the country. Students have come from Washington, California, Virginia, Arizona, Tennessee, Michigan, Colorado, and the Iowa border states of Illinois, Minnesota, Wisconsin, Nebraska, and Missouri.

5. **If there are plans to offer the program away from the campus, briefly describe these plans, including potential sites and possible methods of delivery instruction. Will off-campus delivery require additional HLC accreditation?**

There are no plans to offer the program at sites other than the Iowa State campus, although clinical sites in the Ames community (e.g., McFarland Clinic, Mary Greeley Medical Center, Ames High School) will continue to be utilized.

6. **Has the proposed program been reviewed and approved by the appropriate campus committees and authorities?**

The proposal has been reviewed and approved at the following levels:

- Graduate Faculty Review, Department of Kinesiology
- Undergraduate Curriculum and Standards Committee, Department of Kinesiology
- Curriculum Committee, College of Human Sciences
- College of Human Sciences Faculty
- Dean, College of Human Sciences
- Graduate Curriculum and Catalog Committee
- Graduate Council
- Dean, Graduate College
- Faculty Senate Curriculum Committee
- Faculty Senate Academic Affairs Committee
- Faculty Senate Executive Board
- Faculty Senate
- Senior Vice President and Provost
- University President

7. **List date the program proposal was submitted to the Iowa Coordinating Council for Post High School Education (ICCPHSE) and results of listserv review.**

*To be determined following internal review at Iowa State University.*

8. **Will the proposed program apply for programmatic accreditation? When?**

Yes, we will complete a Substantive Change Level of Degree application to CAATE which will trigger a review of our proposed program. Application for a substantive change (<https://caate.net/substantive-documents/>) does not guarantee the change will be accepted. After review of materials, the CAATE may deem that an on-site visit is necessary to ensure compliance with required standards. Assuming this proposal advances smoothly through the Iowa State University and Board of Regents' reviews, we anticipate the date for submission of the CAATE application will be May, 2019.

9. **Will articulation agreements be developed for the proposed program? With whom?**

Yes, we currently have several clinical affiliated agreements for the clinical education portion of our academic program. These agreements are with Ames High School, McFarland Physical Therapy Clinic, McFarland Orthopedics, and Mary Greeley Medical Center (including emergency room). We do not have articulation agreements with any other academic institutions and do not anticipate any for the program.

10. **Will there be opportunities for student internships?**

Yes, clinical internships/practicums are integrated into the curriculum across the entire 24-month program and are a vital component of the athletic training student's clinical immersion experiences.

11. **Describe the faculty, facilities, and equipment that will be required for the proposed program.**

The ISU B.S. in Athletic Training is functioning effectively now. CAATE accreditation standards require at least three full-time athletic training core faculty. We currently have two full-time core faculty for the B.S. in Athletic Training and have a plan to add a third full-time core faculty member when the program proposal is approved by the Iowa Board of Regents and CAATE. The facilities and equipment that effectively serve the B.S. in Athletic Training will continue to support the MATR program.

12. **From where will the financial resources for the proposed program come (list all that apply, e.g., department reallocation, college reallocation, grants, new to the university)?**

Iowa State University utilizes a decentralized financial management model for the development of its annual operating budgets. The Resource Management Model (RMM), is a responsibility-centered and incentive-driven approach to financial planning and management. The model supports departments and colleges in making budgetary decisions that enhance student success (e.g., retention), innovate by meeting market demands from students and employers for degree programs of the future, and discontinue legacy curricula which are either not aligned with industry/employer needs or for which student demand is low. Through the RMM, for graduate students, net tuition revenue is allocated to academic college of the student's

enrollment. Tuition revenue will include both base tuition and applicable differential rates. The proposed degree program will be funded through this existing, proven financial model, and is expected to be fully self-sustaining over time. In addition to the budget model as described, financial resources may also come from internal reallocations made within the college during the program's startup phase. The level of reallocation will depend, in part, on the numbers of new students attracted to the proposed program, and the number of existing students who choose the proposed program over another program, based on standard and differential tuition rates. The proposed program will not be dependent on grants, contracts, gifts, central university resources, or reallocations between academic colleges.

13. **Estimate the total costs/total new costs (incremental increases in expenditures) that will be necessary for the next seven years as a result of the new program. Be as specific as possible.**

New costs in year 1 will include additional salary and benefits (estimated to be \$41,500) for restructuring and recruiting a faculty member to serve as the program Clinical Education Coordinator. In year 3 an additional \$50,000 continuing expense is anticipated. This increase would be associated with the recruitment of a third full-time faculty member dedicated to the athletic training education program, which will be needed to meet national accreditation requirements. By recruiting an additional full-time faculty member, we anticipate a modest reduction in the need for part-time instructional support, which will help offset some of the expense of the new faculty position. Finally, we anticipate other program expenses to remain stable over the next seven years.

14. **Describe the marketing plan developed to communicate the new program and recruit students.**

The Department of Kinesiology and the College of Human Sciences will market the Master of Athletic Training program by utilizing the strong relationships and program reputation we have developed with the success of our undergraduate program over many years. We have a positive reputation for developing well-prepared undergraduate athletic training students for the Board of Certification examination and placement into the profession and/or graduate education programs. We offer early clinical experiences and exposure to the profession which appeals to prospective students. We have a strong network of alumni locally, statewide, and nationally who promote our program. We have clinical preceptors actively serving in leadership roles within the profession in the state and nationally. We will capitalize on our internet presence and social media outlets to engage with prospective students.

15. **Describe the program evaluation plan to determine if the program is meeting the intended objectives, if the expected student enrollment has occurred, funding for the program, and any other components that affect the effective operation of the program.**

CAATE external accreditation will require the athletic training program to continually evaluate the program mission, curriculum, professional preparation of students, recruitment and retention of students, and program outcomes. The specific program goals and related outcomes that guide program design and delivery are regularly evaluated and will include measures of student learning, quality of instruction, and overall program effectiveness in preparing students for certification. The standards for external accreditation require annual publication of student achievement measures, including graduation rate, retention rate, graduate placement rate, and Board of Certification pass rate. Internal review of the program to determine if it is meeting the

intended objectives, student enrollment target numbers, funding objectives will be done by the Program Director of the Athletic Training program and Chair of the Department of Kinesiology in conjunction with the Dean of the College of Human Sciences.

16. **Include any additional information that justifies the development of this program.**

Supplemental materials include:

Program mission statement

Program goals and objectives

Program outcomes

Admission criteria

Sample 24-month curricular plan

Course descriptions

Letters of support

University of Iowa

University of Northern Iowa

**New Academic Program Plan  
Master of Athletic Training (MATR)  
Department of Kinesiology**

**Supplemental Information and Documents**

**Program mission statement**

Athletic training is the art and science of the prevention, recognition, care, and rehabilitation of athletic injuries. It involves the organization and administration of athletic training education programs, as well as the education and counseling of athletes and physically active individuals. Iowa State University athletic training program provides high quality education striving to instill in the athletic training students the intellectual curiosity, evidence based knowledge and clinical skills essential for their individual development. The athletic training program enrolls academically qualified students who represent diverse socio-economic levels, ethnic heritage and who provide a gender balance. The program faculty and clinical preceptors strive to prepare athletic training students to be productive and responsible citizens of the world and to foster affective, caring individuals to promote the profession of athletic training. The Athletic Training faculty and clinical preceptors continually update educational curriculum to keep athletic training students current with field knowledge and to ensure the best possible undergraduate and graduate education in both the didactic and clinical settings.

**Program goals and objectives**

1. To prepare athletic training students for the BOC Certification Exam.
2. To produce high quality athletic trainers prepared for employment in educational, clinical, and professional settings.
3. To promote professional and ethical conduct at all times.
4. To provide athletic training students equal opportunity to develop their skills both in the classroom and in the clinical settings.
5. To continually update the curricular offerings to provide the athletic training student current evidence based knowledge in the profession.
6. To provide high quality instruction in the classroom and clinical experiences.
7. To assist the athletic training student in gaining employment.
8. To promote the concept of establishing professional contacts by attending professional and educational meetings.
9. To foster an appreciation of athletic training as a component of sports medicine.
10. To foster the affective, caring side of athletic training.

**Program outcomes**

1. Athletic training graduates will use effective communication skills.
2. Athletic training graduates will demonstrate competence in athletic training skills and knowledge.

3. Athletic training graduates will possess ethical, caring, professional attributes and behaviors as a health care professional.
4. Athletic training graduates will demonstrate effective critical thinking and problem solving skills ensuring them of being an effective athletic trainer.
5. Athletic training graduates will demonstrate the ability to apply clinical skills and make evidence based decisions to optimize patient outcomes.

**Admission Criteria:**

1. Minimum undergraduate cumulative GPA of 3.0 on a 4-point scale
2. Scores on the Graduate Record Examination
3. Documentation of satisfactory performance (minimum grade of "C" or better) in foundational undergraduate coursework, including: introductory nutrition, introductory biology with lab, introductory chemistry with lab, introductory physics, human anatomy with lab, human physiology with lab, general psychology, biomechanics, exercise physiology, motor control and learning, and statistics
4. Letter of recommendation from a certified athletic trainer and documentation of completion of a minimum of 125 clinical observation hours under the supervision of a certified athletic trainer
5. Documentation of current first aid, CPR basic life support, and professional rescuer certification
6. Documentation of personal health and ability to meet program technical standards that establish the essential qualities necessary for students to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (Commission on Accreditation of Athletic Training Education (CAATE)).
7. Personal statement (why athletic training, career goals, personal attributes)

**Sample 24-month curricular plan:****Summer – year 1 (7 credits)**

Course	Credit	Title
A TR 501	1	Bracing, Wrapping, and Taping Techniques
A TR 502	3	Emergency Care Procedures in AT
A TR 520	1	Athletic Training Seminar A
A TR 509	2	Athletic Training Clinical Education I

**Fall – year 1 (9 credits)**

Course	Credit	Title
A TR 505	3	Therapeutic Modalities and Clinical Interventions
A TR 510	3	Evaluation Methods and Treatment Techniques – Lower Body
A TR 521	1	Athletic Training Seminar B
A TR 519	2	Athletic Training Clinical Education II

**Spring – year 1 (12 credits)**

Course	Credit	Title
KIN 501	3	Research Methods in Physical Activity
A TR 513	3	Evaluation Methods and Treatment Techniques – Upper Body
A TR 545	3	Therapeutic Exercise and Rehabilitation Interventions
A TR 522	1	Athletic Training Seminar C
A TR 529	2	Athletic Training Clinical Education III

**Summer – year 2 (10 credits)**

Course	Credit	Title
A TR 515	2	Evidence-based Practices in Athletic Training
A TR 550	2	Pharmacological Issues in Athletic Training
A TR 560	3	General Medical and Behavioral Health Issues
A TR 523	1	Athletic Training Seminar D
A TR 539	2	Athletic Training Clinical Education IV

**Optional experiences**

Course	Credit	Title
A TR 549A	1	Athletic Training Clinical Education Study Abroad (May)
A TR 549B	2	Athletic Training Clinical Education

**Fall – year 2 (11 credits)**

Course	Credit	Title
A TR 570	3	Injury Intervention, Rehabilitation and Patient Care
KIN elective	3	KIN 515 Injury Biom, KIN 550 Adv Ex Phys I, or KIN 572 Neural Basis
A TR 559	5	Athletic Training Clinical Education V

**Spring – year 2 (9 credits)**

Course	Credit	Title
A TR 575	3	Athletic Training Organization and Administration
A TR 524	1	Athletic Training Seminar E
A TR 569	5	Athletic Training Clinical Education VI

Total credit requirement: 58 credits

**Course descriptions (note that 500-level A TR courses have not yet been approved):**

A TR 501: Bracing, Wrapping, and Taping Techniques (0-3) Cr. 1. SS

Prereq: acceptance into Athletic Training program

Methods to select, fabricate, and/or customize prophylactic, assistive, and restrictive devices, material, and techniques into plan of care (durable medical equipment, orthotic devices, taping, bracing, splinting, protective padding, and casting). Students will gain knowledge in methods of taping and wrapping for injury care, prevention of injury, and return to play. Exposure to different brands of bracing, how to fit a brace, and their use as well as casting techniques. Discussions of when to refer for prosthetics and overview of gait training.

A TR 502: Emergency Care Procedures in Athletic Training (3-0) Cr. 3. SS

Prereq: acceptance into Athletic Training program

Development, implementation, and revision of policies pertaining to the prevention, preparedness and response to medical emergencies and other critical incidents. Evaluate and manage patients with acute conditions including triaging conditions and internal/external hemorrhage. Cardiac, respiratory, and cervical spine compromise.

A TR 505: Therapeutic Modalities and Clinical Interventions (3-0) Cr. 3. F

Prereq: A TR 502, A TR 520, acceptance into Athletic Training program

Knowledge and skills to utilize a variety of therapeutic modalities. The acquirement of a detailed understanding of the psychological and physiological process of pain, healing and a problem-based approach to apply theories, principles, and techniques of thermal, electrical, mechanical, light, and alternative therapies (laser, cryotherapy). Incorporation interventions (for pre-, post-, and non-surgical conditions) designed to address a patients' identified impairments, activity limitations, injuries, and participation restrictions. Home care to include self-treatment, soft tissue techniques.

A TR 509: Athletic Training Clinical Education I (0-6) Cr. 2. SS

Prereq: acceptance into Athletic Training program

Clinical experiences under the direct supervision of a certified athletic trainer. Techniques and clinical skills provided in both the clinical and classroom settings including: Special Olympics, emergency room rotation, environmental conditions, off season practice and conditioning sessions, biometrics/physiological monitoring systems and translation of data into effective preventative measures, clinical interventions, and performance enhancement.

A TR 510: Evaluation Methods and Treatment Techniques – Lower Body (3-0) Cr. 3. F

Prereq: A TR 502, A TR 520, acceptance into Athletic Training program

Instruction on the proper methods of musculoskeletal evaluation of the upper extremity, thorax, spine, and head. Evaluate and manage patient (s) with acute conditions including triaging conditions that are life threatening or otherwise emergent. Obtaining a medical history, proper methods of documentation, patient overview, and determination for participation status (PPE), identification of comorbidities, assessment of function, selection and use of special tests and measures assessing patient's clinical presentation, evaluation of all results to determine a plan of care, including referral when warranted. Selection and incorporations of interventions designed to address a patient's identified impairments, activity limitations, and participation restriction.

A TR 513: Evaluation Methods and Treatment Techniques– Upper Body (3-0) Cr. 3. S

Prereq: A TR 510, A TR 521, acceptance into Athletic Training program

Proper methods of musculoskeletal evaluation of the lower extremity. Evaluate and manage patient (s) with acute conditions including triaging conditions that are life threatening or otherwise emergent. Obtaining a

medical history, proper methods of documentation, patient overview, identification of comorbidities, assessment of function, selection and use of special tests and measures assessing patient's clinical presentation, evaluation of all results to determine a plan of care, including referral when warranted. Selection and incorporations of interventions designed to address a patient's identified impairments, activity limitations, and participation restriction.

A TR 515: Evidence-based Practices in Athletic Training (2-0) Cr. 2. SS

Prereq: A TR 522, A TR 545, acceptance into Athletic Training program

Principles of evidence-based practice, search for evidence, grading and evaluating literature. Use of systems of quality assurance and improvement to enhance patient care, search, retrieve, and incorporating the use of contemporary principles and practices information from health informatics for clinical decisions and communication with patients/clients, family members, coaches, administrators, other healthcare providers, consumers, payors, and/or policy makers. Use of the International Classification of Functioning, Disability, and Health (ICF) as a framework for delivery and communication about patient care.

A TR 519: Athletic Training Clinical Education II (0-6) Cr. 2. F

Prereq: A TR 510, A TR 521, acceptance into Athletic Training program

Clinical experiences under the supervision of a certified athletic trainer with client/patient populations in competitive, recreational, individual and team activities, high and low intensity activities, non-sport client/patient populations, different sexes and throughout the lifespan (pediatric, adult, elderly). Real client/patient interactions as well as assessment of clinical component procedures and policies. Clinical hours occur in a variety of settings with patients and the student will complete the clinical hours that may extend prior to and/or beyond the academic semester end date. These clinical opportunities provide a basis for evaluating the athletic training student's clinical progression through the program.

A TR 520: Athletic Training Seminar A (1-0) Cr. 1. SS

Prereq: acceptance into Athletic Training program

Introduction to athletic training program and to explore the following topics: environmental issues and concerns, wound care/closure, fractures/dislocations, hemostatic agents/tourniquet applications. Blood borne pathogen training, communicable and infectious disease prevention, FERPA/HIPAA, concussion/brain injury with consideration of established protocols including: comprehensive examination, recognition, and treatment, implementation of a plan of care, referral, and return to participation. Use of C3Logic, Impact testing, and other methods will be introduced.

A TR 521: Athletic Training Seminar B (1-0) Cr. 1. F

Prereq: A TR 502, A TR 520, acceptance into Athletic Training program

Procedures on how to obtain via the appropriate team physicians and medical staff the necessary and appropriate diagnostic tests (including imaging, bloodwork, urinalysis, electrocardiogram) to facilitate diagnosis, referral, and treatment planning. Surgical observation experience including pre-, post- care designed to address a patient/s identified impairments, activity limitations, and participation restrictions.

A TR 522: Athletic Training Seminar C (1-0) Cr. 1. S

Prereq: A TR 510, 521, acceptance into Athletic Training program

Explore other allied health professions and interprofessional collaboration for optimal patient care and referral. Total patient care and how different professions can impact the care will be explored and discussed. Participation in roundtable discussions with other interprofessional health professions and students are exposed to foundational behaviors of professional practice including but not limited to: work/family balance, ethics, mentorship, leadership, professional involvement, and promotion of the profession.

A TR 523: Athletic Training Seminar D (1-0) Cr. 1. SS

Prereq: A TR 522, A TR 545, acceptance into Athletic Training program

This seminar will allow the student to receive training and exposure in cupping, graston or ASTM technique for soft tissue mobilization, and dry needling. Extra course fee may be need to cover the cost of the training. This course will include case study analysis utilizing previous coursework including individual self-assessment of clinical skills.

A TR 524: Athletic Training Seminar E (1-0) Cr. 1. S

Prereq: A TR 515, A TR 550, A TR 565 and permission of the Athletic Training Program Director

This seminar will assess the athletic training students' mastery of knowledge and clinical skills in athletic training, prepare students for employment, and self-assessment. The course utilizes a case study covering all of the domains of athletic training and demonstrates interprofessional and interdisciplinary connections. Review of all of the athletic training domains via specific exams (written, simulation and computer based) will be utilized to prepare the student to challenge the BOC examination.

A TR 529: Athletic Training Clinical Education III (0-6) Cr. 2. S

Prereq: A TR 510, A TR 521, A TR 519, acceptance into Athletic Training program

Clinical experiences under the direct supervision of a certified athletic trainer where foundational behaviors of professional practice with emphasis being placed on evaluation of clinical skills. Reinforcement and instruction about therapeutic modalities, upper and lower extremity assessments. Clinical hours occur in a variety of settings with patients and the student will complete the clinical hours that may extend prior to and/or beyond the academic semester end date. These clinical opportunities provide a basis for evaluating the athletic training student's clinical progression through the program.

A TR 539: AT Clinical Education IV (0-6) Cr. 2. SS

Prereq: A TR 522, A TR 545, A TR 529, acceptance into Athletic Training program

Clinical experiences under the direct supervision of a certified athletic trainer where students are exposed to advanced issues in the athletic training profession with emphasis on practical application and professional development. Utilization of evidenced based research and approaches to clinical practice with emphasis placed on lab reports, imaging results, life-span issues, and diverse patient populations. Students will learn about foundational behaviors of professional practice and emphasis will focus on evaluation, treatment, rehabilitation, and clinical skills.

A TR 545: Therapeutic Exercise and Rehabilitation Interventions (3-0) Cr. 3. S

Prereq: A TR 510, 521, acceptance into Athletic Training program

Therapeutic and corrective exercise, joint mobilization, soft tissue techniques, movement training (including gait training), motor control/proprioceptive activities, task-specific functional training, home care including self-treatment and exercise, cardiovascular training. Pre, post, and non-surgical conditions and addressing activity limitations, participation restrictions and return to play guidelines.

A TR 549A : Athletic Training Clinical Education (study abroad) (1-0) Cr. 1. SS

This course is intended to prepare a student for a study abroad experience that is focused on the discipline of athletic training in another country. It precedes a multi-credit ATR 549B course that is the actual study abroad experience. The prerequisite for this course is having been accepted to study abroad by the Program Director of your intended program. For the "experience athletic training in \_\_\_\_" program, the prerequisites for acceptance are: 1. Graduate student majoring in Athletic Training, 2. Minimum GPA of 3.0 and 3. Having completed athletic training clinical education III. These are in addition to the study abroad program application requirements.

A TR 549B: AT Clinical Education Study Abroad (2-0) Cr. 2. SS

This two credit course is intended to give you a first-person perspective into the athletic training profession in another country as well as provide enrichment experiences related to the history and culture of that country. Follow-up course and experience of one credit A TR 549A which was intended to prepare the student for the study abroad experience. The prerequisites for A TR 549B are: having been accepted to study abroad by the AT Program Director and passing A TR 549A.

A TR 550: Pharmacological Issues in Athletic Training (2-0) Cr. 2. SS

Prereq: A TR 522, A TR 545, acceptance into Athletic Training program

General medical and pharmacological issues generally found in the field of athletic training. The course content covers various medications used to treat various medical conditions and the ability to educate patients regarding appropriate pharmacological agents for the management of their condition, including indications, contraindications, dosing, interactions, and adverse reactions. Administration of medications by the appropriate route upon the order of a physician or other provider with legal prescribing authority.

A TR 559: Athletic Training Clinical Education V (0-14) Cr. 5. F.

This course serves to monitor student progression of athletic training proficiencies, acquiring clinical skills under the direct supervision of a certified athletic trainer. It will reinforce and instruct new information about general medical conditions and administrative topics and begin the immersive clinical experience required prior to graduation. The field experience is designed to provide the student with immersive and additional athletic training experiences and clinical responsibilities for a minimum two clinical rotations lasting 5 weeks under the direct supervision of a certified athletic trainer or allied health care professional. The student is required to complete a minimum of 25 hours per week of field clinical experience. The athletic training student must have the site approved by the preceptor and AT program director prior to beginning the immersion clinical experience. The clinical experience may extend beyond the academic semester end date and the clinical hours are a component of this course.

A TR 560: General Medical and Behavioral Health Issues (3-0) Cr. 3. SS

Prereq: A TR 522, A TR 545, acceptance into Athletic Training program

This course addresses general medical issues generally observed in the athletic training profession. Development and implementation of wellness strategies to mitigate the risk for long-term health conditions across the lifespan and in an active population. Students will be exposed to topics including dermatology, mental illness, neurological disorders, pulmonary disease, respiratory infections, viral infections, autoimmune disorders, oncology, gastrointestinal conditions and sexually transmitted infections. The ability to identify, refer, and give support to patients with behavioral health conditions, educate clients/patients about effects, participation consequences, and risks of misuse and abuse of alcohol, performance-enhancing drugs/substances, and over the counter, prescription and recreational drugs including drug testing policies and procedures.

A TR 569: Athletic Training Immersion Clinical Education VI (0-14) Cr. 5. S.

Prereqs: A TR 565, permission of Athletic Training Program Director

Cumulative clinical experience for students to gain a more in-depth experience in the field of athletic training. The student selects a field or site experience that meets their professional goals. The field experience is designed to provide the student with immersive and additional athletic training experiences for a minimum of 10 weeks under the direct supervision of a certified athletic trainer. The athletic training student must have the site approved by the preceptor and AT program director prior to beginning the immersion clinical experience. The student is required to complete a minimum of 25 hours per week of field experience. The clinical experience may extend beyond the academic semester end date and the clinical hours are a component of this course.

A TR 570: Injury Intervention, Rehabilitation and Patient care (3-0) Cr. 3. F

Prereqs: A TR 515, A TR 550, A TR 560 and acceptance into Athletic Training Program.

Basic understanding of injury and sport psychology and its application to the overall health and well-being of athletic and general population clients. Psychological, social, socio-economical, and environmental factors that influence a client/patient and in their injury susceptibility, reaction, immediate care, and adherence to rehabilitation will be explored. Assessment and intervention techniques to promote and facilitate rehabilitation in a variety of professional settings and with patients from different backgrounds and social issues that may impact a patient. Overview of special populations (adolescent, female, special populations of athletes/physically active patients). Foundational behaviors of professional practice and working with other allied health care professionals in the overall health and well-being of a patient will be explored.

A TR 575: Athletic Training Organization and Administration (3-0) Cr. 3. S

Prereqs: A TR 565, concurrently enrolled in A TR 569

Knowledge and skills necessary for the administration aspect of an athletic training program. Course content includes but is not limited to: PPEs, how to manage physical, human, and financial resources in the delivery of healthcare services. Discussion of patient and insurance management, working relationships with interprofessional members of the health care team, policies and procedures for guidance in the daily operation of athletic training services including EAP or other critical incidents (concussion or other brain injuries), patients in behavioral health crisis, record keeping, athletic training facility design, resume development, and administrative/leadership skills and mentoring.

KIN 501: Research Methods in Physical Activity (3-0) Cr. 3. S

Prereq: Graduate classification in kinesiology and health or athletic training

Methods and techniques used in the design and interpretation of research involving physical activity. Emphasis on styles of writing, library use, and computer applications.

KIN 515: Injury Biomechanics (3-0) Cr. 3. Alt. S.

Prereq: undergraduate biomechanics or permission of instructor

Utilization of biomechanical principles to model injury mechanisms. Introduction to tissue mechanics of bone, articular cartilage, ligament, tendon, and muscle. Biomechanics of lower extremity, upper extremity, and head/neck/trunk injuries.

KIN 550: Advanced Physiology of Exercise (2-3) Cr. 3.

Prereq: KIN 505

Concepts and methods of assessing neurological, muscular, cardiovascular, and respiratory adjustments to exercise.

KIN 572: Neural Basis of Human Movement (3-0). Cr. 3. S.

Prereq: undergraduate motor control and learning

Addresses the role of the central nervous system in the control of voluntary human movement, with the focus on the cerebral cortex, basal ganglia and cerebellum. Content organized around specific nervous system damage (such as stroke, apraxia, spasticity, or spinal cord damage) and functional movements (such as reaching and grasping, balance and gait). Converging evidence from human movement disorders, brain imaging, animal lesion and single cell studies provide the primary basis for the content.



**GRADUATE COLLEGE**  
**Office of the Dean**

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June 15, 2018

Laura D. Jolly, PhD  
Dean, College of Human Sciences  
Iowa State University

Dear Dean Jolly,

Thank you for reaching out to the University of Iowa regarding the Iowa State University proposed program, Master of Athletic Training. After consulting with vested individuals on campus, I am pleased to report no concerns regarding your proposal were raised by our program director, departmental chair, or curricular college dean. It is without reservation that the University of Iowa Graduate College supports your proposal.

Sincerely,

John C. Keller  
Interim Vice President for Research and Economic Development  
Associate Provost for Graduate and Professional Education  
Dean, the Graduate College

cc: Susan Curry, Interim Provost, University of Iowa  
Brooks Jackson, VP for Medical Affairs and Dean, Carver College of Medicine.  
Philip E. Martin, ISU, Professor and Chair, Department of Kinesiology  
Warren Darling, Chair, UI Department of Health and Human Physiology  
Megan Lundstrom, UI Athletic Training Program Director

DATE: October 18, 2018

TO: Laura D. Jolly, Ph.D.  
Dean, College of Human Services  
Dean's Chair and Professor of Apparel, Events, and Hospitality Management

FROM: Gaëtane Jean-Marie, Ph.D.   
Dean, College of Education  
Richard O. Jacobson Endowed Chair of Leadership in Education

Oksana Grybovych Hafermann, Ed.D.  
Head, Department of Health, Recreation and Community Services (HRCS)

SUBJECT: Letter of Support for Establishing a Master of Athletic Training at ISU

Dear Dean Jolly,

Thank you for sharing your proposal to develop a professional Master of Athletic Training program within the Department of Kinesiology at Iowa State University. We recognize that the new CAATE accreditation standards require athletic training education to occur at the master's level. As you are aware, we launched the first accredited professional Master of Athletic Training Program in the state of Iowa in the summer of 2018. We greatly appreciate your continuous support of our program, and would like to offer you our support.

The Council of Provosts among the regent institutions has asked for an era of collaboration, one in which we can work together on so that new efforts can complement existing programs. We have a shared understanding of the nature and value of collaboration, and are eager to collaborate with our fellow Regent's programs.

In the College of Education, we welcome the opportunity to work with Iowa State University faculty to explore opportunities for collaboration. Again, thank you for reaching out to us for support, and we look forward to future collaboration.

cc: Dr. Patrick Pease, Associate Provost for Academic Affairs

## Academic Program Approval Voting Record

This document is to be appended as the last page of the proposal for any new or revised academic program to record the successive votes of approval as the proposal moves through its required review and approval steps. Consult Faculty Handbook Section 10.8 or the Faculty Senate Curriculum Committee website for information regarding Committee review and voting requirements for each action.

Curricular Action: (check appropriate boxes below)

1.  **New Program**     Name Change         Discontinuation         Concurrent Degree for:
2.     Undergraduate Major     **Graduate Major**     Undergraduate Minor     Graduate Minor  
        Undergraduate Certificate     Graduate Certificate         Other: \_\_\_\_\_
3. Name of Proposed Change: Master of Athletic Training\_\_\_\_\_
4. Name of Contact Person: Philip E. Martin, Chair        e-mail address: pemartin@iastate.edu
5. Primary College: Human Sciences                                Secondary College: \_\_\_\_\_
6. Involved Department(s): Kinesiology\_\_\_\_\_

**Voting record for this curricular action:**

Voting Body	Votes			Date of Vote
	For	Against	Abstain	
Kinesiology Curriculum Committee	4	0	0	April 9, 2018
Kinesiology faculty	*	0	0	May 3, 2018
College Curriculum Committee	10	0	0	October 1, 2018
College Approval Vote	86	1	1	October 23-29, 2018
Graduate Curriculum & Catalog Comm.	6	0	0	Feb. 9, 2019
Graduate Council	10	0	0	Feb. 20, 2019
Faculty Senate Curriculum Committee	6	0	1	March 11, 2019
Faculty Senate Academic Affairs Council	8	0	0	April 25, 2019
Faculty Senate Executive Board				
Faculty Senate				

\* Following the favorable recommendation by the department curriculum committee, Department of Kinesiology faculty unanimously approved the MATR degree program proposal by voice vote on May 3, 2018.