ATHLETIC TRAINING (BS)

The athletic training program at Canisius College has voluntarily withdrawn their accreditation and is no longer admitting students. The date of voluntary withdrawal coincides with the graduation of the last cohort in May 2020.

Co-Chairs: Nicholas Lorgnier and Shawn O’Rourke
Director: Erin F Thornton

Introduction

The Department of Kinesiology offers a Bachelor of Science degree with a major program in athletic training. The major is designed to prepare students to enter the athletic training and allied health fields. Emphasis is placed on the development of cognitive knowledge and psychomotor skills which includes practicum, laboratory and an internship experience. The major is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and prepares students for the Board of Certification (BOC) examination.

A degree in athletic training (AT) can be the key to an exciting career. Athletic trainers are skilled health care professionals who are involved in the prevention, diagnosis, management and rehabilitation of injuries and illnesses. Our nationally recognized program, taught by faculty members who also have earned national reputations, prepares students for the Board of Certification examination.

Students benefit from a very low student-teacher ratio, and thus a high degree of personal attention. Every semester, AT majors gain hands-on clinical experience which begins in the second year. Our students have a competitive edge in the job market, due to a culminating internship.

Athletic trainers are integral members of the health care team in high schools, colleges, sports medicine clinics, hospitals, physician offices and professional sports teams. Beyond the field of athletic training, our alumni include physical therapists, podiatrists, physician assistants, chiropractors, physicians and secondary school teachers. Information about the tuition and fees at Canisius are available in the Tuition and Fees portion of our catalog (http://catalog.canisius.edu/undergraduate/tuition-fees-aid/tuition-fees/).

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. The decision may be based on career goals or planned graduate studies. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean. Please note that students will receive only one degree, regardless of the number of majors they complete.

MAJOR EXPERIENCES

All applicants and students in the athletic training major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a patient, classmate or him or herself will be accepted into the program or continue as a student in the program. All applicants and students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability. Clinical sites may require a criminal background check prior to placement at the student’s expense.

All applicants to the professional phase of the program are required to submit a written acknowledgment indicating that they have read and understood the technical standards related to the professional duties of the discipline. These documents are available on the program website. The athletic training program website also provides additional information for program applicants. The program faculty will be responsible for applying the standards for their students and prospective students.

The health care professional’s self-presentation is a vital part of the complex relationship among the patient, the health care provider and the health care delivery site. The athletic training program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face and oral cavity. The program handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Chair of the Kinesiology Department.

Minors in other disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Assessment Measures

BOC Exam Results (three-year aggregate data)

<table>
<thead>
<tr>
<th>Fields</th>
<th>Aggregate over 2016-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students graduating from the program</td>
<td>23</td>
</tr>
<tr>
<td>Number of students graduating from program who took examination</td>
<td>21</td>
</tr>
<tr>
<td>Number of students who passed the examination on the first attempt</td>
<td>19</td>
</tr>
<tr>
<td>Percentage of students who passed the examination on the first attempt</td>
<td>90</td>
</tr>
<tr>
<td>Number of students who passed the examination regardless of the number of attempts</td>
<td>20</td>
</tr>
<tr>
<td>Percentage of students who passed the examination regardless of the number of attempts</td>
<td>95</td>
</tr>
</tbody>
</table>
### Student Graduation Rate

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Number of Students Graduating from Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-2017</td>
<td>9</td>
</tr>
<tr>
<td>2017-2018</td>
<td>8</td>
</tr>
<tr>
<td>2018-2019</td>
<td>6</td>
</tr>
<tr>
<td>3 Year Aggregate</td>
<td>23</td>
</tr>
</tbody>
</table>

*Graduation rate for all three years is 100%.

### Student Employment/Placement Rate 2016-2017

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Number of Students Employed as AT</th>
<th>Student Employment/Placement Rate as AT (%)</th>
<th>Number of Students Employed as “Other”</th>
<th>Student Employment/Placement Rate as “Other” (%)</th>
<th>Number of Students Not Employed</th>
<th>Students Not Employed Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-2017</td>
<td>7</td>
<td>78</td>
<td>2</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2017-2018</td>
<td>6</td>
<td>75</td>
<td>1</td>
<td>12</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>2018-2019</td>
<td>2</td>
<td>33</td>
<td>2</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Three-Year Aggregate

<table>
<thead>
<tr>
<th>Number of Students Employed as AT</th>
<th>Student Employment/Placement Rate as AT (%)</th>
<th>Number of Students Employed as “Other”</th>
<th>Student Employment/Placement Rate as “Other” (%)</th>
<th>Number of Students Not Employed</th>
<th>Students Not Employed Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>65</td>
<td>5</td>
<td>22</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Retention Rates

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Number of Students Beginning of Program (cohort #)</th>
<th>Number of Students Returning for Subsequent Year 2</th>
<th>Program Retention Rate (%)</th>
<th>Number of Students Returning of Subsequent Year 3 (if applicable)</th>
<th>Program Retention Rate (%)</th>
<th>Number of Students Returning of Subsequent Year 4 (if applicable)</th>
<th>Program Retention Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-2017</td>
<td>11</td>
<td>5</td>
<td>45</td>
<td>4</td>
<td>80</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>2017-2018</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2018-2019</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Transfer student graduated a year early.

### Three-Year Aggregate

<table>
<thead>
<tr>
<th>Number of Students Beginning of Program (cohort #)</th>
<th>Number of Students Returning for Subsequent Year 2</th>
<th>Program Retention Rate (%)</th>
<th>Number of Students Returning of Subsequent Year 3 (if applicable)</th>
<th>Program Retention Rate (%)</th>
<th>Number of Students Returning of Subsequent Year 4 (if applicable)</th>
<th>Program Retention Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>5</td>
<td>45</td>
<td>4</td>
<td>80</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>
Number of Students Returning of Subsequent Year 3 (if applicable) 4
Program Retention Rate (%) 80
Number of Students Returning of Subsequent Year 4 (if applicable) 3*
Program Retention Rate (%) 100

Curriculum
An Ignatian Foundation
All undergraduate students must complete either the Canisius Core Curriculum (http://catalog.canisius.edu/undergraduate/academics/curricular-information/core-curriculum/) or the All-College Honors Curriculum (http://catalog.canisius.edu/undergraduate/academics/curricular-information/all-college-honors-program/). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives
Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 114 &amp; 114L</td>
<td>Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIO 115 &amp; 115L</td>
<td>Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>ATH 170</td>
<td>Emergency Care and Introduction to Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>HED 115</td>
<td>Basic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HED 205</td>
<td>Wellness and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>KIN 235</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KIN 336 &amp; 336L</td>
<td>Physiology of Exercise and Physiology of Exercise Lab</td>
<td>4</td>
</tr>
<tr>
<td>ATH 132</td>
<td>Practicum in Athletic Training</td>
<td>2</td>
</tr>
<tr>
<td>ATH 231</td>
<td>Practicum in Athletic Training</td>
<td>1</td>
</tr>
<tr>
<td>ATH 232</td>
<td>Practicum in Athletic Training</td>
<td>1</td>
</tr>
<tr>
<td>ATH 261 &amp; 261L</td>
<td>Diagnosis of Injuries/Ilnesses I and Diagnosis of Injuries/Ilnesses Lab</td>
<td>4</td>
</tr>
<tr>
<td>ATH 262 &amp; 262L</td>
<td>Diagnosis of Injuries/Ilnesses II and Diagnosis of Injuries/Ilnesses II Lab</td>
<td>4</td>
</tr>
<tr>
<td>ATH 300</td>
<td>General Medical Diagnostics and Interventions</td>
<td>3</td>
</tr>
<tr>
<td>ATH 309</td>
<td>Pathophysiology and Pharmacology for Athletic Trainers</td>
<td>3</td>
</tr>
<tr>
<td>ATH 331 &amp; 331L</td>
<td>Practicum in Athletic Training</td>
<td>1</td>
</tr>
<tr>
<td>ATH 332</td>
<td>Practicum in Athletic Training</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATH 342 &amp; 342L</td>
<td>Therapeutic Modalities and Therapeutic Modalities Lab</td>
<td>4</td>
</tr>
<tr>
<td>ATH 343 &amp; 343L</td>
<td>Therapeutic Exercise and Therapeutic Exercise Lab</td>
<td>4</td>
</tr>
<tr>
<td>ATH 361</td>
<td>Psychology of Sport and Mental Health</td>
<td>3</td>
</tr>
<tr>
<td>ATH 372</td>
<td>Health Issues for Athletic Trainers</td>
<td>3</td>
</tr>
<tr>
<td>ATH 398</td>
<td>Statistics and Research Design</td>
<td>3</td>
</tr>
<tr>
<td>ATH 431</td>
<td>Practicum in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>ATH 482</td>
<td>Administration of Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>ATH 498</td>
<td>Internship in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

Roadmap

Freshman
Fall
BIO 114 & 114L
ATH 170
FYS 101
ENG 101
PHI 101
RST 101

Spring
BIO 115 & 115L
ATH 132
Core
Core
Core
Core

Sophomore
Fall
ATH 231 & 232
ATH 261 & 261L
ATH 342 & 342L
KIN 235
Core
Core
Core

Spring
ATH 232
KIN 336 & 336L
ATH 309 & 309L
ATH 331 & 331L
ATH 372 & 372L
Core
Core
Core
Core
Core
Core

Junior
Fall
ATH 331 & 331L
ATH 309 & 309L
ATH 331 & 331L
ATH 372 & 372L
Core
Core
Core
Elective
Elective

Spring
ATH 431 & 431L
ATH 309 & 309L
ATH 331 & 331L
ATH 372 & 372L
Core
Core
Elective
Elective

Senior
Fall
ATH 482 & 482L
ATH 498 & 498L
Core
Core
Elective
Elective

Spring
ATH 431 & 431L
ATH 309 & 309L
ATH 331 & 331L
ATH 372 & 372L
Core
Core
Elective
Elective
Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – Observed in Writing)
Candidates in the Athletic Training program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.
Students will:
• Demonstrate knowledge of how to prevent injury and manage risk of injuries/illnesses
• Recognize the nature and diagnosing extent of injuries/illness
• Demonstrate knowledge of acute injuries/illnesses
• Demonstrate knowledge of athletic training practice in various practice settings, or post professional education programs

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)
Candidates in the Athletic Training program will demonstrate professional skills and dispositions necessary for successful performance in their field.
Students will:
• Recognize the nature and diagnosing extent of injuries/illness
• Manage acute injuries/illnesses
• Implement treatment and rehabilitation protocols and reconditioning programs

Learning Goal 3 (SERVICE)
Candidates in the Athletic Training program will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.
Students will:
• Identify cultural and diversity awareness in patient populations

Learning Goal 4 (PROFESSIONALISM)
Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.
Students will:
• Use self-reflection to assess and refine professional practice

Learning Goal 5 (LEADERSHIP)
Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Minor

- Strength and Conditioning Minor (http://catalog.canisius.edu/undergraduate/school-education-human-services/health-wellness/#minorstext)

The Strength and Conditioning minor is common minor for athletic training students, human services major and physical education majors, although it is open to any student with the prerequisites. The minor provides students with preparation for the fields of strength and conditioning, wellness, and for related graduate work. It also helps students prepare for specialty certifications through the American College of Sports Medicine, the National Strength and Conditioning Association and the National Academy of Sports Medicine. Strength and conditioning courses have specific prerequisites, which are stated in the course descriptions.

Admission to the Strength and Conditioning minor is competitive due to a limited number of student slots available and is based on skills and knowledge competencies acquired in BIO 114 and lab, BIO 115 and lab, and KIN 235. Each course must be completed with a grade of C (2.0) or higher. The applicant must attain a minimum C (2.0) cumulative GPA in these five courses and an overall college GPA of C (2.0) or higher. Majors from other departments are eligible for selection by meeting the above requirements. Students interested in the Strength and Conditioning minor at Canisius College must complete a Change of Major/Minor form. Application for the minor must be completed following enrollment in KIN 235.

Courses

ATH 132 Practicum in Athletic Training 2 Credits
Didactic and psychomotor skill instruction with practical examinations.
Examinations are an integral portion of the acceptance criteria for the program.
Prerequisite: minimum grade of C in ATH 231.
Offered: spring 2017 only.

ATH 170 Emergency Care and Introduction to Athletic Training 3 Credits
Recognition and immediate care of common illnesses and injuries.
Introduction to the profession of Athletic Training.
Offered: fall 2016 Only.

ATH 231 Practicum in Athletic Training 1 Credit
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 132. Restriction: acceptance into the athletic training education program.
Offered: fall.

ATH 232 Practicum in Athletic Training 1 Credit
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 231.
Offered: spring.

#minorstext
ATH 261 Diagnosis of Injuries/Illnesses I
Theoretical, practical, empirical study of lower extremity, lumbar spine diagnosis and associated illnesses.
Prerequisite: minimum grade of C in ATH 132. Corequisite: ATH 231 & ATH 261L.
Offered: fall.

ATH 261L Diagnosis of Injuries/Illnesses Lab
Laboratory to accompany ATH 261.
Offered: fall.

ATH 262 Diagnosis of Injuries/Illnesses II
Theoretical, practical, empirical study of upper extremity, thorax, head and cervical spine diagnosis and associated illnesses.
Prerequisite: minimum grade of C in both ATH 231 & ATH 261. Corequisite: ATH 232 & ATH 262L.
Offered: spring.

ATH 262L Diagnosis of Injuries/Illnesses II Lab
Laboratory to accompany ATH 262.
Offered: spring.

ATH 300 General Medical Diagnostics and Interventions
Theoretical, practical, empirical study of general medical conditions, commonly used diagnostics and interventions for the athletic trainer.
Prerequisite: minimum grade of C in both ATH 231 & ATH 261.
Offered: spring of even-numbered years.

ATH 309 Pathophysiology and Pharmacology for Athletic Trainers
Discussion of the physiologic changes that occur following injuries and illness. Discussion of indications, contraindications and legal issues regarding medications used in the management of athletic injuries.
Corequisite: ATH 231 or ATH 331.
Offered: fall of even numbered years.

ATH 331 Practicum in Athletic Training
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 232.
Offered: fall.

ATH 332 Practicum in Athletic Training
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 331.
Offered: spring.

ATH 342 Therapeutic Modalities
Therapeutic modality use in treatment of orthopedic injuries. Physiology, physiological effects, rationale and application of modalities in health care of patients. Practical examinations.
Prerequisite: minimum grade of C in ATH 132. Corequisite: ATH 231 & ATH 342L.
Offered: fall.

ATH 342L Therapeutic Modalities Lab
Laboratory to accompany ATH 342.
Corequisite: ATH 342.
Offered: fall.

ATH 343 Therapeutic Exercise
Contemporary exercise and clinical intervention techniques used in the management of orthopedic injuries. Biomechanics, physiological effects, rationale and application of exercise techniques and devices. Practical examination.
Prerequisite: minimum grade of C in KIN 235. Corequisite: ATH 232 & ATH 343L.
Offered: spring.

ATH 343L Therapeutic Exercise Lab
Laboratory to accompany ATH 343.
Corequisite: ATH 343.
Offered: spring.

ATH 361 Psychology of Sport and Mental Health
This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete’s ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

ATH 372 Health Issues for Athletic Trainers
Current content and practices related to personal, school and community health as it relates to the management of injury and illness.
Offered: fall of odd numbered years.

ATH 398 Statistics and Research Design
Application and interpretation of descriptive and inferential statistics Library search techniques and research design as related to evidence based practice. Includes the use of statistical software, data collection, and creation and presentation of a research poster.
Prerequisite: minimum grade of C in KIN 235.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall & spring.

ATH 431 Practicum in Athletic Training
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in KIN 235.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall & spring.

ATH 482 Administration of Athletic Training
Theoretical, practical and empirical study of administrative requirements of the athletic trainer relative to facility design, duties, liability, drug testing, nomenclature and injury epidemiology.
Prerequisite: minimum grade of C in both ATH 231 & ATH 261.
Offered: spring of even-numbered years.
ATH 498 Internship in Athletic Training 3 Credits
Field-based experience in athletic training or related health care field. Requires 150 clock hours over twelve weeks.
Prerequisites: ATH 331 grades of C or above, Permission of Chair then Associate Dean. Fall/Spring/Summer