ATHLETIC TRAINING (BS)
The information below only pertains to students that enrolled at Canisius in fall 2016 or earlier. Students will not be able to enroll or change into this major after fall 2016.

Co-Chairs: Nicholas Lorgnier and Shawn O’Rourke
Director: Peter Koehneke

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.

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.

Dual Majors
Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

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. http://www.canisius.edu/athletic-training/.

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.

Curriculum
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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 more but not less than 120 credit hours. Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation.

Major Requirements

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 114 &amp; 114L</td>
<td>Human Biology: Introduction to Human Anatomy and Physiology</td>
<td>4</td>
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<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
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<tr>
<td>BIO 115 &amp; 115L</td>
<td>Musculoskeletal Anatomy and Physiology Laboratory</td>
<td>4</td>
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<tr>
<td>ATH 170</td>
<td>Emergency Care and Introduction to Athletic Training</td>
<td>3</td>
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<tr>
<td>HED 115</td>
<td>Basic Nutrition</td>
<td>3</td>
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<tr>
<td>HED 205</td>
<td>Wellness and Fitness</td>
<td>3</td>
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<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>
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<tr>
<td>ATH 231</td>
<td>Practicum in Athletic Training</td>
<td>1</td>
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<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/Illnesses I and Diagnosis of Injuries/Illnesses Lab</td>
<td>4</td>
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<tr>
<td>ATH 262 &amp; 262L</td>
<td>Diagnosis of Injuries/Illnesses II and Diagnosis of Injuries/Illnesses II Lab</td>
<td>4</td>
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<tr>
<td>ATH 300</td>
<td>General Medical Diagnostics and Interventions</td>
<td>3</td>
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<tr>
<td>ATH 309</td>
<td>Pathophysiology and Pharmacology for Athletic Trainers</td>
<td>3</td>
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<tr>
<td>ATH 331</td>
<td>Practicum in Athletic Training</td>
<td>1</td>
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<tr>
<td>ATH 332</td>
<td>Practicum in Athletic Training</td>
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<tr>
<td>ATH 342 &amp; 342L</td>
<td>Therapeutic Modalities and Therapeutic Modalities Lab</td>
<td>4</td>
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<tr>
<td>ATH 343 &amp; 343L</td>
<td>Therapeutic Exercise and Therapeutic Exercise Lab</td>
<td>4</td>
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<tr>
<td>ATH 361</td>
<td>Psychology of Sport and Mental Health</td>
<td>3</td>
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<tr>
<td>ATH 372</td>
<td>Health Issues for Athletic Trainers</td>
<td>3</td>
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<tr>
<td>ATH 398</td>
<td>Statistics and Research Design</td>
<td>3</td>
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<tr>
<td>ATH 431</td>
<td>Practicum in Athletic Training</td>
<td>3</td>
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<tr>
<td>ATH 482</td>
<td>Administration of Athletic Training</td>
<td>3</td>
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<tr>
<td>ATH 498</td>
<td>Internship in Athletic Training</td>
<td>3</td>
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**Total Credits** 70

### 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

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### Roadmap

#### Additional Course Considerations

Athletic Training majors should consult their advisor for additional course considerations.

#### Recommended Semester Schedule for Major Course Requirements:

**Freshman**

**Fall**
- BIO 114 & 114L
- ATH 170
- FYS 101
- PHI 101
- Core

**Spring**
- BIO 115 & 115L
- ATH 132
- ENG 101
- RST 101
- Core

**Sophomore**

**Fall**
- ATH 231
- ATH 261 & 261L

**Spring**
- ATH 232
- ATH 262 & 262L

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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

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<tr>
<th>Course Description</th>
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<tr>
<td>ATH 132 Practicum in Athletic Training</td>
<td>2</td>
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| 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 both BIO 114 & BIO 114L, and minimum overall GPA of 2.0. **Offered:** spring 2017 only.

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<th>Course Description</th>
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<tr>
<td>ATH 170 Emergency Care and Introduction to Athletic Training</td>
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| Recognition and immediate care of common illnesses and injuries. Introduction to the profession of Athletic Training. **Offered:** fall 2016 Only.

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<tr>
<th>Course Description</th>
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<tr>
<td>ATH 231 Practicum in Athletic Training</td>
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| 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.

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<tr>
<td>ATH 232 Practicum in Athletic Training</td>
<td>1</td>
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| 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.

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<tr>
<td>ATH 261 Diagnosis of Injuries/Illnesses I</td>
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| 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.

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<tr>
<td>ATH 261L Diagnosis of Injuries/Illnesses Lab</td>
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| Laboratory to accompany ATH 261. **Offered:** fall.

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<th>Course Description</th>
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<tbody>
<tr>
<td>ATH 262 Diagnosis of Injuries/Illnesses II</td>
<td>3</td>
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| 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.

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<tr>
<td>ATH 262L Diagnosis of Injuries/Illnesses II Lab</td>
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| Laboratory to accompany ATH 262. **Offered:** spring.

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<tr>
<th>Course Description</th>
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<tr>
<td>ATH 300 General Medical Diagnostics and Interventions</td>
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| 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.

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<th>Course Description</th>
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<tr>
<td>ATH 309 Pathophysiology and Pharmacology for Athletic Trainers</td>
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| 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 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 232.
Offered: fall.

ATH 332 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 331.
Offered: spring.

ATH 342 Therapeutic Modalities 3 Credits
Therapeutic modality use in treatment of orthopedic injuries. Physics, 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 1 Credit
Laboratory to accompany ATH 342. Corequisite: ATH 342.
Offered: fall.

ATH 343 Therapeutic Exercise 3 Credits
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 1 Credit
Laboratory to accompany ATH 343. Corequisite: ATH 343.
Offered: spring.

ATH 361 Psychology of Sport and Mental Health 3 Credits
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 398 Statistics and Research Design 3 Credits
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 3 Credits
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. Restriction: acceptance into the athletic training education program.
Offered: fall.

ATH 482 Administration of Athletic Training 3 Credits
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