## EXERCISE SCIENCE

### What can I do with this major?

### AREAS

<table>
<thead>
<tr>
<th>PHYSICAL FITNESS</th>
<th>ATHLETIC TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise Physiology</td>
<td>Performance Enhancement/Management</td>
</tr>
<tr>
<td>Personal Training</td>
<td>Strength &amp; Conditioning Coaching</td>
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<tr>
<td>Performance Enhancement/Management</td>
<td>Biomechanics</td>
</tr>
<tr>
<td>Strength &amp; Conditioning Coaching</td>
<td>Consultation</td>
</tr>
</tbody>
</table>

### EMPLOYERS

- Health clinics
- Fitness centers
- Retirement centers
- Nursing homes
- Daycare centers
- Correctional facilities
- Resorts
- Camps and park districts
- Cruise lines
- Community centers
- Rehabilitation centers
- Healthcare programs: Clinical, Industrial, Corporate
- Sports facilities
- Individual athletes
- Self employed

- High schools
- Colleges and universities
- Health clinics
- Sports medicine clinics
- Fitness centers
- Retirement centers
- Nursing homes
- Resorts
- Cruise lines
- Community centers
- Rehabilitation centers
- Healthcare programs: Clinical, Industrial, Corporate
- Professional sports teams
- Private sports organizations
- Sports facilities
- Individual athletes
- Private or group practice

### STRATEGIES

- Maintain up to date knowledge of trends in fitness and safety practices.
- Obtain necessary certification in addition to CPR certification.
- Develop computer skills and familiarity with technology used in the field.
- Maintain excellent personal fitness and athletic proficiency.
- Volunteer at a gym or fitness facility to gain familiarity with methods of fitness instruction.
- Remain calm under pressure and maintain a positive, outgoing personality.
- Develop excellent interpersonal skills for working with clients, coaches, and team physicians.
- Volunteer to work with college or high school sport teams or lead exercise programs for local, non-profit organizations.

Certified Athletic Trainers must earn a degree from an accredited institution. 70% of Athletic Trainers hold a master's degree or higher. Obtain certification through the National Athletic Trainers' Association. Athletic training is not the same as personal training. Develop communication and decision making skills and the ability to work well under pressure. Demonstrate ability to establish close and trusting relationships with others. Be willing to work long and irregular hours and travel with sport teams. Build your reputation in smaller programs to move up. Obtain an internship or part-time job with a sports team, athletic organization, or fitness facility. Join fitness oriented associations and organizations. Volunteer to work with college or high school sports teams, or to run exercise programs for non-profit organizations.
### STRATEGIES EMPLOYERS AREAS

#### PHYSICAL THERAPY
**Clinical Practice:**
- Acute care
- Neuro-rehab
- Out-patient
- Management
- Education
- Research
- Consultation

**Specialties Include:**
- Pediatrics
- Geriatrics
- Sports Medicine
- Orthopedics
- Neurology
- Cardiopulmonary

**Employers:**
- Hospitals
- Clinics
- Home healthcare agencies
- Nursing homes
- Sports medicine facilities
- Rehabilitation centers
- Doctors' offices, particularly orthopedic
- Schools
- Health clubs and fitness centers
- Group or private practices
- Universities and colleges
- Federal and state government:
  - Armed Forces
  - Public Health Service
  - Veterans Administration

**Strategies:**
- Obtain knowledge of several basic sciences including anatomy, physiology, biology, chemistry, and physics.
- Attain superior grades in pre-physical therapy course work due to intense competition for admittance to physical therapy programs.
- Volunteer for a physical therapist in a hospital or clinic to gain experience and improve chances of acceptance into a program.
- Develop strong interpersonal and communication skills. Must possess patience and a desire to help individuals of all ages with disabilities. A positive attitude is important when working with patients.
- Manual dexterity and physical stamina are important in succeeding in physical therapy work.
- Earn a master's degree or doctorate in physical therapy from a program accredited by the American Physical Therapy Association.
- All states require licensure which includes passing an examination.
- Obtain a doctoral degree for teaching and research positions.
- Some physical therapists specialize in an area after gaining several years of general experience.

#### OCCUPATIONAL THERAPY
**Screening**

**Evaluation**

**Treatment:**
- Physical
- Psychosocial
- Social
- Vocational

**Follow-up**

**Administration**

**Teaching**

**Research**

**Employers:**
- Hospitals (including psychiatric and rehabilitative)
- Schools
- Group or private practice
- Nursing homes
- Community mental health centers
- Adult daycare programs
- Job training centers
- Residential care providers
- Out-patient rehabilitation facilities
- Home healthcare agencies
- Federal and state government:
  - Armed Forces
  - Public Health Service
  - Veterans Administration
- Universities and colleges

**Strategies:**
- Build a solid foundation in physical, biological, and behavioral sciences.
- Develop excellent communication skills which are important when interacting with patients and their families.
- Volunteer in an occupational therapy or related healthcare setting to experience the field first-hand and improve chances of program admittance.
- Individuals working in occupational therapy should possess patience and a true interest in helping people with disabilities reach their full potential.
- Learn to work well within a team. O.T.’s work with many other professionals in the rehabilitation of patients.
### OCCUPATIONAL THERAPY Continued

- **Strategies**
  - Earn a master’s (MOT, MA, MS) or doctoral (OTD, less common) degree in occupational therapy to gain entry in the field.
  - Doctoral degree is often preferred for university teaching and administrative positions.
  - All states regulate O.T. licensure. Requirements include passing a certification exam given by the American Occupational Therapy Certification Board and a supervised clinical internship. Those who have passed the exam become Occupational Therapists Registered (OTR).
  - Occupational therapists may choose to specialize in a particular age group or type of disability.

### EDUCATION

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<tr>
<th>Areas</th>
<th>Employers</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Colleges and universities</td>
<td>Develop strong computer, mathematics, science and both written and oral communication skills.</td>
</tr>
<tr>
<td>Teaching</td>
<td>Athletic associations</td>
<td>Obtain teaching or instructional experience through volunteering or internships.</td>
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<tr>
<td>Assessment &amp; Evaluation</td>
<td>Research facilities</td>
<td>Seek opportunities to join faculty in research projects to gain experience.</td>
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<tr>
<td>Program Development</td>
<td></td>
<td>Join related student and professional organizations. Acquire a master’s degree for community college teaching and a Ph.D. for colleges and universities.</td>
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### BUSINESS

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<th>Strategies</th>
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<tbody>
<tr>
<td>Product Development</td>
<td>Sporting goods manufacturers</td>
<td>Develop outstanding communication skills, written and oral.</td>
</tr>
<tr>
<td>Program Development</td>
<td>Exercise equipment manufacturers</td>
<td>Take additional courses in marketing, advertising, and public relations.</td>
</tr>
<tr>
<td>Biomechanics</td>
<td>Sports facilities</td>
<td>Gain experience with public speaking and sales.</td>
</tr>
<tr>
<td>Sales:</td>
<td>Health clubs and fitness centers</td>
<td>Obtain a part-time job or internship in the areas of wholesaling or retail.</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>Pharmaceutical companies</td>
<td>Build relationships with coaches, athletic directors, and college equipment/uniform representatives.</td>
</tr>
<tr>
<td>Healthcare</td>
<td>Hospitals</td>
<td>Consider working with manufacturers of exercise equipment or nutritional supplements to learn more about the field and make contacts.</td>
</tr>
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<td>Sport &amp; Fitness</td>
<td>Clinical and corporate healthcare programs</td>
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There are many different ways to work within the health and fitness industry. Identify a particular area of interest and then seek to gain the best combination of educational preparation, experience, and skills because requirements will vary by field.

Most careers in these fields require professional certification. Though many entry-level positions may be obtained with an undergraduate degree, most will require additional clinical experiences and a graduate or professional degree.

Given the growing number of aging adults, many positions available in these areas will involve working with the elderly.

Join professional associations. Read their publications and attend their meetings, seminars, and conventions to learn more about the field and make contacts.

Get involved with local sport teams, intramurals, or recreational programs and facilities. Seek leadership roles, manage equipment and facilities, or plan events.

Look for jobs in the minor leagues as a way to enter the sport industry.

Fitness communication is also a growing field offering opportunities to write, research, and report on health and fitness related topics for newspapers, magazines, and websites. If interested in this area, take supplemental course work in English, journalism or broadcasting and seek opportunities to volunteer with local or campus newspapers or television/radio stations.

Earn a graduate or professional degree for increased opportunities.

Maintain excellent personal fitness and athletic proficiency.

Learn to relate well to people with varying personalities and backgrounds.

An undergraduate degree in exercise science offers excellent preparation and meets many pre-requisites for a variety of pre-professional programs in the field of healthcare. Meet with a pre-health advisor to identify any additional prerequisites for entry into a particular graduate school.

GENERAL INFORMATION
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