Health Professions:
Physical Therapy

- Overview of Profession
- Pre-Requisites
- Application Process Timeline
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Overview of Profession:
(source: www.bls.gov)

1. **Overview:**
   - Physical therapists are healthcare professionals who diagnose and treat individuals of all ages, from newborns to the very oldest, who have medical problems or other health-related conditions, illnesses, or injuries that limits their abilities to move and perform functional activities as well as they would like in their daily lives.
   - They examine each individual and develop a plan using treatment techniques to promote the ability to move, reduce pain, restore function, and prevent disability.
   - They work with individuals to prevent loss of mobility before it occurs by developing fitness and wellness-oriented programs for healthier and more active lifestyles.

2. **Working Conditions:**
   - They practice in hospitals, outpatient clinics, and private offices that have specially equipped facilities.
   - In 2008, most full-time PT's worked a 40-hour week; some worked evenings and weekends to fit their patients' schedules.
   - About 27% worked part-time.

3. **Earnings:**
   - Median annual wages were $72,790 in May 2008.
   - The middle 50% earned between $60,300 and $85,540. The average earnings in June 2012 was $68,000.
   - The lowest 10% earned less than $50,350, and the highest 10% earned more than $104,350.

4. **Job Outlook:**
   - Employment is expected to grow by 30% from 2008 to 2018, much faster than the average for all occupations.
Changes to restrictions on reimbursement for physical therapy services by third-party payers will increase patient access to services and, thus, increase demand.

The increasing elderly population will drive growth in the demand for physical therapy services.

Job opportunities will be good for licensed physical therapists in all settings.

Job opportunities are particularly good in acute hospital, skilled nursing, and orthopedic settings, where the elderly are most often treated.

Job prospects should be especially favorable in rural areas, because many physical therapists tend to practice in highly populated urban and suburban areas.

5. **Employment:**

- About 60% work in hospitals or in offices of other health practitioners.
- Other jobs are found in the home healthcare services industry, nursing care facilities, outpatient care centers, and offices of physicians.
- Some are self-employed in private practices, seeing individual patients and contracting to provide services in hospitals, rehabilitation centers, nursing care facilities, home healthcare agencies, adult day care programs, and schools.
- Physical therapists also teach in academic institutions and conduct research.

**Pre-Requisites:**

The table at the bottom shows the courses that are most commonly completed by UC Santa Cruz Students to fulfill Physical Therapy school pre-requisites. The Career Center recommends that students complete the courses sequenced listed in this table.

**NOTE:** The PT school pre-requisites can differ slightly from school to school. It is important to look at the coursework required for each school you wish to apply to. A good resource to find the pre-requisite coursework is through the Physical Therapist Centralized Application Service online.
<table>
<thead>
<tr>
<th>Course Subject</th>
<th># Quarters</th>
<th>UCSC course sequences most students use to fulfill requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry</td>
<td>Nearly all schools require 3 quarters of general (inorganic) chemistry, each with laboratory</td>
<td>Chem 1A, Chem 1B/ M and Chem 1C/N</td>
</tr>
<tr>
<td>General Biology</td>
<td>Nearly all schools require 3 quarters of general biology, with laboratory</td>
<td>Biol 20A, Bioe20B, and Bioe20C and three upper-division labs* since UCSC doesn't offer lab with its 20 series.</td>
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<tr>
<td></td>
<td></td>
<td>*Common labs used to fulfill the 1-year of lab are: Biol 20L, Bio 100K, Biol 130L, etc</td>
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<tr>
<td>Statistics</td>
<td>Nearly all schools require 1 quarter of a statistics course</td>
<td>AMS 5, AMS 7/L, Psych 2, etc.</td>
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<tr>
<td>Physics</td>
<td>Nearly all schools require 3 quarters of physics, each with laboratory</td>
<td>Phys 6A/L, Phys 6B/M, and Phys 6C/N</td>
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<td></td>
<td></td>
<td>Or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys 5A/L, Phys 5B/M, Phys 5C/N</td>
</tr>
<tr>
<td>Human Anatomy</td>
<td>All schools require 1 quarter of an anatomy course, with laboratory</td>
<td>Biol 135/L</td>
</tr>
<tr>
<td>Human Physiology</td>
<td>All schools require 1 quarter of an human physiology course, with laboratory</td>
<td>Biol 130/L</td>
</tr>
<tr>
<td>Exercise Physiology</td>
<td>Some schools require 1 quarter of exercise physiology</td>
<td>Bioe 133*</td>
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<tr>
<td></td>
<td></td>
<td>*Not offered every year</td>
</tr>
<tr>
<td>English Composition</td>
<td>Some schools require 2 or 3 quarters of English Composition</td>
<td>Courses that satisfy the Core Courses and Composition requirements at UCSC will fulfill two quarters of the medical school English coursework requirements for most schools. An additional course in Literature will usually satisfy the remaining quarter.*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Save your course syllabi in case any schools express concern that you did not</td>
</tr>
<tr>
<td>Psychology</td>
<td>Nearly all schools require 1 quarter of an introductory psychology course.</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td></td>
<td>Nearly all schools require an additional course in psychology</td>
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<tr>
<td>Speech</td>
<td>Some schools require 1 quarter of a speech, oral communication or public speaking course</td>
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<tr>
<td>Medical Terminology</td>
<td>Some schools require 1 quarter of a medical terminology course</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>Some schools require 1 quarter of a nutrition course</td>
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</tbody>
</table>

**Application Process Timeline:**

1. **PTCAS**
   - The Physical Therapy Centralized Application Service is a web-based application that applicants can use to apply to programs that subscribe to PTCAS.
   - Not all programs subscribe to PTCAS. To apply to these programs, applicants must apply directly to each program.

2. **Prior to applying:**
   - Consider these factors when deciding upon where to apply:
     - Option for a DPT or MPT degree
     - Location
     - Cost
     - Size
     - Licensure exam passage rates
     - Faculty interests and reputation
     - Job placement history of program graduates.
     - Talk with recent PT graduates, as well as ask PT employers about various programs’ strengths and weaknesses.
   - Research each program you wish to apply to before submitting your application.
     - Admission requirements
     - Pre-requisite coursework
     - Deadlines
     - Amount and preferences for letters of recommendations
   - Register and take GRE before end of July, of the year you are applying
   - Write your personal statement
   - Develop a resume of activities and accomplishments
- Request your transcripts
- Arrange letters of evaluation
- In addition to California programs, consider applying to some public or private schools outside of California that accept many (20+) non-resident or non-contract state applicants.

3. **Early June:**
   - PTCAS application cycle begins
     - APPLY EARLY! Many PT programs have multiple deadline dates (i.e., preferred, priority, or early decision) or operate on a rolling admissions process.
   - PTCAS application cycle will officially close in June the following year.

4. **October - February:**
   - Deadlines to complete PTCAS application
   - Deadlines indicate when your materials must arrive at PTCAS (and not at the program). You should e-submit your application as soon as it’s complete and NOT wait for PTCAS to receive all of your transcripts or references.

5. **Fall**
   - Begin PT school

**Admission Exam:**

1. **Overview of Graduate Record Exam (GRE):**
   - All U.S. PT schools require applicants to submit GRE exam scores.
   - Approximately a 4 hour standardized multiple-choice computerized-based exam.
   - Scores are usually available 10 to 15 days after completion of the exam.
   - No GRE scores older than five years will be accepted.
   - **Sections**
     - Verbal Reasoning - Measures your ability to analyze and evaluate written material and synthesize information obtained from it, analyze relationships among component parts of sentences and recognize relationships among words and concepts.
     - Quantitative Reasoning - Measures problem-solving ability, focusing on basic concepts of arithmetic, algebra, geometry and data analysis.
     - Analytical Writing - Measures critical thinking and analytical writing skills, specifically your ability to articulate and support complex ideas clearly and effectively.
   - **Score:**
     - The Verbal and Quantitative reasoning sections are out of 800 points, for a maximum score of 1600.
     - The Analytical writing section is out of 6.0
     - The maximum score is a 1600 with a 6.0 AWA.
2. **When should students take the GRE?**:
   - You should take the GRE well in advance of applying to PT school but definitely at least one year prior to your intended start date.
   - If students want to go straight into PT school, they will need to take the GRE the summer of their junior year.
   - Students should take the GRE when they can do their best.
     - If they can be preparing for the GRE and be taking courses, and do well in both, then they should do that.
     - If the student will compromise their grades and/or score by doing both at the same time, the student should prepare for the GRE during the summer or after they have graduated.

3. **Dates for exam**:
   - Offered daily

**Additional Requirements**:

1. Most programs require applicants to submit a letter of recommendation from a physical therapist.
2. Many programs require a minimum of 80-200 volunteer hours in physical therapy and/or acute care settings, with some programs encouraging applicants to acquire more than their stated minimum.

**Overview of PT School**:

1. **Overview**:
   - There are two physical therapy program types, both of which currently train students to equal standards of professional competency, lead to this qualification:
     - A 2-year (minimum) entry-level master of physical therapy (MPT) program.
     - California programs include California State Universities at Fresno, Long Beach, Northridge, Sacramento, and the joint San Francisco State/UCSF program.
     - A 3-year (minimum) entry-level doctor of physical therapy (DPT) program.
     - California programs include Chapman, USC, Loma Linda, Mt. Saint Mary’s College, Azusa Pacific, Samuel Merritt College, University of the Pacific, Western University of Health Sciences, and a new San Diego branch of the University of St. Augustine for Health Sciences.
   - There are 212 physical therapy education programs in the United States, and 14 in California.
   - The current trend with the field is for MPT programs to transition into DPT programs.
     - The DPT is expected to be the degree of choice for practitioners by 2020.
• PT’s with the MPT degree who want or need to augment their academic and clinical background can enroll in transitional DPT programs.

2. **Education:**
   - Physical therapist education programs include foundational science courses, such as biology, anatomy, physiology, cellular histology, exercise physiology, neuroscience, biomechanics, pharmacology, pathology, and radiology/imaging, as well as behavioral science courses, such as evidence-based practice and clinical reasoning.
   - Some of the clinically-based courses include medical screening, examination tests and measures, diagnostic process, therapeutic interventions, outcomes assessment, and practice management.
   - In addition to classroom and laboratory instruction, students receive supervised clinical experience.
   - DPT programs typically include augmented coursework and more clinical training.
     - Augmented content areas include: differential diagnosis; pharmacology; radiology/imaging; histology; pathology; prevention & wellness; and health care management.
     - This added training is designed to better equip the PT to evaluate, diagnose and treat disabilities of the cardiopulmonary, musculoskeletal and neuromuscular systems.

3. **Licensure and Certification:**
   - All States regulate the practice of physical therapy.
   - Eligibility requirements vary by State. Typical requirements for physical therapists include graduation from an accredited physical therapy education program; passing the National Physical Therapy Examination; and fulfilling State requirements such as jurisprudence exams.
   - A number of States require continuing education as a condition of maintaining licensure.

4. **Specialty:**
   - Some physical therapists become board certified in a clinical specialty.

**Important Websites:**

- Occupational Outlook Handbook
- Explore Health Careers
- Applying to PT School-www.ptcas.org
- Directory of PT Schools-http://www.capteonline.org/Programs/
- PT School Requirements
- Summary of observation hours required per PT program
- American Physical Therapy Association-www.apta.org
- PT Central-www.ptcentral.com
- Physical Therapists. com-www.physicaltherapist.com