

Human Biology

This is a Biology degree option designed to allow “early entry” into Physical Therapy’s DPT program. The following is a suggested schedule of courses for the first three years of study at TWU for students desiring entrance into TWU’s Physical Therapy graduate program.

Freshman Year

Fall		Spring	
Biol 1111, 1113 ⁴ (Principles of Biology I)	4	Biol 1121, 1123 ⁴ (Principles of Biology II)	4
Chem 1111, 1113 (Principles of Chemistry I)	4	Chem 1121, 1123 (Principles of Chem II)	4
Eng 1013 (Composition I)	3	Eng 1023 (Composition II)	3
Math 1303, 1313, or 2014 ¹ (Elem. Analysis I or Calculus)	3	Math 1313 or 2014 (Elem. Analysis II or Calculus)	3
Psy 1013 ² (Intro. Psychology)	3	Psy 1603 (Developmental Psychology)	3
Elective	<u>1</u>	Elective	<u>1</u>
	18		18

Sophomore Year

Fall		Spring	
Zool 2043, 2041 (Anatomy)	4	Bact 3111, 3113 ⁴ (Microbiology)	4
Chem 2211, 2213 (Organic Chemistry I)	4	Chem 3221, 3223 (Organic Chemistry II)	4
Humanities (Lit, Philos or Language)	3	Visual or Performing Arts	3
Hist 1013 (US History I)	3	Hist 1023 (US History II)	3
Math 1013 (Quantitative Literacy)	3	Psy 3303 (Statistics)	3
Elective	<u>2</u>	HS 3032 (Medical Terminology)	<u>2</u>
	19		19

Junior Year

Fall		Spring	
Biol 4811, 4813 Mol/Cell Biol: Gene Exp.) ⁵	4	Zool 4241, 4243 (Mammalian Physiology)	4
HS 3002 (First Aid & CPR)	2	Gov 2023 (Texas Government)	3
Gov 2013 (American Government)	3	Phys 1141, 1143 or 2161, 2163 (Physics)	4
Phys 1131, 1133 or 2151, 2153 (Physics)	4	(Biol 4681 if no oral comm. taken-see below)	(1)
Multicultural Women’s Studies	3	Biology Elective ³	3-4
Elective	<u>3</u>	Elective	<u>4</u>
	19		19

COMPUTER COMPETENCY: Computer Competency must be demonstrated by a satisfactory result on a competency exam or by passing an approved Computer Science course, CSCI 1403 or CSCI 2433.

ORAL COMMUNICATION: One class in the program must fill the oral communication requirement. This may be a speech class or a class in the core, the major or an elective. Biology 4681 will fill this requirement if another suitable class has not been taken.

GLOBAL PERSPECTIVES: All students entering Fall, 2007 or later must take six credit hours that are certified to fulfill the global perspectives requirement. These may be from courses which are also utilized for the minor, or for another core requirement, if desired (they do not have to be "extra" courses).

- 1 Fulfills core requirements for math
- 2 Fulfills core requirement for Social Science
- 3 Zool 3121, 3123 - Neuroanatomy and Neurophysiology is highly recommended as an elective.
- 4 Biology courses that may be taken either Fall or Spring
- 5 This course is offered Fall only and has a prerequisite of Organic Chemistry II. Please plan accordingly.

Note: At least **112 hours including 28 hours of advanced credit** is required before entrance into Physical Therapy. The Bachelor’s Degree is conferred after the completion of the first term at the Physical Therapy clinical center.

This schedule will enable students to meet prerequisite requirements (see below) for early application to physical therapy. Students must also meet all requirements for admission to the Graduate School (please refer to the Graduate Catalog).

Students beginning at TWU may apply for early admission to the Doctor of Physical Therapy program during their junior year at TWU and, if accepted, will be assigned to either the Dallas or Houston campuses. Application to the School of Physical Therapy is a separate process and admission is competitive.

Prerequisites to Graduate Level Course Work in Physical Therapy

1. Two semesters of biology or zoology with laboratory (courses not accepted as meeting these prerequisites are biology for non-science majors, anatomy, physiology, kinesiology, botany and ecology).
2. Two semesters of chemistry with laboratory.
3. Two semesters of physics with laboratory.
4. Two semesters of college mathematics equal to algebra and trigonometry or one semester of calculus.
5. One semester of general psychology.
6. Psy 1603 (lifespan developmental psychology) or equivalent.
7. Statistics - 3 hours.
8. Zool 4243 and 4241 (Physiology with Laboratory).
9. Current certificate in cardiopulmonary resuscitation and first aid.
10. Competency in medical terminology – HS 3032 or equivalent.
11. Competitive scores on the general aptitude test of the Graduate Record Examination.
12. Acceptance by the PT Admissions Committee.

All prerequisite courses must be completed with a grade of “C” or better. In order to apply for admission to graduate level course work, the student must have successfully completed all prerequisites and have a minimum 3.0 GPA in the last 60 hours. Only limited number of students can be accepted due to limited availability of clinical facilities, space, and faculty. Admission is competitive.

Once a student is admitted to the DPT program, she/he will be allowed to count up to 8 hours of course work taken as part of the training for Physical Therapy as biology electives toward the Human Biology undergraduate degree program. Students who are not accepted into physical therapy or who decide in their junior year to switch from the option which prepares them for P.T. graduate work to a regular Biology program will need to complete a total of 36 hours of biological sciences which must include Botany and Biol 4821, 4823 - Molecular and Cellular Biology: Genetics and Inheritance. These students need to discuss their plans with their Biology advisor.