Pre-Physical Therapy Student Guide

PSU Biology

Purpose of the Guide

This guide serve as an orientation for all Pre-Physical Therapy students at PSU, but especially those that are assigned to new advisors due to being newly college-bound, declaring or changing a major, changing the emphasis area within the biology major or transferring to PSU from another institution.

Pittsburg State University Bachelor's of Science in Biology Pre-Physical Therapy Emphasis

A. Introduction

The Biology Department program is a pre-professional program in Physical Therapy. The curriculum includes courses needed to qualify for a BS in Biology and those needed for admission into Physical Therapy Graduate Programs at other universities, including the University of Kansas, Wichita State University, and Missouri State University, just to name a few.

Graduate PT programs require a BS degree, but not necessarily a biology degree. However, since there are many science requirements, it is important to sit down and figure out a schedule that meets the PT course requirements and still graduate in 4 years. For example, the PSU HHPR Department offers a BS degree in Exercise Science. That degree may be modified to meet the PT course requirements and graduation requirements in 4 years.

This is an information and orientation source for college freshmen or transfer students seeking information about Pre-Physical Therapy at PSU as well as for those changing their major to Biology or changing the emphasis area within Biology. Everyone will hopefully get the information needed to be brought up to speed on how to more efficiently proceed through the Bachelor's of Science Degree in Biology with Pre-PT emphasis in the Biology degree program.

General Curriculum Information: Pre-Physical Therapy Curriculum - B.S. in Biology with emphasis in Pre-PT

Students usually select a minor in chemistry, psychology, public health, or physical science (20 hrs). A Physical Science Minor is automatic with our set Pre-PT curriculum. A normal course load is around 16-17 credit hours/semester. The curriculum is a 4-year degree. Freshmen will take one biology course plus one chemistry or physics course per semester to finish the degree in 4 years. Fill in the schedule with General Education Courses, but save a few Gen Ed courses for the end of your degree since you will need to get out of Heckert-Wells Hall occasionally. Transfer students as entering juniors will need to take two biology courses plus chemistry or physics course per semester with most likely one summer to finish the degree in two and a half PSU years. This will be very busy for you since you are doubled-up on the science curriculum to finish on time. Realistically, transfer students can expect to complete the degree in 5 semesters. Keep in mind that mainly lower division courses are offered over the summer, so it may be to your advantage to take summer classes as a freshmen or sophomore!

B. FAQ - About PSU Pre-PT

1. Which catalog do I use?

PSU assigns a catalog year based on when you first took a college-level course. PSU catalogs are now updated digitally annually, so freshmen entering Fall 2017 will probably be assigned the 2017-2018 catalog.

2. Who is my advisor?

The Biology office will assign an advisor to you from Biology faculty who advise pre-PT students: Dr. Peak, Dr. Nonnenmacher, Dr. Schmidt, Dr. Harries, Dr. Brodsky, Dr. Ghosh, and Dr. Chung. GUS will have this information when it is available. Advisors are here for you and provide: help, moral support, letters of recommendation, advice, insight, and guidance.

3. What courses do I take? When do I take them?

Go to our Pre-PT Curriculum page for this information: https://www.pittstate.edu/registrar/catalog/archive/2020-2021/college-of-arts-and-sciences/biology/pre-physical-therapy-emphasis.pdf

4. How do I prepare for enrollment?

If you are planning to enroll here as a new student (either new freshmen or transfer), the Office of Admissions will have that information for you. During the enrollment process, you will meet with a faculty member.

If you are an existing student, then you probably already know the scoop:

- · check your degree audit on GUS and the course schedule for the coming semester
- double-check your curriculum
- · prepare a draft schedule
- sign up for a conference appointment with your advisor
- · show up and discuss things
- · pre-enroll at the designated time
- 5. How do I apply for physical therapy school?

Visit with your academic advisor and attend Pre-PT Orientation events.

- 6. How do I graduate?
 - Do well in your courses!
 - Be sure to have an official degree audit done by the Registrar's Office at the end of your Junior year (85 hours passed).
 - Pay your graduation fees (One more hoop to jump!)

Some suggestions to make your life easier in the Pre-PT Emphasis:

- Freshman entry into Principles of Biology I and II should be with an ACT score of at least 23, otherwise start in General Biology + Lab (BIOL 111/112)
- Anatomy and Physiology + Lab (BIOL 257/258) can be a helpful course in preparation for upper division
 Physiology and upper division Anatomy; it is also a pre-requisite for Kinesiology and Physiology of Exercise
- Biological/Medical Terminology (BIOL 410) is required for WSU, but helpful for everyone.
- Recommended course order for Sophomore/Junior Classes:
 - 1. General Microbiology + Lab (BIOL 371/372)
 - 2. Genetics + Lab (BIOL 322/323)
 - 3. Cell Biology (BIOL 311)
- Biomedical Ethics Course (PHIL 112) or Ethics (PHIL 105) recommended for both KU and Wichita State
 University. Upper division Bioethics class in Biology Department will not count for General Education credit but
 can be useful.
- CPR and First Aid-CPR Certification; watch your re-certification time.
- Human Dissection (BIOL 660) and lowered course load, expect 16-18 hours per week outside of class for dissecting in blocks of 2-3 hours minimum.
- Additional Recommended or Required Prerequisites- This Can Change. Check the curriculum requirements of your intended PT program. This is your responsibility, especially if you go to an out-of-state school.

And Remember to: Contact local PT's for scheduling observation hours and request a form be filled out on the number of hours you observe. KU nor Missouri State require shadowing hours, although they ask you to list relevant PT experience. WSU requires 20 hours of observation in total. Always chart your own observation hours since personnel change jobs and this will make it easier on the person verifying your observation hours for your applications. Get a variety of PT experiences: Critical Care, Geriatrics, Pediatrics, Outpatient, Home Health, School, Sports/Athletic, and Hospice.

Pittsburg State University
Arts and Sciences Program Guide

Pre-Physical Therapy Emphasis

Degree: Bachelor of Science

Major: Biology

Emphasis: Pre-Physical Therapy

Biology Core Requirements (41 hours)

See notes *1

__ BIOL-105 Pre-Health Orientation I (1 hour)

__ BIOL-211 Principles of Biology I (4 hours)

__ BIOL-212 Principles of Biology II (4 hours)

__ BIOL-311 Cell Biology (3 hours)

__ BIOL-322 Genetics (3 hours)

and __ BIOL-323 Genetics Laboratory (2 hours)

BIOL-330 Principles of Ecology (3 hours)

__ BIOL-371 General Microbiology (3 hours)

and __ BIOL-372 General Microbiology Laboratory (2 hours)

BIOL-656 Human Physiology (3 hours)

and __ BIOL-657 Human Physiology Laboratory (2 hours)

__ BIOL-660 Human Anatomy and Dissection (5 hours)

__ BIOL-699 Senior Seminar and Assessment (1 hour)

Notes *1: Plus 5 hours of Biology Electives.

Required from Other Departments (36-38 hours)

__ CHEM-215 General Chemistry I (3 hours)

and __ CHEM-216 General Chemistry I Laboratory (2 hours)

__ CHEM-225 General Chemistry II (3 hours)

and __ CHEM-226 General Chemistry II Laboratory (2 hours)

__ CHEM-320 Introductory Organic Chemistry (3 hours)

and __ CHEM-326 Organic Chemistry I Laboratory (2 hours)

__ HHP-260 First Aid and CPR (2 hours)

__ HHP-464 Physiology of Exercise (3 hours)

__ MATH-122 Plane Trigonometry (3 hours)

or __ MATH-126 Pre-Calculus (4 hours)

or __ MATH-150 Calculus I (5 hours)

PHYS-100 College Physics I (4 hours)

and __ PHYS-130 Elementary Physics Laboratory I (1 hour)

PHYS-101 College Physics II (4 hours)

and __ PHYS-131 Elementary Physics Laboratory II (1 hour)

PSYCH-571 Abnormal Psychology (3 hours)

Plus 5-8 hours of electives. Physical Science minor is included in above hours. Other minors will need more hours. Total hours for Bachelor of Science Degree with a Major in Biology, Pre-Physical Therapy, 120 hours.

Pitt State Pathway Requirements

The following PittState Pathway courses are recommended; MATH 143 Elementary Statistics, CIS 130 Computer Information Systems, and PHIL 105 Ethics or PHIL 112 Biomedical Ethics.

Core Elements (12 hours)

A0 - Written Communications

- __ ENGL-101 English Composition (3 hours)
- __ ENGL-299 Introduction to Research Writing (3 hours)

B0 - Verbal Communication

__ COMM-207 Speech Communication (3 hours)

C0 - Quantitative/Analytic Methods

- __ MATH-110 College Algebra with Review (5 hours)
- __ MATH-113 College Algebra (3 hours)
- __ MATH-126 Pre-Calculus (4 hours)
- __ MATH-133 Quantitative Reasoning (3 hours)
- __ MATH-143 Elementary Statistics (3 hours)
- __ MATH-150 Calculus I (5 hours)
- __ MATH-204 Mathematics for Education I (3 hours)
- PHIL-206 Rational Decisions (3 hours)
- __ PHIL-207 Critical Thinking (3 hours)
- __ PHIL-208 Logic (3 hours)

Essential Studies (23-24 hours minimum)

See notes *2

Notes *2: D-G and cannot be same prefix as major.

D - The Human Experience (3-6 hours)

D1- Diverse Perspectives

- ENGL-113 General Literature (3 hours)
- __ ENGL-114 General Literature (Genre) (3 hours)
- __ ENGL-116 General Literature (Theme) (3 hours)
- __ ENGL-120 Literature and Film (3 hours)
- __ ENGL-250 Introduction to Creative Writing (3 hours)
- __ ENGL-315 Mythology (3 hours)
- __ ENGL-320 Literature and Film (3 hours)

D3 - Non-Verbal and Creative Expression

- __ ART-178 Introduction to the Visual Arts (3 hours)
- __ ART-188 The Designed World (3 hours)
- __ ART-217 Crafts I (3 hours)
- __ ART-222 Jewelry Design I (3 hours)
- ___ ART-233 Drawing I (3 hours)
- __ ART-244 Ceramics I (3 hours)
- __ ART-266 Sculpture I (3 hours)
- __ ART-277 Painting I (3 hours)
- __ ART-288 Introduction to Art History I (3 hours)
- __ ART-289 Introduction to Art History II (3 hours)
- __ ART-311 Art Education (3 hours)
- __ COMM-105 Performance Appreciation (3 hours)
- __ COMM-205 Performance Studies (3 hours)
- __ COMM-395 Theatre History (___) (3 hours)
- __ HHP-151 Dance Appreciation (3 hours)
- __ MUSIC-120 Music Appreciation (____) (3 hours)

MUSIC-121 Introduction to Music Literature (3 hours) F4 - Scientific Inquiry __ MUSIC-321 History of Music (3 hours) BIOL-111 General Biology (3 hours) __ MUSIC-322 History of Music (3 hours) and __ BIOL-112 General Biology Laboratory (2 hours) __ BIOL-113 Environmental Life Science (4 hours) E - Human Systems (9-12 hours) __ BIOL-211 Principles of Biology I (4 hours) CHEM-105 Introductory Chemistry (3 hours) **E0 - No Companion** and __ CHEM-106 Introductory Chemistry Laboratory (1 hour) __ CHEM-215 General Chemistry I (3 hours) __ CIS-130 Computer Information Systems (3 hours) and __ CHEM-216 General Chemistry I Laboratory (2 hours) __ EDUC-261 Explorations in Education (3 hours) PHYS-100 College Physics I (4 hours) EET-247 Computer Programming for Electronic Systems (3 hours) or __ PHYS-104 Engineering Physics I (4 hours) __ MECET-121 Engineering Graphics I (3 hours) __ PHYS-130 Elementary Physics Laboratory I (1 hour) __ MGT-101 Introduction to Business (3 hours) PHYS-160 Physical Geology (3 hours) and __ PHYS-165 Physical Geology Laboratory (1 hour) **E1 - Diverse Perspectives** PHYS-166 Meteorology (3 hours) __ ANTH-101 Introduction to Cultural Anthropology (3 hours) and _ PHYS-167 Meteorology Laboratory (1 hour) __ GEOG-106 World Regional Geography (3 hours) PHYS-171 Physical Science (3 hours) __ GEOG-300 Elements of Geography (3 hours) and PHYS-172 Physical Science Laboratory (1 hour) __ GEOG-304 Human Geography (3 hours) __ PHYS-175 Descriptive Astronomy (3 hours) __ HIST-101 World History to 1500 (3 hours) and __ PHYS-176 Astronomy Laboratory (1 hour) __ HIST-102 World History from 1500 (3 hours) __ PHYS-375 Solar System Astronomy (3 hours) __ HIST-201 American History to 1865 (3 hours) __ HIST-202 American History from 1865 (3 hours) G - Wellness Strategies (4-6 hours) __ MFGET-405 Quality Control (3 hours) __ MLL-124 French Language and Culture I (3 hours) __ MLL-154 Spanish Language and Culture I (3 hours) **G0 - No Companion** PHIL-103 Introduction to Philosophy (3 hours) EXSCI-200 Introduction to Exercise Science (1 hour) PHIL-231 World Religions (3 hours) __ FCS-203 Nutrition and Health (3 hours) __ POLS-103 Comparative Politics (3 hours) __ HHP-150 Lifetime Fitness Concepts (1 hour) __ SOC-100 Introduction to Sociology (3 hours) __ HIST-207 Health Habits in American History (3 hours) __ WGS-399 Global Women's Issues (3 hours) __ REC-350 Promoting Community and Worksite Wellness (3 hours) E2 - Social Responsibility G3 - Non-Verbal and Creative Expression __ ECON-191 Issues in Today's Economy (3 hours) __ DANCE-200 Dance (___) (1-3 hours) __ ECON-200 Principles of Microeconomics (3 hours) __ ECON-201 Principles of Macroeconomics (3 hours) **G4 - Scientific Inquiry** __ EDTH-330 Technology for Teaching and Learning (3 hours) PSYCH-155 General Psychology (3 hours) __ ETECH-502 Engineering Economy (3 hours) __ FCS-230 Consumer Education and Personal Finance (3 hours) H - Gorilla Gateway __ FIN-210 Financial Planning (3 hours) __ GT-190 Introduction to Technological Systems (2 hours) H0 - No Companion __ GT-210 Technology in the World Today (3 hours) __ UGS-150 Gorilla Gateway (2 hours) __ GT-350 Technology and Civilization (3 hours) __ NURS-303 Introduction to Public Health (3 hours) I - Pathway Elective (3 hours) __ PHIL-105 Ethics (3 hours) See notes *3 __ PHIL-112 Biomedical Ethics (3 hours) Notes *3: Elective can be from any D,E,F, or G Essential Studies PHIL-113 Business Ethics (3 hours)

Notes *3: Elective can be from any D,E,F, or G Essential Studies and can be from the same prefix as major or repeat of prefix used in Essential Studies.

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E4 - Scientific Inquiry

__ MFGET-263 Manufacturing Methods I (2 hours) and __ MFGET-268 Manufacturing Methods I Laboratory (1 hour)

__ WGS-200 Introduction to Women's Studies (3 hours)

F - Natural World (4-5 hours)

__ PHIL-114 Environmental Ethics (3 hours)

POLS-101 U.S. Politics (3 hours)

F0 - No Companion

__ BIOL-617 Environmental Health (3 hours)