

Biochemistry/DPT

12 credits in the major and 9 credits in the minor must be completed at Alvernia University

When pursuing a double major, you must have 12 distinct credits between the two majors.

| Semester 1 | Credits | Semester 2 | Credits |
|--|---|---|---|
| Diversity graduation requirement <i>cannot</i> be fulfilled through major courses; students should fulfill this with a Gen Ed class | | | |
| Please check with the Department regarding the Senior Capstone graduation requirement | | | |
| SRH 101: First Year or HNR 160: Search Seminar-Enduring Questions BIO 103: Principles of Biology w/lab CHE 104: General Chemistry I CHE 110: General Chemistry Lab I CHE 107: Laboratory Safety MAT 131 (if needed) or Gen Ed | 3 4 3 1 1 <u>3</u> TOTAL 15 | BIO 221: General Microbiology w/lab CHE 105: General Chemistry II CHE 111: General Chemistry Lab II MAT 230: Calculus I PSY 101 THE 105 or PHI 105 | 4 3 1 4 3 <u>3</u> TOTAL 18 |
| Students should expect to take additional coursework (3-6 credits of Gen Ed) over the summer or winter in order to complete this program. A BS in BIOCHEMISTRY is awarded at the end of the 4th year. The remainder of the DPT curriculum will result in the earning of the DPT. | | | |
| Semester 3 | Credits | Semester 4 | Credits |
| CHE 201: Organic Chemistry I CHE 210: Organic Chemistry Lab I BIO 303: Genetics BIO 309: Molecular Genetics Lab BIO 107/117 (subs for BIO 104) THE 105 or PHI 105 Gen Ed or BIO 409 (if chosen over BIO 304/311; keep in mind that BIO 409 is offered every other year so BIO 409 may need to be taken in Junior Fall semester instead) | 3 1 3 1 4 3 <u>3</u> TOTAL 18 | BIO 108/118 (counts as the BIO/CHE elective) BIO 304/311: Cell Biology w/lab (or BIO 409: Immunology offered in Fall) or Gen Ed CHE 202: Organic Chemistry II CHE 211: Organic Chemistry Lab II Gen Ed Gen Ed | 4 3-4 3 1 3 <u>3</u> TOTAL 17-18 |
| Semester 5 | Credits | Semester 6 | Credits |
| By January 15 of Junior Year: Must meet DPT Progression Requirements: GPA: overall 3.5; Science 3.5 | | | |
| CHE 401 Biochemistry CHE 410 Biochemistry lab PHY 200: Physics I w/lab CHE 301: Physical Chemistry I CHE 310: Physical Chemistry I lab Gen Ed Gen Ed | 3 1 4 3 1 3 <u>3</u> TOTAL 18 | PHY 201: Physics II w/lab CHE 302: Physical Chemistry II CHE 311: Physical Chemistry II lab MAT 209: Probability and Statistics MAT 220: Math/Stats Computer Lab Gen Ed Gen Ed | 4 3 1 3 1 3 <u>3</u> TOTAL 18 |
| Semester 7 | Credits | Semester 8 | Credits |
| DPT 500 Gross Anatomy & Histology DPT 503 Applied Physiology for Physical Therapy DPT 504 Practice Management I DPT 508 PT Procedures I DPT 512 Critical Inquiry I DPT 522 Foundations of Clinical Practice | 5 5 3 4 1 <u>1</u> TOTAL 19 | DPT 502 Kinesiology DPT 516 Musculoskeletal Practice I DPT 520 Neuromuscular Practice I DPT 509 Found Clin Exam & Eval DPT 528 Cardio Practice I DPT 523 Clinical Practice I | 4 3 3 4 3 <u>1</u> TOTAL 18 |

Academic Policy on Eligibility for Participation of May Commencement Ceremony

The academic policy, which the Registrar follows, is: A student who has 6 or less credits remaining to complete the degree may participate in the May Commencement Ceremony. The Graduation Application is available online in myAlvernia on the 'Academics' tab. Seniors must submit the Graduation Application to the Registrar's Office as follows: October 1 for May Graduation; December 1 for August graduation; and March 1 for December graduation.

If you have any questions, please call the Registrar's Office (610.796.8201)

Curriculum Sheets, EAB Navigate, and AUAdvise

The information on this page and the Curriculum Sheet is provided in AUAdvise - EAB Navigate as a static tool for discussion purposes when meeting with students to schedule courses. [Degree Audit uAchieve](#) remains the official source for each student's curriculum audit. Degree Audit uAchieve must be used together with the Curriculum Sheet to determine whether the information noted during scheduling meetings on the curriculum sheet remains accurate.

General Notes

- A minimum of 123 credits are required for graduation.
- Where appropriate, courses required for the major can be used to satisfy General Education requirements. However, the credits earned for these courses are applied to either Gen Ed requirements or the major, not both.
- Paths of Knowledge coursework may count towards major or minor requirements, but may not fulfill a second Mid-Level Liberal Arts Exploration requirement.
- Students are expected to follow the catalog requirements for General Education, the major, and additional requirements.
- A minor or second major within the areas listed under Paths of Knowledge automatically fulfills that area of the Gen Ed requirements.
- Students must complete 45 of their last 60 credits at Alvernia University
- Students must complete community service hours as part of the General Education Program

Major Notes

The DPT program is offered in a 4+3 year and 3+3 year curricular format. Prospective students with an earned bachelor's degree from Alvernia or another four-year accredited institution are welcome to apply to the 4+3 year format. The 3+3 year format enables Alvernia students who are admitted into 1 of 4 majors to follow a curricular plan in that major with the intention to be admitted to the DPT program in their senior year, upon completion of all requirements. Interested students should contact Dr. Christopher Wise, Physical Therapy Department Chair at christopher.wise@alvernia.edu. All prerequisite courses must be completed within 10 years of application to the DPT Program. *Admission Requirements subject to change*

The following Prerequisites courses must be completed with a final grade of “C” or better:

- Human Anatomy and Physiology I and II - 4 credits each with lab • Biology – 3-4 credits
- Chemistry I and II - 4 credits each with lab
- Physics I and II - 4 credits each with lab
- Social Sciences – 6-9 credits (psychology, sociology/anthropology, humanities)
- Statistics - 3 credits
- English Composition/Writing - 3 credits

In order to enter the DPT program within the Alvernia accelerated (3+3) format, students must complete the following preadmission criteria:

- Achieve a cumulative GPA of 3.25, Science GPA of 3.0, Prerequisites GPA of 3.0
- Achieve a minimum grade of “C” in all Prerequisites courses
- All DPT prerequisite courses (listed above) must be taken at a four- year accredited institution. If taken at another institution, only courses in which the student achieved a grade of "B", or higher, will be transferred.
- All 3+3 students must follow the guidelines for applying to the program and submit all required documents through the Physical Therapy Centralized Application Service (PTCAS), which can be accessed through the DPT Program homepage. All decisions are contingent upon the applicant’s maintaining admission criteria throughout the final semester.
- A minimum of 100 hours of observation, which shall include experiences in a broad range of settings that include both outpatient and inpatient physical therapy settings. Recommended settings include skilled nursing facilities, assisted living facilities, pediatric intervention settings, home health settings, acute or sub-acute inpatient rehabilitation settings, acute hospital settings, sports and orthopedic settings, and/or private practices.
- Three letters of reference that shall include one each from a: licensed PT, professor, and other non-family member. Applicants should ensure that their chosen references have knowledge of and can speak to the qualities/attributes required of a doctorally prepared health professional and to their readiness to handle the academic rigor of doctoral study.
- Advanced Placement (AP) courses taken in high school, if accepted by undergraduate admissions upon entrance into the university, will be accepted as fulfilling the Prerequisites for entrance into the DPT Program. These courses must appear on the undergraduate transcript.

- Non-science Prerequisites (statistics, social science, psychology) may be completed online. For science Prerequisites (biology, chemistry, physics, anatomy, and physiology), the lecture portion of each course may be taken online, but the laboratory portion of each course must be taken in a traditional laboratory setting.

Degree/Major: BS BIOCHEM – DPT

Name: _____ Id: _____

2nd Major: _____ 3rd Major: _____ Minor: _____ 2nd Minor: _____

Matriculation Year 2024-2025 - Term: _____

GENERAL EDUCATION

Grade Notes:

Enduring Questions (12 cr)

- SEARCH Sem. Enduring Questions (3) _____
 THE 105 Foundations of Theology (3) _____
 PHI 105 Introduction to Philosophy (3) _____
 COM 101 Composition & Research (3) _____
(C grade or better)

Exploring the Natural World (6-8)

- MAT _____ Met in Related Area (x) _____
(not MAT 100)
 _____ Met in Related Area (x) _____
(Science with Lab)

Culture & Language (9 cr)

- COM 103 or 213 _____ (3) _____
(not COM 100 or 101)

World Language – 2 courses in sequence

- _____ (3) _____
 _____ (3) _____

Individuals & Communities (6 cr)

- HIS or POS _____ (3) _____
 _____ Met with PSY 101 (x) _____
(PSY, HIS, POS, SOC, SSC, or ECON)

Creative Expressions (6 cr)

- LIT _____ (3) _____
 _____ (3) _____
(Art, Music, or Theatre)

Ethical Leaders & Followers (6 cr)

- THE/PHI _____ (3) _____
(200-400 level)
 THE/PHI _____ (3) _____
(ethics/morality @ 200 level)

Paths of Knowledge (9 cr @ 200-400 level in ONE path)

- Met in Related w/ BIO 221 (x) _____
 Met in Related w/ BIO 303/309 (x) _____
 Met in Related w/ BIO 304/311 (x) _____

- Human Diversity: _____
 Senior Capstone: _____
 Writing Enhanced Course: will be met with CHE 211
 Community Service Hours: Required: _____ Met: _____
 Overall GPA >= 3.25
 Science GPA >= 3.0
 Pre-Requisite GPA >= 3.0

Residency Requirements:

- 45 of last 60 credits
 Min 12 Alvernia credits in major
 Min 9 Alvernia credits in minor (if applicable)
 Min 123 non-remedial credits earned

BIOCHEMISTRY (108-112 cr)

Grade Notes:

Major (29 cr)

- CHE 104 General Chemistry I (3) _____
 CHE 105 General Chemistry II (3) _____
 CHE 107 Laboratory Safety (1) _____
 CHE 110 General Chemistry Lab I (1) _____
 CHE 111 General Chemistry Lab II (1) _____
 CHE 201 Organic Chemistry I (3) _____
 CHE 202 Organic Chemistry II (3) _____
 CHE 210 Organic Chemistry Lab I (1) _____
 CHE 211 Organic Chemistry Lab II (1) _____
 CHE 301 Physical Chemistry I (3) _____
 CHE 302 Physical Chemistry II (3) _____
 CHE 310 Physical Chemistry Lab I (1) _____
 CHE 311 Physical Chemistry Lab II (1) _____
 CHE 401 Biochemistry (3) _____
 CHE 410 Biochemistry Lab (1) _____

Select:

- SCI 480 Biology Internship (x) _____
OR
 SCI 406 Research I (x) _____
 SCI 407 Research II (x) _____
DPT 508 & 509 (see below)

Major Elective: (4 cr)

- BIO 108 Human A & P II (3) _____
 BIO 118 Human A & P II Lab (1) _____

Related Requirements (38-42 cr)

- BIO 103 Principles of Biology I (4) _____
 BIO 107 Human A&P I (3) _____ sub for
 BIO 117 Human A&P II (1) _____ BIO 104
 BIO 221 General Microbiology (4) _____
 BIO 303 & 309 Genetics and Lab (4) _____
 BIO 304 Cell Biology & BIO 311 OR (4) _____
BIO 409 Immunology (3) _____
 PHY 200 Physics I w/Lab (4) _____
 PHY 201 Physics II w/Lab (4) _____
 MAT 209 Probability & Statistics (3) _____
 MAT 220 Math Stats Computer Lab (1) _____
 MAT 230 Calculus I (4) _____
 PSY 101 Introductory Psychology (3) _____
 SCI 402 *DPT 522&528 (see below)* (x) _____

Recommended:

- MAT 131 Pre-Calculus (3) _____

Doctor of Physical Therapy (37 cr.)

- DPT 500 Gross Anatomy & Histology (5) _____
 DPT 502 Kinesiology (4) _____
 DPT 503 Physiology PT (5) _____
 DPT 504 Practice Mgmt I (3) _____
 DPT 508 PT Procedures I (4) _____
 DPT 509 Found Clinical Exam & Eval (4) _____
 DPT 512 Critical Inquiry I (1) _____
 DPT 516 Musculoskeletal PT Prac I (3) _____
 DPT 520 Neuromuscular PT Practice (3) _____
 DPT 523 Clinical Practice I (1) _____
 DPT 522 Found. Clinical Practice (1) _____
 DPT 528 Cardio Practice I (3) _____