

University of Saint Francis and Indiana Tech Articulation Agreement for the University of Saint Francis Physician Assistant Program

The University of Saint Francis (USF), in conjunction with Indiana Tech (IT), works cooperatively to assist highly qualified undergraduate students in entering the profession of Physician Assistant. This agreement will facilitate entrance into the Physician Assistant Studies Program at USF for such students and will benefit both institutions. The following principles apply to the guaranteed admission program. The agreement will begin for the 2023-2024 admission cycle (USF PA Cohort of 2026).

Students enrolled at IT who are on target for graduation with a baccalaureate degree will be provisionally accepted to the Physician Assistant Studies Program at USF one year prior to their matriculation at USF, provided they meet the following criteria.

1. The provisional acceptance at USF will be contingent upon the student's completion of the required courses and completion of an undergraduate degree, which meets the admissions standards stipulated by the USF PA Admissions Committee. All course grades must be C or above, with a minimum cumulative GPA of 3.5 and a science GPA of 3.0. Courses that must be completed at IT are detailed in Appendix A of this document and include:
 - a. HSC 2010 - General Anatomy and Physiology I Credit(s): 4
 - b. HSC 2020 - General Anatomy and Physiology II Credit(s): 4
 - c. HSC 2100 - Human Genetics Credit(s): 4
 - d. HSC 2350 - Endocrinology & Immunology Credit(s): 3
 - e. HSC 2400 - Biomedical Research Methods Credit(s): 3
 - f. HSC 2600 - Human Pathology & Histology Credit(s): 3
 - g. HSC 2700 - Clinical Microbiology Credit(s): 4
 - h. HSC 3100 - Pharmacology & Toxicology Credit(s): 3
 - i. HSC 4250 - Biomedical Ethics Credit(s): 3
 - j. MA 1090 - Precalculus Credit(s): 4
 - k. MA 2025 - Statistical Problem Solving Credit(s): 3
 - l. PH 1100 - Fundamentals of Physics Credit(s): 3
 - m. BIO 1330 - General Biology I (Organismal) Credit(s): 3
 - n. BIO 1340 - General Biology I Lab Credit(s): 1
 - o. BIO 1350 - General Biology II (Cell and Molecular) Credit(s): 3
 - p. BIO 1360 - General Biology II Lab Credit(s): 1
 - q. CH 1220 - General Chemistry & Lab I Credit(s): 3
 - r. CH 1225 - General Chemistry I Lab Credit(s): 1
 - s. CH 1230 - General Chemistry II Credit(s): 3
 - t. CH 1240 - General Chemistry II Lab Credit(s): 1
 - u. CH 2400 - Organic Chemistry I Credit(s): 3
 - v. CH 2410 - Organic Chemistry I Lab Credit(s): 1
 - w. PSY 1700 - Introduction to Psychology Credit(s): 3
 - x. HIT 1100 - Medical Terminology Credit(s): 3

2. Additionally, students are encouraged to take the following courses if their schedules allow. These courses are not required but recommended. They include:
 - a. See Appendix for courses required for pre-PA curriculum.

3. Progression Standards

Students must:

- a. Have a written reference from the Academic Advisor for pre-PA students supporting that they are on track for agreement admissions criteria including that they are in good standing with IT with no academic or professional issues.
 - b. Accumulate at least 1000 hours of paid patient care work experience approved by the faculty advisor prior to graduation from IT.
 - c. Have experience with the PA role, such as interviewing, shadowing or working with PAs.
4. Students must formally apply to the USF PA Program via the CASPA application process.
 5. Students may submit records to USF via the IT academic advisor and CASPA beginning May 1 for USF PA matriculation the following August.
 6. Students must reserve their seat with the submission of a non-refundable deposit required of all incoming PA students by March 1 of matriculation year. The deposit money will be credited towards the first semester's tuition.
 7. Students must complete all USF enrollment materials required of matriculating PA students prior to the beginning of classes in August.
 8. The Graduate School at USF will make offers of provisional acceptance and its decision will be final. Matriculation is dependent upon completion of all admissions requirements including pre-requisite courses, maintenance of a cumulative GPA of 3.5 or above and science GPA of 3.0 or above, awarding of a baccalaureate degree, and a reference from the IT faculty describing the student's ability to be successful in a graduate-level program.
 9. USF will provide informational support for IT recruitment efforts.
 10. Once accepted to the program, students are required to meet on an annual basis with a University of Saint Francis Physician Assistant faculty mentor.
 11. Two (2) students will be accepted through this agreement from IT per cohort. USF may increase this allotment in future cycles as it sees fit.
 12. For each admissions cycle, the window for early acceptance under this program begins on May 1 of the year prior to the PA program matriculation. Thereafter, additional qualified applicants from IT will be considered on a wait list. Any IT student eligible for the terms of the agreement must inform the USF PA Program in writing by September 1 of their intention to apply, with formal CASPA application submission to occur no later than December 1. After this time, any seats held for IT students seeking guaranteed admission under the terms of the agreement will be forfeited and students will need to apply through traditional processes.

13. IT pre-PA students not meeting these stringent requirements or not accepted under the terms of this Articulation Agreement are welcome to apply to USF via the typical CASPA admissions process.

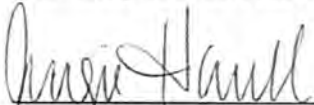
Cooperation Term

The term of this Agreement is three years. It will take effect from the date of signature by the representatives from both Parties. It may be altered, modified or extended only by mutual consent and written amendment signed by both Parties up to three months before the expiration. Either Party may terminate the agreement in advance of its normal expiration date by giving the other Party a sixty-day prior written notice. The Parties agree to work together amicably to resolve any disputes or disagreements that may arise during the Parties' performance of this agreement.

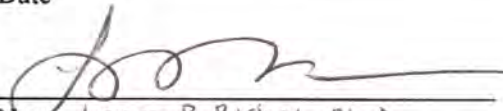
The Parties hereto have executed this Agreement this 10th day of May 2023.

Other untouched issues, if there are any, should be addressed by both parties through consultation.

University of Saint Francis

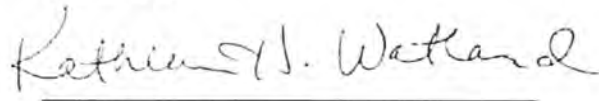

Name Angie Harrell
Dean of College of Health Sciences

5/11/23
Date

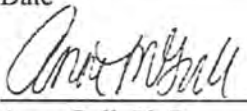

Name Lance P. Richey, Ph.D.
Vice President for Academic Affairs

5/16/23
Date

Indiana Tech


Dr. Kathleen H. Watland
Vice President for Academic Affairs

May 9, 2023
Date


Anne Gull, Ph.D.
Dean of College of Arts and Sciences

May 9, 2023
Date

APPENDIX A.
Courses Required for pre-PA Curriculum

All course grades must be C or above with a minimum cumulative GPA of 3.5, minimum cumulative science GPA of 3.0, and at least 1000 hours of paid or unpaid clinical experience.

Courses that must be completed at IT include:

HSC 2010 - General Anatomy and Physiology I

Prerequisite(s): BIO 1000 or BIO 1330/BIO 1340 or BIO 1350/BIO 1360.

General Anatomy & Physiology I provides instruction about the organization, structure, and function of the human body. This course assumes a general knowledge of human cell structure and function. This course begins with introducing the physiological concepts of feedback regulation and homeostasis and provides a study of the four major tissue types. It then examines the structure and function of the integumentary, skeletal, muscular, and nervous systems and, in each of these systems, introduces basic pathologies occurring during physiological imbalances. This course has both a lecture and a laboratory component. Credit(s): 4

HSC 2020 - General Anatomy and Physiology II

Prerequisite(s): BIO 1000 or BIO 1330/BIO 1340 or BIO 1350/BIO 1360.

General Anatomy and Physiology II provides instruction about the structure and function of the human cardiovascular, urinary, digestive, respiratory, lymphatic, endocrine, and reproductive systems, including the anatomical and physiological changes occurring during human pregnancy. This course assumes a general knowledge of human cell structure and function. This course also introduces basic concepts in human metabolism and energy production. Credit(s): 4

HSC 2100 - Human Genetics

Prerequisite(s): BIO 1000 or BIO 1330/BIO 1340 or BIO 1350/BIO 1360.

Human Genetics provides a detailed study of the structure and function of human DNA and RNA, and the importance of human genetics in modern medicine. DNA transcriptional and translational processes are examined, and human gene sequencing technology and practice are introduced. This course emphasizes the examination of the genetic basis of disease, including specific genes implicated in disease onset and the hereditary etiology for these diseases. Also, the environmental and molecular basis for mutations in human DNA are explored. This course is tailored for students interested in clinical pre-professional or Allied Health occupations. Credit(s): 4

HSC 2350 - Endocrinology & Immunology

Prerequisite(s): HSC 2010 or BIO 2710/BIO 2720; HSC 2020 or BIO 2730/BIO 2740.

Endocrinology & Immunology offers an introductory, yet comprehensive, study of the human endocrine system, which is comprised of a group of glands that secrete chemical messengers, called hormones, to specific target tissues. Immunological responses are also studied, including the importance of inflammatory responses, and the mechanism of action of B and T cells. Credit(s): 3

HSC 2400 - Biomedical Research Methods

Prerequisite(s): HSC 2010.

Biomedical Research Methods instructs students about how the process of science in biomedicine is conducted through biomedical research practice. The concepts of observation, Inductive and deductive reasoning, community feedback, and discovery are examined. Methods used to do biomedical research are emphasized. Biomedical and clinical literature, its function as sources for evidence, and its importance as a foundation in human-based studies, clinical studies, nutrition, and drug development are introduced. Students are taught how to find peer-reviewed evidence, the process in the development of published peer-reviewed evidence, the differences in evidence, how to determine the quality of the source, and how to organize individual evidence databases. Students will also be taught basic elements in biomedical and clinical communication and how to integrate peer-reviewed evidence into this communication. Credit(s): 3

HSC 2600 - Human Pathology & Histology

Prerequisite(s): HSC 2010; HSC 2020.

Human Pathology and Histology provides an advanced study into the basis and mechanisms of human disease conditions. This course gives instruction into clinical histology techniques and identification of disease in human tissue samples. This course explains the basis and techniques of clinical laboratory testing and diagnostic theory and practice. This course emphasizes the origins of local and systemic inflammation and its role as a foundation for disease pathogenesis. This course also examines the pathological implications of visceral adipose tissue, the pathological basis for cancer genesis, and neurodegenerative pathologies including Alzheimer's Disease. Credit(s): 3

HSC 2700 - Clinical Microbiology

Prerequisite(s): HSC 2010.

Clinical Microbiology provides a detailed study into the morphology and physiology of microorganisms with an emphasis on their effects on human health and disease. This course also focuses on microorganisms found in the human intestinal tract, in the mouth, in probiotics, and their roles in human health and illness. Prevention of the growth, spread, and transmission of pathogenic microorganisms through sanitation, hygiene, and sterile technique is taught. This course is intended for students interested in clinical preprofessional careers or Allied Health occupations. This course includes both a lecture and laboratory component. Credit(s): 4

HSC 3100 - Pharmacology & Toxicology

Prerequisite(s): CH 1000 or CH 1150 or CH 1220; HSC 2010; HSC 2020; Junior standing.

This course includes pharmacological approaches to treating illness, injury, and disease and investigates the mechanisms of toxicological adverse effects of substances on humans. Other topics include absorption, distribution, metabolism, and excretion of pharmacological agents and treatments of exposures to toxins and toxicants. Credit(s): 3

HSC 4250 - Biomedical Ethics

Prerequisite(s): HSC 2400.

Biomedical Ethics provides instruction on building ethical and moral decision-making foundations for future health care and biomedical professionals. This course explores complex contemporary issues in health care, which include the impact of the pharmaceutical, government, and business influence on health care practice. Students will be introduced to classical and contemporary ethical and moral theories, and the basis for scientific integrity and informed consent. This course emphasizes critical thinking, and students will be challenged by evaluating specific clinical and biomedical case studies and then to make decisions that affect their hypothetical career trajectory, patient care and well-being. The capstone experience in this course will include a personal ethical and experiential analysis of a biomedical topic of the student's choice. Credit(s): 3

MA 1090 - Precalculus

Prerequisite(s): MA 1010 with a grade of C or higher or appropriate placement.

This course prepares students for a traditional engineering calculus sequence. Topics include: Algebraic operations; polynomial, rational, exponential, and logarithmic functions and their graphs; trigonometric functions, identities, and graphs of trigonometric and inverse trigonometric functions; solving triangles. Credit(s): 4

MA 2025 - Statistical Problem Solving

Prerequisite(s): MA 1025 or MA 1030 or MA 1090 with a grade of C or higher or equivalent.

This course will include basic statistical terminology, mean, median, mode and designing experiments. In addition, standard deviation, variance, normal distribution, probabilities, correlation, statistical inference and sampling distribution will be covered. Additional topics include regression analysis, confidence intervals, hypothesis testing and one and two sample statistics are also to be included. All topics should be used in appropriate application solving applied problems with appropriate technology. Credit(s): 3

PH 1100 - Fundamentals of Physics

Prerequisite(s): [MA 1030](#). Prerequisite or co-requisite(s): [MA 1055](#).

Basic mechanics: vectors, kinematics in one and two dimensions, Newton's Laws, work, energy, momentum, rotational motion. Laboratory is incorporated into the course. Credit(s): 3

BIO 1330 - General Biology I (Organismal)

Prerequisite(s): Adequate high school preparation in math (trigonometry) and English (composition, critical review, and organizational writing) Co-requisite(s): [BIO 1340](#).

The first of a two-course series, BIO 1330 is required of all Molecular Environmental Biology majors. Core content areas focus on "big biology", namely ecology, diversification of life, comparative contributions of all organisms in prokaryotic and eukaryotic kingdoms, macroscopic structure of plant and animal systems coupled to evolution, adaptation, and organismal requirements. Credit(s): 3

BIO 1340 - General Biology I Lab

Prerequisite(s): Adequate high school preparation in math (trigonometry) and English (composition, critical review, and organizational writing) Co-requisite(s): [BIO 1330](#).

Required alongside GENERAL BIOLOGY I, this experiential learning environment drives students to apply biological learning objectives and demonstrate skills, abilities, and attitudes of scientists.

Laboratory investigations focus on the natural world, relying on flora and fauna of the wild and urban settings. Significant writing and problem solving skills develop through laboratory activities. Credit(s): 1

BIO 1350 - General Biology II (Cell and Molecular)

Prerequisite(s): Adequate high school preparation in math (trigonometry) and English (composition, critical review, and organizational writing) Co-requisite(s): [BIO 1360](#).

The second of a two-course series is required of all Molecular Environmental Biology majors (including those on the pre-med track). Core content areas focus on sub-microscopic elements of all living organisms. Topics include foundational biochemistry, introductory cell biology, cellular energy production, genetics, cell-cell interactions, cell division, and developmental biology. Credit(s): 3

BIO 1360 - General Biology II Lab

Prerequisite(s): Adequate high school preparation in math (trigonometry) and English (composition, critical review, and organizational writing) Co-requisite(s): [BIO 1350](#).

Supplementing GENERAL BIOLOGY II (Cell and Molecular), this experiential learning environment drives students to apply learning objectives and demonstrate skills, abilities, and attitudes of molecular biologists. Laboratory investigations focus on cellular and molecular analyses, including genetics, genomics, physiology, introductory biochemistry, and biotechnology. Significant writing, problem solving, and computational skills develop through laboratory activities. Credit(s): 1

CH 1220 - General Chemistry & Lab I

Prerequisite(s): High school chemistry or equivalent; MA 1090 with a C or better or concurrent with MA 1100 or MA 1200.

A quantitative approach to general chemistry; atomic and molecular structures; reactions and stoichiometry; gas laws; thermochemistry; chemical bonding; properties of solutions. Classroom, laboratory and computer activities are integrated. Credit(s): 3

CH 1225 - General Chemistry & Lab I

A quantitative approach to general chemistry; atomic and molecular structures; reactions and stoichiometry; gas laws; thermochemistry; chemical bonding; properties of solutions. Classroom, laboratory and computer activities are integrated. Credit(s): 3

CH 1230 - General Chemistry II

Prerequisite(s): CH 1220 with grade of C or better.

Chemical kinetics; gaseous and solution equilibria; thermodynamics; metals and their properties, organic chemistry and nuclear chemistry; electrochemistry. Credit(s): 3

CH 1240 - General Chemistry II Lab

Prerequisite(s): CH 1220. Co-requisite(s): CH 1230.

Extending topics in the associated General Chemistry II course, this hands-on laboratory addresses reaction kinetics, thermodynamics, and transition metals. Topics also include laboratory safety, use of laboratory equipment to collect quantitative data, analysis of chemical reactions, acid-base titrations, and introductory spectroscopic methods. Credit(s): 1

CH 2400 - Organic Chemistry I

Prerequisite(s): CH 1230 with a grade C or better. Prerequisite or co-requisite(s): CH 2410.

Topics include bonding principles, intermolecular forces, nomenclature, isomerism, stereochemistry; synthesis and reactions of aliphatic hydrocarbons, aromatic compounds and functional groups. Addition, elimination, and substitution mechanisms. Also included in the course is a study of pKa and pH, and an introduction to instrumental analysis. Credit(s): 3

CH 2410 - Organic Chemistry I Lab

Prerequisite or co-requisite(s): CH 2400.

Expanding understanding in the linked lecture course (Organic Chemistry I), topics include melting points, boiling points, simple distillation, fractional distillation, extraction, recrystallization, and synthesis of short-chain and single-ring organic compounds studied. Students will hone skills in chemical hygiene, laboratory safety, and use of ground glass equipment. Credit(s): 1

PSY 1750 - Human Growth and Development

Prerequisite(s): PSY 1700.

A Life Span human development course which integrates biology, psychology, sociology, medicine, demography, economics and anthropology perspectives from conception to death. Emerging trends in research. Credit(s): 3

HIT 1100 - Medical Terminology

Prerequisite(s): BIO 1110 with a C or better or HSC 2010 and HSC 2020.

Prefixes, suffixes, and word roots used in the field of medicine. Topics include medical vocabulary and terms related to anatomy, physiology, pathological conditions, and medical treatments. Credit(s): 3

OPTIONAL:

HSC 4950 - Health Science Internship

Prerequisite(s): HSC 1100; HSC 1500; HSC 2010; HSC 2020.

Health Science Internship is an external experience in a health care-based or allied health-based clinic, hospital, institution, office, or facility. Internships are developed in consultation with the career center and faculty advisor and require approval and agreement between the site supervisor and the academic institution. Evaluation is completed by the faculty advisor in consultation with the site supervisor. The internship requires 80 hours of on-site contact hours per 2 credit hours. Additional on-site contact hours (at the rate of 40 contact hours per credit hour) could result in additional credit hours if requested when the internship is set up. At least 2 credits are required. Credit(s): 2-4

