**STATE OF INDIANA**
**COMMISSION FOR HIGHER EDUCATION**

**INSTITUTION**: Indiana University on the IUPUI campus

**COLLEGE**: School of Health and Rehabilitation Sciences

**DEPARTMENT**: Health Sciences

**DEGREE PROGRAM TITLE**: Master of Physician Assistant Studies

**FORM OF RECOGNITION TO BE AWARDED/DEGREE CODE**: Master of Physician Assistant Studies

**SUGGESTED CIP CODE**: 510912

**LOCATION OF PROGRAM/CAMPUS CODE**: Indianapolis

**PROJECTED DATE OF IMPLEMENTATION**: Summer 2011

**DATE PROPOSAL WAS APPROVED BY INSTITUTIONAL BOARD OF TRUSTEES**: _____

_____
**SIGNATURE OF AUTHORIZING INSTITUTIONAL OFFICER**

_____
**DATE RECEIVED BY COMMISSION FOR HIGHER EDUCATION**

**COMMISSION ACTION (DATE)** _____

**Indiana University**
**New Degree Proposal**

**Title: Master of Physician Assistant Studies**
**Campus: Indianapolis**
**Academic Unit: School of Health and Rehabilitation Sciences Department: Health Sciences**

## I. Academic Features

**Goals/Objectives:** This is a proposal for a full-time professional Master of Physician Assistant Studies to be housed in the School of Health and Rehabilitation Sciences at the Indiana University Purdue University Indianapolis (IUPUI) campus. The aim of the program is to equip Physician Assistant graduates with the competencies necessary to deliver high quality health services under the supervision and direction of a licensed doctor of allopathic or osteopathic medicine. The program will offer students a balance in academic and clinical orientation, extensive access to healthcare resources and a curriculum delivery model that maximizes rural and urban training opportunities in Indiana and beyond.

**Principal Components:** The program will require the completion of seven (7) consecutive semesters over 27 months. Expected total enrollment during the first year will be 35 with an anticipated increase to 40 students in year two and a maximum of 50 students per cohort thereafter. The proposed program will attract a diverse group of candidates from across the State of Indiana and beyond. The program is intended for individuals with prior experience (paid or volunteer) in a health related field and with commitment to provide health care in underserved and rural communities.

**Relation to Existing Programs:** The program will use existing resources within the School of Health and Rehabilitation Sciences and courses (i.e., pharmacology, human physiology/medical physiology, human anatomy) offered by the faculty in the School of Medicine.

**Coherence with Campus Mission:** The Master of Physician Assistant Studies degree is aligned with the mission of IUPUI to be "Indiana's urban research and academic health sciences campus." The implementation of this professional graduate degree program will contribute to the campus' effort to attract high quality graduate students and faculty.

**Benefits of the Program for Students, IU, and State:** According to the American Academy of Physician Assistant's House of Delegates (2005), "Physician Assistants are health professionals licensed or in the case of those employed by the federal government, credentialed, to practice medicine with physician supervision. Physician Assistants are qualified by graduation from an accredited physician assistant educational program and/or certification by the National Commission on Certification of Physician Assistants. Within the Physician-PA relationship, physician assistants exercise autonomy in medical decision making and provide a broad range of diagnostic and therapeutic services. The clinical role of physician assistants includes primary and specialty care in medical and surgical practice settings in rural and urban areas. Physician assistant practice is centered on patient care and may include educational, research, and administrative activities."

The proposed Master of Physician Assistant Studies will meet the educational needs of students at Indiana University who are interested in earning a professional graduate degree in Physician Assistant practice. Upon graduation from the proposed program, students will be eligible to sit for the certification examination developed and administered by the National Commission on the Certification of Physician Assistants. The objective of the proposed Master of Physician Assistant Studies is aligned with the objective of IUPUI Academic Plan to attract high quality faculty and graduate students. A certified PA is a graduate of an accredited PA educational program and has passed the Physician Assistant National Certification Examination (PANCE). All graduates of the degree program would have the potential to contribute to the healthcare workforce in Indiana.

**Opportunities for Degree Recipients:**
Graduates of the proposed program will have the opportunity to complete a curriculum that builds the cognitive, clinical, interpersonal, and professional skills necessary for the supervised practice of medicine as physician assistants. They will have the educational background to identify, analyze, and manage clinical problems, and provide effective, efficient, and humane patient care under the supervision of a licensed physician.

**II. <u>Implementation</u>**
**Steady State Enrollment/Degree Completion Projections (year five):**

| | | |
|---|---|---|
| **Headcount** | **100** | **(100 new-to-campus)** |
| **FTE** | **221** | **(221 new-to-campus)** |
| **Degree Recipients** | **50** | |

**Steady State Expenses and Revenue Sources (year five):**

| | |
|---|---|
| **Expenses:** | |
| **Faculty:** | **$1,176,000,** |
| **Support Staff:** | **224,000** |
| **Supplies and Expenses:** | **$1,452,800** |
| **Reallocation** | |
| **One time costs** | |
| **Graduate Teaching Assistants** | **206,700** |
| **Student Assistance** | **70,000** |
| **Facilities** | |
| **Equipment** | |
| | |
| **Revenue Sources:** | |
| **New-to-Campus Student Fees:** | **$2,433,900** |
| **Enrollment Change Funding** | **695,600** |
| **Reallocation** | |
| **One time costs** | |

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## A. ABSTRACT

Master of Physician Assistant Studies
Indiana University on the IUPUI Campus

**Objectives:**
The primary objective of the proposed professional graduate degree program is to deliver a comprehensive primary care education and training program that combines didactic course work with clinical experiences to prepare graduates who are equipped to provide preventative and therapeutic health care that is safe, current, and evidence-based. Graduates of the program will have necessary research and critical thinking skills to serve as academic and professional leaders in the physician assistant profession.

**Clientele to be served:**
The School of Health and Rehabilitation Sciences proposes to offer a professional Master of Physician Assistant Studies to meet the educational needs of individuals who are interested in becoming a trained physician assistant. Potential candidates for this program will consist of individuals who have strong basic science background and direct patient care experience and seek to work under the supervision of a licensed doctor of allopathic or osteopathic medicine to take medical histories, perform physical examinations, order and interpret diagnostic tests, diagnose illnesses, develop treatment plans, prescribe medication, assist in surgery, and perform minor procedures.

**Curriculum:**
The curriculum of the proposed professional Master of Physician Assistant Studies will be designed to provide students with the skills that enhance their professional and personal growth as physician assistants through course objectives which will cover three areas of learning: cognitive skills (knowledge base), psychomotor skills (manipulative and motor skills), and affective skills (attitudes and values). Bloom's Taxonomy of educational objectives will be used as a framework to assess the three areas of learning. Reflected in this proposal (see Program Description) are specific examples of cognitive, psychomotor, and affective objectives students will be expected to demonstrate. The curriculum will be based on the concepts of adult learning and professional education which focus on helping students become self-directed learners with the capacity to move from basic to more advanced skills and apply what they have learned in the classroom in the clinical setting. In order to progress and graduate from the program, the student will be required to have completed all courses contained within the physician assistant curriculum with a minimum grade of C, maintain a grade point average of 3.0, satisfactorily complete all didactic and clinical objectives and comprehensive examinations, and satisfy all program requirements.

Total credit hours: The total credit hours required for the proposed program is significantly higher than the credit hours required for a typical graduate program. The terminal degree for physician assistants is a Master's degree in Physician Assistant Studies and physician assistant programs are required to offer prescribed didactic courses and clinical experiences for students. A survey of physician assistant programs suggests that the required total credit hours for physician assistant studies programs housed in academic medical centers ranges from 91 to 125 while the length of study ranges from 24 months to 36 months (See Table A). For the proposed program students will

be required to complete 74 credit hours of didactic courses and 32 credit hours of clinical rotations for a total of 106 credit hours. The duration of the program will be 27 months.

Credit hours for required courses: 106

Subject areas of required courses: Gross Anatomy, Physiology, Pathophysiology, Clinical Medicine, Pharmacology, Health Care Trends and Issues, Health Promotion, Critical Inquiry, Values and Ethics, and Interpersonal Communication Skills.

Internships or practicum: Students will be required to complete eight mandatory clinical rotations (internal medicine, family medicine, psychiatry, emergency medicine, pediatrics, general surgery and women's health), public health, and one elective clinical rotation for a total of nine (9) clinical rotations.

Unique and innovative features: The availability of several health and medical facilities in Indianapolis and surrounding counties will increase the access of students to clinical sites and to top health professionals in the State. Indiana School of Medicine developed a partnership with Moi University School of Medicine in 1989. Since then several medical students have participated in service learning activities at Moi University Teaching and Referral Hospital. Faculty will build on the success of the IU School of Medicine to enable students enrolled in the proposed Master of Physician Assistant Studies to have the opportunity to participate in international service learning.

Employment possibilities:
Employment opportunities for physician assistants exist in Indiana as well as throughout the United States. Employment of physician assistants is expected to grow 27 percent from 2006 to 2016, much faster than the average for all occupations as health care organizations increasingly employ physician assistants to contain costs and to meet the health workforce needs of rural and inner city clinics. According to the U.S Department of Labor, physician assistant is ranked as one of the top 20 careers with growth potential. As a respected member of the health care team who works interdependently with his or her supervising physicians, physician assistants find employment in both primary and specialty care at a variety of practice settings including hospitals, managed care organizations, community clinics, private practice, medical groups, Veterans Medical Centers, and other government agencies. In addition to clinical practice, physician assistants may pursue careers in research, public health, health care administration, and teaching in postsecondary institutions.

The physician assistant is a health care professional licensed to work under the supervision of a licensed physician to perform medical duties from basic primary care to technically advanced procedures in emergency medicine or within medical specialties under the supervision of a physician. Physician Assistants have the educational preparation and experience to perform functions such as taking a patient medical history, performing complete physical examinations, ordering and interpreting laboratory tests, diagnosing and treating medical illnesses, assisting physicians during surgical procedures, performing routine medical procedures such as suturing and wound care, and prescribing medication.

## B. Program Description

### 1. Proposed Program and Stated Objectives

The mission of the Physician Assistant program is to prepare students to become generalist physician assistants oriented toward service to underserved populations, both in the rural and urban areas through an education based on the medical model and team approach to medicine and health care. To fulfill the mission statement the physician assistant program commits itself to:

- Recruit and retain qualified candidates for admission into the program.
- Provide a high quality educational program, which meets Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) accreditation standards.
- Provide adequate learning resources and support systems that assist students in meeting the academic requirements of the physician assistant program.
- Encourage students to develop life-long learning behaviors that prepare them for careers in clinical practice, research, public health, health administration, and teaching.
- Engage in on-going review and evaluation of program effectiveness in preparing competent physician assistant graduates.
- Ensure graduates will have the knowledge and skills to deliver cultural and ethnically competent health care.

Consistent with the recommendations of the Physician Assistant professional organizations, the program will ensure that graduates have the skills, knowledge, and abilities to:

- elicit a detailed accurate history and perform a thorough physical examination of a patient of any age, gender, and ethnicity/race
- perform or assist in the performance of diagnostic and therapeutic procedures
- recognize life-threatening emergencies and manage them under the supervision of a licensed physician
- communicate in a medically professional manner both orally and in writing
- present patient data and document it appropriately in the medical record
- use knowledge of medical nutrition therapy to counsel patients on the impact of proper nutrition on health and wellness
- evaluate medical literature critically and apply this knowledge and the principles of evidence-based medicine to clinical practice
- contribute to the Physician Assistant profession through scholarship, leadership, education, and service to the profession and community

- support the concepts of evidence-based medical care and the health of the community
- value diversity of cultures, people and lifestyles
- integrate electronic information technology into clinical practice
- successfully complete the National Certifying Examination for Physician Assistant
- practice safe and cost effective medicine
- interact as professionals within an interdisciplinary health care environment
- develop an awareness and appreciation of the ethical, legal, and social issues impacting the delivery and practice of health care
- demonstrate commitment to professional growth and life-long learning
- perform technical and surgical procedures within the scope of practice
- monitor and manage patient care in acute, long term, and ambulatory settings
- facilitate patient referral to appropriate specialty practices and community agencies
- use clinical problem solving skills to integrate knowledge from the biological and behavioral sciences with medical knowledge and current standards or clinical practice
- understand the basic sciences of anatomy, physiology, and pathophysiology and be able to utilize this knowledge in the diagnosis and treatment of diseases
- understand the principles of public health and incorporate health promotion and disease prevention into a patient care practice
- understand common pathophysiological problems that occur in each of the organ systems and those disease processes in human beings resulting from immunological disorders or from infectious organisms
- demonstrate working knowledge of the principles of pharmacotherapeutic, drug absorption, distribution, action, toxicity and elimination
- use the results from clinical laboratory in the diagnosis and management of disease states
- apply the knowledge of genetics in diagnosis and management of disease
- recognize and be guided by important of legal and ethical concepts related to medical care
- understand the PA profession, its origin and development and the role of PA/Physician team within the health care and social service systems

**2. Admission Requirements, Anticipated Student Clientele, and Student Financial Support**

a. Admission requirements: Admission requirements will be consistent with the admissions requirements of other professional graduate programs (i.e., Physical Therapy, Occupational Therapy) housed within the School of Health and Rehabilitation Sciences at IUPUI. Admissions will be highly selective and enrollment will be limited. To be eligible for admission, students must have earned a bachelor's degree from a regionally accredited college or university by the date of

enrollment in the professional program, have a minimum cumulative grade point average of 3.0 on a 4.0 point scale, submit three letters of reference (one of which must come from a physician assistant), a 500-word personal statement, and GRE or MCAT scores taken within the last five years. Students will be encouraged to use the Centralized Application Service for Physician Assistant (CASPA). CASPA offers applicants a Web-based application service that will allow them to apply to several physician assistant programs by completing a single application.

A Physician Assistant Admissions Committee, a committee of faculty and practicing physician assistants, will be established and assigned the responsibility of reviewing application packets and interviewing a selected group of students. The on-campus personal interview or video conference conducted by the Physician Assistant Admissions Committee will be used to identify important traits and skills which may not be apparent in the applicant's packet. Some of the attributes to be considered by the Committee will include:

- Knowledge and understanding of the profession
- Strength and breadth of academic record
- Type and depth of prior health care experience
- Strength of letters of recommendation
- Ability to work with individuals from diverse backgrounds and communities
- Motivation towards to career as a physician assistant

At the time of application submission, applicants must provide evidence of a minimum of 500 hours (paid or volunteer) of experience with direct patient (hands on) contact in a health care setting. Shadowing a Physician Assistant is recommended. Complete criminal background checks will be performed on all incoming students prior to the first day of classes and prior to the start of the clinical rotation phase of the program. A felony or misdemeanor conviction may result in denial to participate in clinical rotations and/or rejection by professional certification agencies or state licensing boards. The program reserves the right to dismiss any student for failure to declare a criminal record. Admitted students must have current CPR certification for health care providers completed prior to the beginning of the first semester of the program.

The total credit hours required for the proposed program is significantly higher than the credit hours required for a typical graduate program. The terminal degree for physician assistants is a Master's degree in Physician Assistant Studies. To satisfy program accreditation requirements, physician assistant programs must offer prescribed didactic courses and clinical experiences for students. The length of study, required credit hours, and admission requirements for the proposed master's degree program are comparable with the requirements adopted by other reputable physician assistant programs located in academic medical centers and research intensive institutions. Provided below (Table A) is a summary of the length of study and admission requirements of selected Physician Assistant Programs located at academic health center and research intensive institutions.

**Table A: Summary of Program Credit, Program Length and Admission Requirements for Selected PA Programs Located at Academic Health Centers and Research Intensive Institutions**

| Program | Total Credits | Length of Program | Minimum Number of Patient Care Exp. | Minimum GPA | GRE Requirement |
|---|---|---|---|---|---|
| Duke University | 110 | 24 Months | 1000 hours | 3.0 on a 4.0 Scale | 1000 – Combined Verbal & Quant |
| University of South Alabama | 121 | 27 | Not specified | 3.0 on a 4.0 Scale | 1100 – Combined Verbal & Quant |
| George Washington University | 98 | 24 | 960 hours | 3.0 | Required, but no minimum score stipulated |
| University of Florida | 102 | 24 | 2000 hours | Not specified | Not specified |
| Emory University | 119 | 28 | 2000 hours | 2.8 on a 4.0 Scale | Required, but no minimum score stipulated |
| Southern Illinois University Carbondale | 98 | 26 | 2000 hours | 2.8 on a 4.0 Scale | Required, but no minimum score stipulated |
| Seton Hall University | 106 | 36 | 100 hours | 3.0 | Required, but no minimum score stipulated |
| SUNY Downstate Medical Center | 110 | 27 | 100 hours | 2.85 on a 4.0 Scale | Not Required |
| Drexel University | 117 | 27 | 500 hours | 2.75 on a 4.0 Scale | Not Required |
| Medical University of South Carolina | 111 | 27 | Preference given to applicants with direct hands on experience. | 3.0 on a 4.0 Scale | Not Required |
| Texas Tech – University Health Sciences Center | 125 | 27 | Recommended, but not required | 3.2 on a 4.0 Scale | Not Required |
| University of Texas – Medical Branch – Galveston | 109 | 27 | N/A | N/A | Required, but no minimum Required |
| University of Utah | 91 | 27 | 3 years of experience | 3.0 on a 4.0 Scale | Not Required |
| **IUPUI** | **106** | **27** | **500 hours** | **3.0 on a 4.0 scale** | **GRE or MCAT required** |

b. Prerequisite coursework and/or degrees: Applicants will be expected to have an earned bachelor's degree from a regionally accredited institution and completed all prerequisite courses prior to enrolling in the program. Prerequisite science courses must be completed with a grade of "C+" or higher and must be taken on a graded basis within the last five years. A minimum cumulative grade point average of 3.0 on a 4 point scale will be required. All prerequisites must be taken at regionally accredited institutions (or foreign equivalent). Courses taken on a pass/fail, satisfactory/unsatisfactory basis or by correspondence will not be accepted. Science prerequisite courses must be for science majors and include a laboratory component. Applicants will be expected to provide documented evidence of satisfactory completion of the following prerequisite courses:

- Biological sciences with lab (16 semester hours of human anatomy, human physiology, microbiology, bacteriology, or zoology)
- Chemistry (must take general chemistry and biochemistry with labs along with other chemistry courses for a total of 16 semester hours)
- Statistics or biostatistics (3 credits)
- Psychology or sociology (3 credits)
- Medical terminology (2-3 credits)
- Nutrition (3 credits)
- Mathematics – college algebra or higher (3 credits)
- Health Promotion/Wellness or equivalent (3 credits)
- English to include communication or speech (6 credits)

c. Anticipated clientele: The proposed degree will be attractive to individuals interested in becoming a mid-level health practitioner in the health care delivery system. A second group of individuals will be those already practicing (i.e., dieticians, physician therapists, emergency medical technicians, etc) in health care who desire a more expanded role.

d. Enrollment limitations: This is a limited access program. Availability of space and clinical rotation sites will limit the number of students accepted in any given year. Enrollment will be capped at 50 per cohort.

## 3. Proposed Curriculum

a. Curriculum requirements:
Physician Assistants are expected to be educated in the basic science, patient assessment, and clinical medicine in order to provide a broad range of primary health care services to patients under the supervision of a licensed doctor of allopathic or osteopathic medicine. Services performed by Physician Assistants include history and physical assessment, development and implementation of appropriate therapeutic interventions, and patient education and counseling.

In order to enable Physician Assistant students to acquire necessary technical capabilities, behavioral characteristics, and judgment to deliver competent care in a professional capacity, the innovative curriculum of the Physician Assistant program (Table B) will be divided into two major parts: 12 months of classroom study and 15 months of clinical experience in internal medicine,

family medicine, psychiatry, emergency medicine, pediatrics, general surgery and women's health, public health, and an elective rotation. The curriculum will be delivered in a combination of flexible (i.e., compressed/intensive, online, mixed mode, laboratory, and on-campus) formats. The didactic curriculum will include course work in basic sciences, patient evaluation, behavioral medicine, laboratory and diagnostic medicine, pharmacology, physiology, clinical medicine, legal and ethical issues, research methods, health disparities, role of physician assistants in the health care delivery systems, health promotion and disease prevention, and medical nutrition therapy. The didactic curriculum will emphasize the interrelationships of various functions and organs of the body and the socioeconomic, psychological, and demographic factors impacting access, outcomes, and utilization of health services. During the clinical rotation phase of the program, students will have the opportunity to apply classroom material to the clinical setting. Students will learn interpersonal skills necessary to provide culturally competent health care to underserved populations.

**Table B: Master of Physician Assistant Curriculum**

| Course | Number | Course Title | Status | Credit Hours |
|---|---|---|---|---|
| SHRS | | Introduction to Physician Assistant profession | New | 2 |
| ANAT | D505 | Gross Anatomy/Lab | Existing | 5 |
| SHRS | | Clinical Laboratory and Diagnostic Medicine | New | 3 |
| SHRS | | Clinical Medicine for Physician Assistants I – Internal Medicine | New | 8 |
| SHRS | | Clinical Medicine for Physician Assistants II – Pediatric, Gynecology, Obstetrics, Geriatric, Dermatology | New | 6 |
| SHRS | | Clinical Medicine for Physician Assistants III – Surgery, Emergency Medicine | New | 6 |
| SHRS | | Medical Genetics and Embryology | New | 3 |
| SHRS | | Patient Evaluation I | New | 3 |
| SHRS | | Patient Evaluation II | New | 3 |
| SHRS | | Behavioral Medicine | New | 2 |
| SHRS | | Pharmacology for Physician Assistant I | New | 2 |
| SHRS | | Pharmacology for Physician Assistants II | New | 2 |
| SHRS | | Pharmacology for Physician Assistants III | New | 2 |
| SHRS | | Legal and ethical issues in Physician Assistant | New | 2 |
| SHRS | | Concepts of leadership and management for PA | New | 1 |
| SHRS | W661 | Health Promotion/Disease Prevention | Existing | 3 |
| SHRS | | Medical Nutrition Therapy | New | 3 |
| SHRS | P512 | Clinical Physiology and Pathophysiology I | Existing | 4 |
| SHRS | P530 | Clinical Physiology and PathoPhysiology II | Existing | 4 |

| Course | Number | Course Title | Status | Credit Hours |
|---|---|---|---|---|
| SHRS | W510 | Trends and Issues in the Health Sciences | Existing | 3 |
| SHRS | W520 | Evidence-Based Critical Inquiry | Existing | 3 |
| | | | | |
| SHRS | | Seminar in Physician Assistant Clinical Practice I | New | 1 |
| SHRS | | Seminar in Physician Assistant Clinical Practice II | New | 1 |
| SHRS | | Capstone Research Project | New | 2 |
| SHRS | | Clinical Rotation - Public Health | New | 2 |
| SHRS | | Clinical Rotation –Family Practice | New | 4 |
| SHRS | | Clinical Rotation – Internal Medicine | New | 4 |
| SHRS | | Clinical Rotation – Women's Health | New | 4 |
| SHRS | | Clinical Rotation – Pediatric | New | 4 |
| SHRS | | Clinical Rotation – Surgery | New | 4 |
| SHRS | | Clinical Rotation – Psychiatric | New | 4 |
| SHRS | | Clinical Rotation – Emergency Medicine | New | 4 |
| SHRS | | Clinical Rotation – Elective | New | 2 |

b. Sample Curriculum: (Courses will have to be taken in sequence)

| Semester | | Course Title | Credits | Totals |
|---|---|---|---|---|
| First | Summer | Introduction to PA Profession | 2 | |
| | | Clinical Physiology and Pathophysiology I | 4 | |
| | | Trends and Issues in Health Sciences | 3 | |
| | | Legal and Ethical Issues in PA | 2 | |
| | | Health Promotion/Disease Prevention | 3 | |
| | | | | 14 |
| Second | Fall | Clinical Physiology and Pathophysiology II | 4 | |
| | | Clinical Medicine for PA I – Internal Medicine | 8 | |
| | | Pharmacology for Physician Assistant I | 2 | |
| | | Clinical Laboratory and Diagnostic Medicine | 3 | |
| | | | | 17 |
| | | | | |
| Third | Spring | Anatomy | 5 | |

| Semester | | Course Title | Credits | Totals |
|---|---|---|---|---|
| | | Pharmacology for Physician Assistant II | 2 | |
| | | Patient Evaluation I | 3 | |
| | | Medical Genetics and Embryology | 3 | |
| | | Clinical Medicine for Physician Assistant II – Pediatric, Gynecology, Obstetrics, Geriatric, and Dermatology | 6 | |
| | | | | 19 |
| Fourth | Summer I and II | Clinical Medicine for Physician Assistant III – Surgery and Emergency Medicine | 6 | |
| | | Medical Nutrition Therapy | 3 | |
| | | Behavioral Medicine | 2 | |
| | | Health Promotion and Disease Prevention | 3 | |
| | | Pharmacology for Physician Assistants III | 2 | |
| | | Patient Evaluation II | 3 | 19 |
| Fifth | Fall | Clinical Rotation | 4 | |
| | | Clinical Rotation | 4 | |
| | | Clinical Rotation | 4 | |
| | | Evidence-Based Critical Inquiry I | 3 | |
| | | Seminar in Physician Assistant Clinical Practice I | 1 | |
| | | | | 16 |
| Sixth | Spring | Clinical Rotation | 4 | |
| | | Clinical Rotation | 4 | |
| | | Clinical Rotation | 4 | |
| | | Seminar in Physician Assistant Clinical Practice II | 1 | |
| | | | | 13 |
| | | | | |
| Seventh | Summer I and II | Clinical Rotation | 4 | |
| | | Clinical Rotation –Public Health | 2 | |
| | | Clinical Rotation – Elective | 2 | |
| | | Capstone Research Project | 2 | |
| | | Concepts in Leadership and Management in PA | 1 | |
| | | | | 11 |

## Course descriptions

**New Courses**

**Introduction to Physician Assistant Profession (2 credits):** This course is designed to provide students with an understanding of the origin, history, and development of PA profession and role of physician assistants in the health care delivery system, regulations governing PA practice, and credentialing and licensure. Additional topics to be covered will include delivery of health care, health disparities and diversity in health care, cultural competency, economics of health care, insurance and reimbursement systems, telemedicine, health policy, access and utilization of care, and impact of health care technology.

**Clinical Laboratory and Diagnostic Medicine (3 hours**): This course will review commonly used laboratory and diagnostic resources with specific focus on testing in hematology, chemistry, toxicology, microbiology, urinalysis, radiology, imaging, pulmonary function, cardiac testing, and other studies.

**Clinical Medicine for Physician Assistants I (8 credits) – Internal Medicine:** A comprehensive study of the medical conditions and diseases emphasizing etiology, pathophysiology of organ systems, signs and symptoms, diagnostic procedures, and clinical interventions and therapeutic measures used to diagnose and manage medical problems commonly seen by primary care physicians. Focus of this course will be on: cardiology, pulmonology, gastroenterology, urology, nephrology, neurology, dermatology, rheumatology, otolaryngology, otorhinolaryngology, orthopedic, allergy, ophthalmology, endocrinology, immunology, hematology, oncology, and infectious disease.

**Clinical Medicine for Physician Assistants II (Pediatric, Gynecology, Obstetrics, Geriatric, Dermatology – 6 credits)**
Growth, development, and medical problems encountered in the general pediatric populations; gynecological problems, normal/abnormal labor and delivery, pregnancy, family planning, and other problems encountered in the female patient; dermatologic problems encountered in various populations; and medical and behavioral problems experienced by the geriatric populations.

**Clinical Medicine for Physician Assistants III (Surgery, Emergency Medicine – 6 credits):**
This course will present an overview of surgical conditions and pre/post operative care, techniques of evaluating and treating emergency problems, and clinical skill sessions on suturing, splinting, injections, sterile technique, gowning and gloving.

**Medical Genetics and Embryology (3 credits):** This course is a basic introduction to the genetic and molecular basis for health and disease.

**Patient Evaluation I (3 credits):** This course is designed to prepare students in approaching the patient, obtaining history, and performing a physical examination. Emphasis will be placed on helping students understand normal anatomy and pathological physical findings, variations of normal, and physical examination techniques.

**Patient Evaluation II (3 credits):** This course is designed to build on student's knowledge of physical examination skills and increase knowledge regarding medical history and physical examinations of patients. Students will learn how to present findings, list a differential diagnosis,

write up results of patient encounters and use patient medical record, and electronic medical information systems.

**Behavioral Medicine (2 credits):** This course is designed to expose students to behavioral medicine and conditions they will encounter during clinical rotations and to examine how clinicians can best approach both emotional disorders and the difficult patient seen in everyday practice. Topics to be discussed are: interviewing and history taking techniques, methods of listening and building rapport with patient, anxiety and mood disorders, eating disorders, stressors and coping mechanisms, human sexuality, asking difficult questions, personality and child development, chemical dependency, manipulative personality, psychiatric emergencies and crises, domestic violence, the concept of death, dying, and bereavement.

**Pharmacology I (2 credit hours):** This course is the first of a sequence of three courses in pharmacology designed to teach students the general principles of pharmacology and how to use these principles to make rational clinical prescribing decisions. Topics covered will include: pharmacology, routes of administration, pharmacokinetics, pharmacodynamics, pharmacogenomics, and toxicology, drug classes, disease management, and drug safety and regulation. Students will develop the pharmacologic and therapeutic skills that a physician assistant will need to provide comprehensive patient care in clinical practice focusing on the specialties covered in Clinical Medicine for PA I.

**Pharmacology II (2 credit hours):** This course is the second of a sequence of three courses in pharmacology designed to teach students the general principles of pharmacology and how to use these principles to make rational clinical prescribing decisions. . Topics covered will include pharmacology, routes of administration, pharmacokinetics, pharmacodynamics, pharmacogenomics, and toxicology, drug classes, disease management, and drug safety and regulation. Students will develop the pharmacologic and therapeutic skills that a physician assistant will need to provide comprehensive patient care in clinical practice focusing on the specialties covered in Clinical Medicine for PA II.

**Pharmacology III (2 credit hours):** This is a sequence of three courses that focus on general principles of pharmacology designed to teach students the skills necessary to make rational clinical prescribing decisions. Topics covered will include: pharmacology, routes of administration, pharmacokinetics, pharmacodynamics, pharmacogenomics, and toxicology, drug classes, disease management, and drug safety and regulation. Students will develop the pharmacologic and therapeutic skills that a physician assistant will need to provide comprehensive patient care in clinical practice focusing on the specialties covered in Clinical Medicine for PA III.

**Women's health rotation (4 credits):** This course will place the student in a structured obstetrics/ gynecology medicine clinical rotation under the direct supervision of a qualified preceptor. This rotation will expose the student to the spectrum of problems and issues associated with women's health care as well as routine prenatal, intra-partum, and postpartum obstetrical care. Family planning and birth control methods, recognition and treatment of sexually transmitted infections, cancer detection, and evaluation of common gynecological problems will be covered.

**Pediatric rotation (4 credits):** This course will place the student in a structured pediatric clinical rotation under the direct supervision of a qualified preceptor. Students will be expected to become proficient with a variety of clinical presentations and procedures related to the assessment, preventative child care, and newborn physical. Students will develop competency in diagnosing, evaluating, monitoring, treating, educating and/or referring children and adolescent patients.

**Surgery rotation (4 credits):** This course will place the student in a structured surgical clinical rotation under the direct supervision of a qualified preceptor. Students will be expected to become proficient with a variety of clinical presentations and procedures. The emphasis of the learning experiences are preoperative evaluation and preparation of patients for surgery, role of Physician Assistants during the intra-operative and post-operative patient management, care of surgical wounds and complications,

**Psychiatric rotation (4 credits):** This course will place the student in a structured psychiatric clinical rotation under the direct supervision of a qualified preceptor. Students will be expected to become proficient with a variety of behavioral components of health, disease, and disability. Students will develop the skills to conduct mental health examination, recognize and categorize psychiatric disturbances, design early intervention, and make appropriate and timely referrals to psychiatrists and psychiatric facilities.

**Emergency Medicine rotation (4 credits):** This course will place the student in a structured emergency medicine clinical rotation under the direct supervision of a qualified preceptor. This rotation will enable students to develop interview and examination skills to recognize illnesses and injuries sustained by children and adults that necessitate emergency care and to develop techniques and procedures essential to the management of life-threatening illnesses and injuries. Students will be expected to become proficient in ventilation assistance, cardiopulmonary resuscitation, and fluid and electrolyte replacement.

**Family Medicine rotation (4 credits):** This course will place the student in a structured family practice medicine clinical rotation under the direct supervision of a qualified preceptor. This rotation will provide the student with an understanding of various medical disorders and their complications experienced by patients of all age groups. Students will be expected to become proficient with a variety of clinical presentations and procedures and develop competency in diagnosing, evaluating, monitoring, treating, referring, and/or educating patients about health risk behaviors and therapeutic regimens.

**Internal Medicine rotation (4 credits):** This course will place the student in a structured internal medicine clinical rotation under the direct supervision of a qualified preceptor. The internal medicine rotation is designed to provide clinical experience with the various acute and chronic medical disorders and complications that necessitate hospitalization and further evaluation of patients. Students will be expected to become proficient in addressing common medical issues via patient education.

**Public health rotation (2 credits):** This course is designed to provide students with primary care experience in a public health setting. Students will use public health principles to study community health and designed interventions.

**Clinical Rotation – Elective (2 credits):** This clinical rotation is designed to provide students with the opportunity in any one of the following disciplines: dermatology, radiology, ENT, subspecialties in surgery, urology, gerontology, oncology or another area of interest to the student.

**Medical Nutrition Therapy (3 credits):** This course is designed to provide students with an understanding of medical nutritional therapy principles and intervention strategies for the routine management of chronic diseases in at-risk individuals or populations.

**Concepts of leadership and management for Physician Assistant (1 credit):** This course is designed to provide physician assistant students with the foundation to understand and appreciate leadership and management principles necessary to assume leadership positions in the PA profession and practice. Students will examine current leadership theories and selected cases of management principles and processes in health care organizations

**Legal and ethical issues in Physician Assistant (2 credits):** The course deals with the application of ethical principles and legal doctrines to problems of physician assistant education and practice. Students will examine ethical dilemmas encountered in health care (i.e., end of life, patient's right, advanced directives) and medical research, the role of institutional review boards, and state/federal legislation, policies, practice guidelines impacting Physician Assistant profession, legal aspects of physician assistant practice, licensing, malpractice, supervision, delegation, and prescribing.

**Capstone Research project (2 credits):** This course is designed to allow Physician Assistant students to complete a Master's degree project under the supervision of a faculty. Students will identify clinical oriented question and use the principles of evidence-based practice and current published medical research to address the question and make an oral presentation on their topic. Students will be expected to use appropriate audiovisual, handouts, etc. for the oral presentation.

**Seminar in Physician Assistant Clinical Practice I and II (I credit each; 2 credits total):** An opportunity for students to further define, expand, and acquire skills necessary for the practice of medicine as a primary care physician assistant. Integrate concepts and knowledge gained from rotation. Emphasis will be placed on patient and professional communication, life-long learning, and current clinical issues. The third component of this series will include review and practice for licensure examination.

**Existing Courses**

**SHRS W661 Health Promotion and Disease Prevention (3 credits):** This course is designed to give students the opportunity to examine public health principles and examine important theoretical and conceptual framework for community-based health promotion and interventions. Health People 2010/2020 will be used as the framework for discussion and analysis.

**ANAT D505 Gross Anatomy (5 credits):** This course is an intensive introduction to the gross anatomy of the human body, including a complete dissection. Series of lectures on radiographic anatomy and clinical application of anatomy

**SHRS W510 Trends and Issues in the Health Sciences (3 credits):** A seminar course to review pertinent literature and other sources of information as a basis for discussing trends and issues affecting the therapeutic professions and the health care delivery system

**SHRS P512 Clinical Physiology and Pathophysiology I (4 credits):** This course is designed to provide students with a solid foundation of normal and abnormal physiology, including an understanding of how cells, tissues, organs and organ systems work together. The first semester will include the following modules of normal and abnormal physiology: Cell physiology, metabolism, muscle, cardiovascular, respiratory and endocrine

**SHRS P530 Clinical Physiology and Pathophysiology II (4 credits):** As a continuation of P512, this course is designed to provide students with a solid foundation of normal and abnormal physiology, including an understanding of how cells, tissues, organs and organ systems work together. The second semester will include the following modules of normal and abnormal physiology: Renal physiology, Gastrointestinal Physiology, Oncology, and Integumentary

**SHRS W520 Evidence-Based Critical Inquiry (3 credits):** This course will present the fundamentals of research methodology, design, techniques, and procedures applicable to research problems in the allied health disciplines. Student will review literature related to a specific topic in patient outcome assessment or other approved area

c. Courses at another institution: None

**4. Form of Recognition**

a. Type of degree to be awarded: Master of Physician Assistant Studies

b. Indiana University's suggested CIP Code: 510912

c. Program, organizational and site information on diploma
Master of Physician Assistant Studies, Indiana University School of Health and Rehabilitation Sciences, Indiana University-Purdue University at Indianapolis, Indiana.

**5. Program Faculty and Administrators**

a. Current faculty and administrators

| **Name** | **Degree** | **Rank/Status** | **Courses to be taught/format** |
|---|---|---|---|
| Augustine Agho | PhD in Health and Hospital Administration | Tenured –Professor & Dean, SHRS | Leadership and Management (web-based course) |
| Judith Ernst | Doctor of Medical Science and Master's Degree in Nutrition and Dietetic | Tenured - Associate Professor, Department of Nutrition and Dietetics | Medical Nutrition Therapy |

| | | | |
|---|---|---|---|
| Joyce Mac Kinnon | Ed.D, PT | Tenured Full Professor - Associate Dean & Interim Chair, Department Health Sciences | Critical Inquiry in the Health Sciences |
| Christina Mushi-Brunt | PhD, Health Education | Tenure-track Assistant Professor, Department of Health Sciences | Health Promotion and Disease Prevention<br>Trends and Issues in the Health Sciences |

b. New faculty positions required:

Four new faculty members, including a program director, clinical coordinator, a nine-month faculty, and a consulting medical director, will be hired to deliver the curriculum and administer this program during the first year of the program. The roles and responsibilities of the program director, medical director, and clinical coordinator will reflect the requirements of the PA accreditation agency. Faculty workload will be comparable to the workload of other faculty members in the school. As noted in Tables 2A and 2B, additional faculty will be hired in Year 2, 3, and 4. At full capacity, the program will have a total of 10 full-time faculty members and 4 associated faculty. Teaching workload will be adjusted to enable faculty in the School of Health and Rehabilitation Sciences to teach five courses (i.e., Medical Nutrition Therapy, Health Promotion, Leadership and Management, Evidence Based Critical Inquiry, and Trends & Issues in Health Sciences) listed in the PA curriculum. Other faculty at the University with expertise and appropriate credentials will be hired to teach selected courses and to serve as guest lecturers. Practicing physicians and physician assistants in the community will be invited to teach specialized courses and to serve as guest speakers and mentors.

**6. Needed Learning Resources**

a. Library holdings

Students enrolled in the proposed degree program will have access to library holdings in the School of Medicine. Provisions have been made to acquire necessary equipment and space for teaching, research, and laboratory activities. Five separate libraries are located on the IUPUI campus—University Library, Herron School of Art Library, School of Dentistry Library, Ruth Lilly Law Library and Ruth Lilly Medical Library (RLML). Of the five libraries, the Ruth Lilly Medical Library will be the primary source of information. The RLML collection focuses on authoritative literature in biomedical research and clinical practice. It is the only academic health sciences library in the state, and is the primary information resource for faculty, staff, and students of the Indiana University School of Medicine, School of Nursing, School of Health and Rehabilitation Sciences, and licensed Indiana health care professionals. The RLML contains more than 270,000 volumes, with current subscriptions to approximately 1900 journals, many of which can be accessed remotely via the internet, whereby students can retrieve full-text articles at anytime and from any location. For materials not available at the RLML, students can request copies from other institutions using the Document Delivery Service. This essentially means that students have

unlimited access to any needed document. Articles are normally delivered electronically to the requester's desktop within a week. Requests for books are filled within two weeks.

The Library also has a growing electronic collection of 95 databases, 834 books, and 3500 journals. Important health sciences databases include MEDLINE, CINAHL, the Cochrane Database of Systematic Reviews, PsycINFO and SPORTDiscus. IUCAT is the online card catalog for the Indiana University Library system (all campuses) and can be used to find books, journals and electronic resources that are available at the Medical Library. IUCAT is accessible via the Library's web page. The Indiana University Medical Library Special Collections emphasize the practice of 19th century medicine in Indiana and other Midwestern states.

The Library's 50,000 square feet of space includes seating for 426 at study carrels and tables. There are also four rooms that can be reserved for private study, meetings or classes. The Library has a robust information technology infrastructure that includes over 30 public computer workstations as well as wireless and Ethernet connections for laptops. Remote users can authenticate through the university's Central Authentication Service and reach nearly all of the electronic resources available on campus. The library also has an electronic classroom with an instructor station, twenty student workstations, two data projectors and two SmartBoards.

Faculty librarians teach classes on a variety of topics, including: locating health information on the Internet, retrieving the best evidence literature, and information management using personal bibliographic software such as Endnote. Classes can be tailored to meet the curriculum needs of the School of Health and Rehabilitation Sciences.

b. Instructional, clinical, and research space

Due to space constraints on campus, the program will be located off campus. It is estimated that a minimum of 10,000 square foot will be needed for faculty offices, conference room, classrooms, student lounge, computer laboratory, clinical observation laboratories, and physical examination rooms. At a cost of $20 per square ft, it is estimated that rental cost will be approximately $200,000 per year plus an additional $50,000 for overhead – for an overall total of $250,000 per year.

The space will have to be reconfigured to create three dedicated classrooms, one multi-purpose skills laboratory, five (5) examination rooms, and seven (7) faculty and staff offices. It is estimated that $180,000 will be needed to execute this task and to purchase office furniture and equipments.

c. Student Assistance – Diversity Fellowship Award

Diversity Fellowship award of up to $10,000 per year, renewable annually, will be given to up to seven (7) incoming students beginning in Year 2. The Diversity Scholars Fellowship program is designed to attract academically talented students from underrepresented and/disadvantaged backgrounds pursuing the PA degree in the School of Health and Rehabilitation Sciences at Indiana University who will contribute to the diversity of both Indiana University and the professions. To be eligible for the award, students will be required to meet all program admissions requirements at time of application, be full time students as defined by the Graduate School or program, and be of good academic standing throughout the program. In addition to the requirements for admission, applicants will be required to submit an essay addressing the aspect of diversity they bring to the program and the profession.

d. Audiovisual equipment

It is estimated that a sum of $35,868 will be needed to retrofit and equip each of the three classrooms with appropriate audiovisual resources in Year 1, Year 2, and Year 3 plus $7500.00 per year for maintenance and upgrade. The classroom will have a dedicated personal computer, Laptop connection, interactive pen display, and a document camera.

e. Simulation Center

The Fairbanks Simulation Center, which cost $11.4 million to build and equip, is a 30,000-square-foot facility with the latest in technology and 11 employees. The Center is the only training facility in the state of Indiana equipped to offer multidisciplinary training to health-care professionals and other medical personnel, students and residents.

The fourth-floor suite houses a hospital operating room, emergency room, obstetrical/neonatology suite, intensive care room and a multi-purpose area that can be adapted to the education needs of the particular day. Telemetry in each of the five hospital rooms, one obstetrics/neonate suite and the ICU is identical to what is found in hospitals. There is an electronic drug delivery system so pharmacy students, nurses and doctors in training can experience the process of requesting, retrieving and delivering medications to the "patients."

Around the corner from the simulation center's hospital sits the business end of a decommissioned ambulance. The truck was hoisted onto the fourth floor before the building was completely enclosed. The ambulance provides training for first responders.

Down the hall is a skills training area for use by Clarian nurses, IU nursing and medical students, phlebotomists and other medical personnel who need to perfect a skill such as starting an IV, placing a central line for drug delivery, introducing a breathing tube into a patient's airway and other skilled procedures.

Outside the simulated hospital is the Clinical Skills Education Center with the latest in audio and visual technology to enhance learning. In this area, students participate with patient-actors in real-life situations to assess the student's diagnostic skills and bedside manner. The process is observed, recorded and evaluated by faculty.

The Dean of the School of Health and Rehabilitation Sciences met with Dr. Scott Engum, Director of the IU Simulation Center, to discuss assess and the capacity of the Center to accommodate the educational and learning needs of faculty and students enrolled in the proposed PA program. It was determined that with appropriate planning and resources PA faculty and students will have assess to the Center. It is projected that each student will spend approximately 260 hours in the simulation lab at a cost of $35 per hour. The amount budgeted per year for the use of this facility will be:

- Year 1: $318,500 (260 hours per student X 35 students X $35/hour)
- Year 2: $682,500 (260 hours per student X 75 students X $35/hour)
- Year 3: $819,000 (260 hours per student X 90 students X $35/hour)
- Year 4: $910,000 (260 hours per student X 100 students X 35/hour)
- Year 5: $910,000 (260 hours per student X 100 students X $35/hour)

**7. Other Program Strengths**

a. Special Features

Students enrolled in the proposed professional graduate degree program will have the opportunity to participate in international service learning activities at Moi University, Eldoret, Kenya and to take classes with other students enrolled in professional graduate degree programs such as health sciences, physical therapy, occupational therapy, nutrition and dietetic, medicine, nursing, and social work.

The program is designed as a full-time professional education to allow graduates to sit for the Physician Assistant National Certifying Examination (PANCE) as required by all states for licensure to practice.

b. Anticipated Collaborative Arrangements with Other Parties

In order to meet the learning needs of students and have access to clinical rotation sites, the program will establish collaborative arrangements with the following internal and external parities: IU School of Medicine, IU School of Nursing, IU School of Science, Clarian Health System, St. Vincent Health Systems, Indiana Area Health Education Center, Community Physicians of Indiana, Community Health Network, Veterans Administration Medical Center, and Wishard Hospital.

## C. Program Rationale

### 1. Institutional Factors

a. Compatibility with the institution's mission

The mission of IUPUI is to be “Indiana’s urban research and academic health sciences campus”. According to the IUPUI Academic Plan, “graduate education is critical to the campus mission, with more graduate and professional students completing their degrees at IUPUI than at any other Indiana campus”. A graduate professional degree program in Physician Assistant offered by the School of Health and Rehabilitation Sciences is aligned with the research mission of the campus and the campus’s goal to attract high quality faculty and graduate students.

The Physician Assistant Studies program supports and facilitates the mission of IUPUI by providing high quality educational experience, which prepares physician assistant graduates for leadership roles in rural and urban healthcare settings. The program will be committed to providing an environment of academic freedom in which students learn from faculty members who have expertise in the profession. Excellence in teaching will be enhanced by faculty engaged in research and creative activities as well as professional service to the profession.

b. Planning process resulting in this proposal

Planning for the Master of Physician Assistant Studies began with discussions among the faculty and administrators in the School of Health and Rehabilitation Sciences and with IUPUI central administration. In fall 2008, the Dean of the School of Health and Rehabilitation Sciences met with the IUPUI Health Deans (i.e., Deans of the Schools of Medicine, Nursing, Social Work, Dentistry, Science, Optometry, Engineering and Technology, and Purdue College of Pharmacy, Nursing, and Health Sciences) to present and discuss the school’s desire to establish a PA program.

As planning progressed, information was obtained from many of the other health schools on campus and IU Bloomington, the Office of Enrollment Services, and from prospective students. Also, we obtained information from other universities that offer similar degrees in order to examine student enrollment patterns and employment opportunities for prospective graduates.

We have also communicated with schools and programs on campus who we perceived might be impacted by our decision to offer this degree. Specifically, the Dean of the School of Health and Rehabilitation Sciences met with the IUSON Executive Associate Dean for Academic Affairs and Chair of the Department of Family Health Nursing to explore opportunities for collaboration. Similar discussions were held with the Director of the Simulation Center and the Chairs of the Department of Cellular & Integrative Physiology, Department of Pharmacology and Toxicology, and the Department of Anatomy and Cell Biology in the IUSOM. We have assurances that students enrolled in the proposed program will be permitted to enroll in courses (i.e., Human Anatomy, Human Physiology/Medical Physiology, and Pharmacology) offered in the School of Medicine. It is anticipated that discussions will continue with the Schools of Medicine and Nursing as we finalize the curriculum and develop the clinical rotation program for the students enrolled in the proposed PA program.

This proposal has the endorsement the School of Health and Rehabilitation Science's Academic Studies and Research Development Committee and the school's faculty as a whole, and the Physician Assistant Advisory Committee (see Appendix A for membership list). Dr. Dana Sayre-Stanhope, Associate Professor and Director of the Physician Assistant Program in the School of Medicine at Emory University, was contracted to conduct a feasibility study (see Appendix B for copy of the report).

c. Impact of the proposed program on other programs

This degree is designed to complement the existing life and health related degrees offered on the IUPUI campus. This proposed degree has the support of Dr. Craig Brater, Dean of IU School of Medicine, Dr. Marion Broome, Dean of IU School of Nursing, and Dr. Bart Ng, Dean of School of Science (see Appendix C – letters of support).

d. Describe how program would more fully utilize existing resources

The Master of Physician Assistant Studies has been planned to effectively utilize faculty expertise from the School of Health and Rehabilitation Sciences and Schools within IUPUI. The core curriculum includes basic science, pathophysiology, and medical nutrition therapy courses that currently exist as IUPUI offerings. The required prequisite courses are all current course offerings at IUPUI. All of this would translate into increased enrollments in courses already being offered, thereby more fully utilizing existing IUPUI resources.

**2. Student Demand**

a. Description of enrollment projections

We anticipate enrolling a cohort of 35 students the first year the degree is offered, and admitting a cohort of 40 students in Year 2, and 50 students per year thereafter.

b. Enrollment and completion data : See Table 1.

**3. Transferability**

All didactic courses and clinical rotations must be completed while enrolled in the Physician Assistant program at IU School of Health and Rehabilitation Sciences.

**4. Access to graduate and professional programs**

The Master of Physician Assistant Studies is a terminal degree for physician assistants. Graduates of the Physician Assistant program who are interested in earning a doctorate degree will have the opportunity to apply for admissions to the Ph.D program in Health and Rehabilitation Sciences offered by the Indiana University School of Health and Rehabilitation Sciences.

**5. Demand and employment factors**

One of the major benefits of the program for students is that it would provide them with the opportunity to prepare for a high demand health care career. In 2008, jobs in the health services industry were listed as number one for employment in the Indianapolis metro area. Based on workforce data the state of Indiana needs more healthcare workers as does the nation. A recent U.S. Bureau of Labor Statistics publication on "Recession-Proof Jobs in 2008" states that "almost half of the 30 fastest growing occupations are concentrated in the health services"

Employment opportunities for physician assistants exist in Indiana as well as throughout the United States. Employment of physician assistants is expected to grow 27 percent from 2006 to 2016, much faster than the average for all occupations as health care organizations increasingly use physician assistants to contain costs and to meet the health workforce needs of rural and inner city clinics. According to the U.S Department of Labor, physician assistant is ranked as one of the 20 career growth potential. As a respected member of the health care team who works interdependently with his or her supervising physicians, physician assistants can find employment in both primary and specialty care at a variety of practice settings including hospitals, managed care organizations, community clinics, private practice, medical groups, Veterans Medical Centers, and other government agencies. In addition to clinical practice, physician assistants may pursue careers in research, public health, health care administration, and teaching in postsecondary institutions.

**6. Regional, state, and national factors**

a. Comparable programs in region or state

Two private universities in Indiana (i.e., Butler University and University of St. Francis-Fort Wayne) offer graduate degree programs in physician assistant studies. According to published reports, the program at the University of St. Francis-Fort Wayne has been placed on probation by the Accreditation Review Commission on Education for the Physician Assistant, Inc. In February 2010, Indiana State University (ISU) received approval from the Indiana Commission on Higher Education to establish a PA program with a specific focus on rural and underserved populations. One of the distinctive features of the proposed IU program is the tremendous institutional

resources, affiliations, and facilities available to prepare graduates to work with underserved populations in rural and urban communities in Indiana and beyond.

b. External agencies

The program must be granted provisional accreditation by the Accreditation Review Commission on Education for Physician Assistant, Inc before students can be admitted to the program. Program faculty and staff will work with the Dean of the School of Health and Rehabilitation to acquire necessary resources and submit the application for provisional accreditation.

## D. Program Implementation and Evaluation

Program Implementation

It is anticipated that the first class of students will be admitted in summer 2011. To meet this deadline, the activities outlined (Table C) below will be implemented in stages.

Table C: Program Implementation Timeline

| Number | Activity | Timeline |
|---|---|---|
| 1 | Hire an external consultant to conduct a feasibility study | June 2009 |
| 2 | Submit consultant report to Chancellor Bantz and Dr. Uday Sukhatme, Dean of Faculties and EVP. | September 2009 |
| 3 | Establish an advisory committee | September 2009 |
| 4 | Submit consultant report and draft of proposal to advisory committee | October 2009 |
| 5 | Submit proposal to the Academic Studies and Research Development of the School of Health and Rehabilitation Sciences for review and approval | November 2009 |
| 6 | Submit proposal to the Graduate Affairs Committee of IUPUI for campus review and approval | December 2009 |
| 7 | Secure funds and financial commitment from Chancellor Bantz and Dean Sukhatme | November 2009 |
| 8 | Submit proposal to IU- Academic Leadership Council, the IU Board of Trustees and Indiana Commission of Higher Education | February 2010 |
| 9 | Begin the process of hiring faculty and staff | March- April 2010 |
| 10 | Secure space and acquire equipment | May- June |

| Number | Activity | Timeline |
|---|---|---|
| | | 2010 |
| 11 | Send notification of intent to establish a PA program to the Accreditation Review Commission on Education for the Physician Assistant and begin the process of submitting self-study report to the Commission and confirm dates for the site visit | Jan-June 2010 |
| 12 | Develop student handbook and recruitment materials. | June 2010 |
| 13 | Appoint Program Director, Medical Director, Clinical Coordinator, and support staff | June 2010 |
| 14 | Final review of new courses, advertise program, and admit first class | May 2011 |
| 15 | Secure provisional accreditation | May 2011 |
| 16 | Admit first class | June 2011 |

Program Evaluation

The physician assistant program will be responsible and accountable for the formative and summative assessment of educational outcomes and for developing and implementing a process for continuous improvement in all aspects of the program. Table D illustrates the components of the program assessment plan in the areas of mission/policies/procedures, student learning outcomes, and retention/graduation/employment. In each case, results will be noted and corrective action taken to continuously improve the program and its outcomes.

Each of the goals listed has been identified as critical to the mission and success of the program. While attainment of most of these goals can be determined while students are still enrolled, some goals are best assessed by determining what students do after graduation, such as pass certification examination, enroll in doctoral degree program, secure employment, etc. These goals are best assessed through graduate surveys.

Many of the goals will be assessed annually, especially those related to policies and procedures and availability of necessary resources. Other more complex goals may best be assessed in a review format such as a five year review that would include reviewers both internal and external to the campus.

**Table D: Program Assessment Plan - Mission/Policies/Procedures**

| **Goal** | **Freq of** | **Responsibility** | **How** | **Documents** | **Benchmarks** |
|---|---|---|---|---|---|

| | **Assessment** | | **Assessed** | **Used** | |
|---|---|---|---|---|---|
| Program congruent with IUPUI mission | Annually | Program director | Compare program mission with IUPUI mission | Mission statements | All documents congruent |
| Program congruent with SHRS mission | Annually | Program director | Compare program mission with SHRS mission | Mission statements | All documents congruent |
| Program adheres to IUPUI graduate program requirements | Annually | Program director and ASRD Committee | Compare program requirements with IUPUI requirements | Program requirements and IUPUI requirements | All documents congruent |
| Program information dissemination is accurate | Ongoing | Program director and SHRS Associate Dean | Review all dissemination materials | Website; all written program materials | All materials accurate |
| Admission requirements are correlated with student retention | Annually | Program director and SHRS Associate Dean | Correlate components of admissions with retention | Admissions criteria and retention data | Correlate admissions criteria with retention data and student graduation; revise admissions criteria if necessary |
| Students progress through the program in a timely manner | Bi-annually | Program director and SHRS Associate Dean | Track student progression | Student plan of study and student transcripts | two and half year graduation expectation |

**Resources**

| **Goal** | **Freq of Assessment** | **Responsibility** | **How Assessed** | **Documents Used** | **Benchmarks** |
|---|---|---|---|---|---|
| Qualified faculty | Annually | Program director | Review course | Semester course | All courses are appropriately |

| | | | | | |
|---|---|---|---|---|---|
| available | | | assignments | offerings; faculty CVs | staffed |
| Faculty are educating students effectively | Semester; annually | Program director | Course evaluations; annual faculty review | Course evaluations; annual faculty review | Course evaluations are consistent with standards met by faculty in the SHRS |
| Required courses are available | Annually | Program director | Review course offerings | Semester course offerings | All courses are offered in a timely manner |

**Student learning outcomes**

| **Goal** | **Freq of Assessment** | **Responsibility** | **How Assessed** | **Documents Used** | **Benchmarks** |
|---|---|---|---|---|---|
| Students will be able to articulate the theoretical framework of their degree | Each semester | Program director | Exit interviews of graduating students | Exit interview transcripts | All graduating students should be able to articulate the theoretical framework of PA degree |
| Students to meet degree objectives through required coursework objectives (i.e., cognitive, psychomotor, and affective) | Each semester | Course instructor/ program director | All courses will have written cognitive, psychomotor, and affective objectives congruent with the purpose of the course | Syllabi | Student performance in courses (i.e., didactic and clinical rotations) |
| Students successfully pass certification examination | Annually post graduation at one year and three year | Program director | Post graduation survey | Survey | 90% of students passed certification examination on first attempt. |
| Students are employed in their area of interest and report high job | Annually post graduation at one year and three year | Program director | Post graduation survey | Survey | 90% of students employed in their area of interest |

| | | | | | |
|---|---|---|---|---|---|
| satisfaction | | | | | |

**E. Tabular Information**

1. Table 1: Enrollment and Completion Data
2. Tables 2A and 2B: Cost and Revenue Data
3. Table 3 New Program Proposal Summary