example of pathophysiology to emphasize relevance of material. Students will solidify an understanding of the structures and functions across all systems in the human body under normal conditions and select pathophysiology. Knowledge gained of normal function will be applied towards making predictions about physiologic function in response to disease states. Students are expected to gain a cumulative understanding of physiologic function and are challenged to apply this knowledge towards problem solving and interpreting physiologic scenarios. Open to entry-level PA students only.

4 credits.

HAP 516: Problem Based Learning (PBL)
Provides students with the opportunity to develop critical thinking and problem solving skills in a seminar, small group environment. Students will learn to connect the knowledge and attitudes developed in behavioral, basic and clinical science courses and apply it to patient care. Increases student capacity to seek and apply knowledge as individual problem solvers and members of a health care team. Open to entry-level PA students only.
1 credit, S/F graded
May be repeated 2 times FOR credit.

HAP 518: Medical Director Presentation Rounds
Provides students with feedback on oral presentations derived from patient history and physical examinations completed by students. Evaluations are based on student's ability to critique an incomplete history and physical, identify issues that require further discussion in the HPI and physical exam, write a complete problem list, and document an assessment and plan. Open to entry-level PA students only.
S/F graded
May be repeated 2 times FOR credit.

HAP 521: Clinical Medicine I
Focuses on mastery of the knowledge, skills, and attitudes necessary to construct a comprehensive patient database and management plan. Students are introduced to, and become proficient in, medical interviewing and performing a physical examination. Emphasizes the process of synthesizing data to formulate a diagnostic plan through learning activities such as lectures, small group process, problem based learning, case studies, and clinical skills laboratories. Teaches data gathering and recording in the problem oriented medical record format. The diagnostic process is taught in an organ systems (or medical subspecialty) approach. Students learn to recognize and manage physical and mental health problems. Students are encouraged to think critically as an integral part of developing a logical, sequential and humanistic approach to their patient responsibilities and mastering medical information. The ultimate goal of these clinical medicine courses is to assure that students are optimally prepared to participate in the delivery of high quality medical care in both an in-patient and out-patient setting. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information. Open to entry-level PA students only.
5 credits.

HAP 522: Clinical Medicine II
Focuses on mastery of the knowledge, skills, and attitudes necessary to construct a comprehensive patient database and management plan. Students are introduced to, and become proficient in, medical interviewing and performing a physical examination. Emphasizes the process of synthesizing data to formulate a diagnostic plan through learning activities such as lectures, small group process, problem based learning, case studies, and clinical skills laboratories. Data gathering and recording are taught in the problem oriented medical record format. The diagnostic process is taught in an organ systems (or medical subspecialty) approach. Students learn to both recognize and manage physical and mental health problems. Students are encouraged to think critically as an integral part of developing a logical, sequential and humanistic approach to their patient responsibilities and mastering medical information. The ultimate goal of these clinical medicine courses is to insure that students are optimally prepared to participate in the delivery of high quality medical care in both an in-patient and out-patient setting. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information. Prerequisite: HAP 521 (minimum grade of B-). Open to entry-level PA students only.

7 credits,

**HAP 523: Clinical Medicine III**

Focuses on mastery of the knowledge, skills, and attitudes necessary to construct a comprehensive patient database and management plan. Students are introduced to, and become proficient in, medical interviewing and performing a physical examination. Emphasizes the process of synthesizing data to formulate a diagnostic plan through learning activities such as lectures, small group process, problem based learning, case studies, and clinical skills laboratories. Data gathering and recording are taught in the problem oriented medical record format. The diagnostic process is taught in an organ systems (or medical subspecialty) approach. Students learn to recognize and manage physical and mental health problems. Students are encouraged to think critically as an integral part of developing a logical, sequential and humanistic approach to their patient responsibilities and mastering medical information. The ultimate goal of these clinical medicine courses is to insure that students are optimally prepared to participate in the delivery of high quality medical care in both an in-patient and out-patient setting. Prerequisite: HAP 522 (minimum grade of B-). Open to entry-level PA students only.

6 credits.

**HAP 524: Clinical Medicine IV**

Focuses on mastery of the knowledge, skills, and attitude necessary to construct a comprehensive patient database and management plan. Students become proficient in utilizing the history and physical information as they begin to synthesize data to formulate a diagnostic plan. This is emphasized through learning activities such as lectures, small group process, case studies, and clinical skills laboratories. The diagnostic process is taught in an organ systems approach. Students learn to both recognize and manage physical and mental health problems. Students are encouraged to think critically as an integral part of developing a logical, sequential and humanistic approach to their patient responsibilities and mastering medical information. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information. Prerequisite: HAP 523 (minimum grade of B-). Open to entry-level PA students only.

9 credits.

**HAP 528: Genitourinary, Sexual and Reproductive Health**

A comprehensive introduction to obstetrics and gynecology (OB/GYN), female and male genitourinary system (GU) and human sexuality. Students will learn about structures, function, evaluation and treatments of the various diseases and conditions. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information. Open to entry level PA students only.

4 credits.

**HAP 532: Diagnostic Imaging**

Provides an overview of common diagnostic imaging modalities and their indications, limitations, benefits and potential risks. Students learn how to utilize plain radiographs and other imaging studies in the diagnosis of disease with an emphasis on recognition of normal findings and their comparison to the abnormalities found in disease processes. Open to entry-level PA students only.

2 credits.

**HAP 534: Introduction to Clinical Psychiatry**

Presents key principles of psychiatric evaluation and interviewing to include the mental status exam. Focuses on psychiatric problems seen in primary care, introduces the differential diagnosis and treatment of major psychiatric disorders such as anxiety, personality and mood disorders, psychosis, substance abuse, and somatoform disorders. Fosters an awareness of social patterns that exert an impact on mental functioning. Open to entry-level PA students only.

3 credits.

**HAP 538: Clinical Aspects of Palliative Care**

Provides students with knowledge and skills relevant to the practice of hospice and palliative medicine. Involves care of patients at all stages of progressive disease, including symptom management, restoration and maintenance of quality of life. Focuses on patient-directed goals. Explores coordination of services and care, using a holistic, team-based model and communication tools. Open to any healthcare professional who has an interest or work experience in hospice and palliative medical care.

3 credits.

**HAP 539: Hospice and Palliative Care Policy Issues**

Introduces healthcare professionals to policy issues and fundamental tools relevant to the delivery of hospice and palliative care. Addresses aging population; workforce issues; healthcare expenditures and reimbursements; and advancement of medical technology. Includes ethics, barriers to practice, and medical legal issues. Open to any healthcare professional who has an interest or work experience in hospice and palliative medical care.

3 credits.

**HAP 545: Ethics and Health Care for Physician Assistants**

Provides an overview of ethics in health care in a rapidly changing society. Teaches students to approach ethical dilemmas using theoretical frameworks and decision making processes. Explores ethical issues surrounding health care reform and public health policy and includes distribution of resources and rationing of services. Introduces students to the ethical perspectives of euthanasia, reproduction, transplants, genetics, research on human subjects, pediatrics, cloning, stem cells and mental health through case studies. Reviews classic cases in health care ethics and their shaping of health policy. Discusses patient education and the Physician Assistant professional codes of ethics and standards. Open to entry-level PA students only.

3 credits.

**HAP 549: Clinical Skills for the Physician Assistant Student**
The clinical skills course provides the physician assistant student with an overview of common clinical procedural skills and their indications, limitations, benefits and potential risks. Students are taught how to perform a number of commonly performed clinical procedures. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information. Open to entry level PA students only.

1 credit, S/F graded

HAP 551: Research Design and Evidence-Based Medicine
Provides students with basic knowledge and skills needed to formulate research questions and hypotheses, develop research protocols, critically evaluate and analyze scientific and medical journals, and to conduct computerized searches and literature reviews. Describes principals of Evidence-Based Medicine and emphasizes various types of clinical questions and tools available to answer them. By the end of this course, the student will choose a proposed topic for their capstone project. Open to entry-level PA students only.

2 credits,

HAP 556: Teaching Strategies
This course provides an overview of the principles associated with effective teaching. Students will combine theory and practice while developing teaching skills that promote learning and diversity within a variety of education settings. Topics emphasize the practical aspects of teaching and include teaching models, student learning styles, course objectives, learning outcomes, evaluation, and classroom ethics. Students will be required to complete a final project that will be presented, discussed and evaluated in class. For post-professional PA students only or with permission of the Program Director.

3 credits,

HAP 557: Introduction to Clinical Informatics
Introduces health care professionals to concepts surrounding clinical information systems and the practical applications of these concepts. Provides an overview of the Clinical Informatics field including definitions, theory, technologies, and workflows. Focuses on topics related to the delivery of health care within the realm of the electronic medical record systems, including policy, leadership, regulatory affairs and administration. Includes synchronous and asynchronous on-line learning activities.

3 credits,

HAP 558: Epidemiology
Presents epidemiologic concepts used to study health and disease in populations. Provides information about the major causes of morbidity and mortality, including methods of measurement and data sources. Observational and experimental epidemiologic studies will be described and their advantages and disadvantages compared. Students will develop skills needed to critically review epidemiologic research studies published in peer-reviewed journals. Introduces various areas of epidemiologic study, including cancer, molecular/genetic, environmental, occupational, social and behavioral, and infectious disease/surveillance. For post-professional PA students only or permission of the Program Director.

3 credits,

HAP 559: Complementary and Integrative Medicine
Examines the theory, philosophy, and applications of complementary and integrative medicine within today's health care system. Presents many alternatives to traditional Western or allopathic medicine, and how these various models, systems and therapies impact the delivery of health care in the United States. Prepares students to best respond to consumers requests for information on the use of therapies. Emphasizes an evidence based approach and promotes awareness of clinical research currently done in these areas. Exposes various methods of access to resources and how to incorporate these approaches into clinical practices.

3 credits,

HAP 561: Master's Project I
Students will work with a faculty mentor to develop a clinical question and perform an initial literature search on a topic of interest. Topics should be well-focused and may include psychological, economic or ethical issues in health care as well as diagnostic or treatment-related questions. Following review by a faculty mentor, the student will submit summaries of selected articles as well as an outline. Open to entry-level PA students only. Prerequisite: HAP 551

1 credit,

HAP 562: Masters Project II
Students will work with their faculty mentor to refine a clinical question and revise the presentation outline and article summaries submitted at the end of HAP 561. Emphasis will be placed on thoroughness of the literature search and clarity of the presentation. By completion of this course, students should have the presentation in its final form, and have developed a draft of a final paper. Open to entry-level PA students only. Prerequisite: 561

1 credit,

HAP 563: Masters Project III
Students will revise the presentation submitted at the end of HAP 562 with input from their faculty mentor, who will guide them in developing a concise, professional-looking product, suitable for presentation at a professional conference. Students will present this to the faculty and other members of the class, and will be evaluated on the content, visual, and oral components of their work. Students will also complete and submit their final paper. Open to entry-level PA students only. Prerequisite: HAP 562

1 credit,

HAP 570: Internal Medicine Clerkship
Provides practical clinical experience in caring for adult hospitalized patients on a medical service. Strengthens the student's skills in developing a comprehensive database with regard to a wide variety of common medical problems, stressing mastery of cognitive and affective information that enables the student to recognize normal and assess deviation from normal, and effectively consult and refer. Exposure to out-patient care is often included. Students learn to address personal and social issues that influence the care of the medical patient. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information. Prerequisite: Successful completion of preclinical year courses.

5 credits,

HAP 571: Obstetrics and Gynecology Clerkship
Provides students with practical clinical experience in the differential diagnosis, evaluation, management, and consultation and referral for normal and abnormal conditions in obstetrics and gynecology. Students will gain skills in obtaining patient histories, physical diagnosis and medical decision making through exposure to a broad base of patients with a wide variety of personal and social issues that influence patient care. Prerequisite: Successful completion of preclinical year courses.

5 credits,

HAP 572: General Surgery Clerkship
Provides students with practical clinical experience in the evaluation and management of surgical patients. Through exposure to a broad base of surgical patients, students will master the knowledge, attitudes and skills
necessary to obtain focused patient histories and physical exams, construct a differential diagnosis, make sound medical decisions, and effectively consult and refer. Students will learn to address a variety of personal and social issues that influence the care of the surgical patient. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information. Prerequisite: Successful completion of preclinical year courses. 5 credits.

HAP 577: Pediatric Preceptorship
Provides students with practical clinical experience in working with ambulatory pediatric patients. Through exposure to a wide variety of primary care pediatric problems, students will develop directed data collection and patient management skills and learn how to effectively consult and refer. The preceptorship stresses those cognitive and affective skills that enable the student to recognize normal findings and assess abnormal findings. Students will learn to address a wide variety of personal and social issues that influence the care of the pediatric patient. 5 credits.

HAP 578: Practicum
Provides post-professional Physician Assistant students opportunities to apply theories and skills learned in the program. A limited number of students are allowed to develop a practicum project that is uniquely designed to meet his/her needs. Students will plan and implement a project within one of the following areas: 1.) research, 2.) administration and management, 3.) education, 4.) leadership/professional development, or 5.) professional writing. Acceptable projects must include design, implementation and analysis phases as well as a bibliography. Projects are approved by the Program Director and a mentor is assigned to assist in the development of a practicum proposal. Enrollment requires permission of the Program Director. The course may be repeated once. 3 credits.

HAP 599: Clinical Continuation
This course is for physician assistant students continuing with clinical. S/F graded May be repeated for credit.