The program learning outcomes that have been assessed for the 2009-2010 academic year include the following: Cognitive medical knowledge at the end of the didactic phase of the program, at the end of the clinical clerkship phase of the program and upon graduation from the program. The assessment was carried out through evaluation of the didactic Grade Point Average (GPA), clinical clerkship GPA, and performance on Physician Assistant National Certifying Examination (PANCE or national boards). Specific performance in the anatomy/physiology and pharmacology courses were assessed as these courses were deemed to be the most significant challenges for the first year students in the first semester of the program.

The measuring instruments that were used for the assessment include.

1. Medical Terminology exam – there was a high percentage of questions on the exam associated with anatomical and pharmacological terms. This brief exam given during orientation and designed to measure baseline knowledge upon entry into the program appears to have a remarkable correlation with subsequent exam and course performance.

2. Physician Assistant Clinical Knowledge Rate and Assessment Tool (PACKRAT) provide individual student medical specialty performance, diagnosis and management cognitive knowledge performance and other feedback. The exam is administered on-line early in the third year of the program, after completion of the didactic phase. Both students and the program receive the individual and program performance data to allow focusing of any necessary remediation. The program also receives comparative data with programs around the country. The program identifies descriptive class data generating a mean and standard deviation (SD). Students at or below one SD are identified as at-risk for poor performance on the national boards.

3. Student Curriculum focus group: As an indirect measure of assessing attitudes about learning in the program a group of students completing their second year (didactic phase) were assembled to meet with the program chair. There were four students selected based on their leadership characteristics, above average performance in the program and their communication skills. The purpose of the meeting was to assemble a focus group that would critically evaluate the entire didactic curriculum from a learner’s perspective and provide suggestions for improvement. The students were informed of the purpose of the meeting and that their participation would be kept confidential. The attached curriculum evaluation document is the result of the focus group’s work. The information has been shared with the program faculty and used to make changes in the program’s curriculum.
The important findings were the following:

1. Student Curriculum Focus Group
   Most of the recommendations that were brought up at the focus group and shared with the faculty resulted in changes to the curriculum including the development of a Women’s Health course (see attached 2009 Report). The focus group provided a much more in depth and beneficial student analysis of the curriculum than is obtained from the NYIT end of course student evaluations.

2. Medical Terminology Exam
   The results of the medical terminology exam was intended to identify at-risk students for the anatomy and pharmacology courses. The mean score of the exam was 90 with a SD of 8. Those students with greater than one standard deviation below the mean score were identified as at-risk. The results of the exam were shared with the faculty advisors and the students that did not do well on the anatomy and pharmacology components were highlighted.

3. An analysis of the Physician Assistant Clinical Knowledge Rating and Assessment Tool (PACKRAT) scores indicate a correlation with performance on the Physician Assistant National Certifying Examination (PANCE). (see attachment)

4. A comparison with the PANCE data between the classes graduating in 2008 and 2009 revealed the following:
   - 2008: 21 graduates, mean score 432 with 78 SD, 90% first time pass rate
   - 2009: 37 graduates, mean score 505 with 130 SD, 89% first time pass rate rising to 97% with second time.
   The 2008 class was a transition class with a mix of Bachelor and Master students. The class of 2009 was the first fully graduate class. A better comparison will be with the class of 2009 and 2010. The class of 2010 will be taking the exam in summer 2010.

5. All measures of program performance were found to be well below the class mean, generally by one standard deviation or more for at risk students. As indicated above the earliest evaluation, the medical terminology exam can also be used as a predictive tool. An analysis of the class of 2009 indicated that those students more than one standard deviation below the class mean didactic GPA were at high risk for failure on the PANCE. All four board failures supported this observation (see attachment). This information has been used to identify at-risk students for the class of 2010. One intervention was encouraging senior students to use of Exam Master (see below) and the incorporation of Exam Master questions in the end of clerkship examinations. The preliminary assessment of this intervention has shown an improvement in end of clerkship examination scores. Whether this will carry over to improvement in PANCE remains to
An assessment of achievement of targeted student learning outcomes. Other than the student focus group the assessment tools were meant to identify at-risk students as early as possible. A major outcome for the program is performance on the national boards (PANCE). The program assesses not only the first time pass rate but the mean score for the class. This mean program score on the PANCE is compared with national data and provides the program with a measure of its efficacy and student learning outcome.

The faculty believes the following action items may enhance student learning.

1. Increase utilization of Exam Master (an on-line medical testing program that provides immediate feedback to students on the choice of their answers and the reasons for them being right or wrong). The program has recently increased utilization of Exam Master and further evaluation is needed to assess enhancement of student learning.
2. Revision of Medical Terminology exam to include added emphasis on physiology terms.
3. A review of suggestions made by the student curriculum focus group by the department’s curriculum committee and incorporation of these suggestions into the curriculum as deemed appropriate.
4. Identification of future academic performance through use of the Graduate Record Examination.

Faculty responsible for the action and establish a timeline for completion.

The assessment plan for the next academic year will include.

- PANCE scores, the 2010 graduates are expected to take the exam in the summer of 2010; a report from the certifying agency is sent in early 2011 to the program director. The report is shared with the faculty at department curriculum committee meetings.
- Standardized tests (PACKRAT, Exam Master) The PACKRAT is purchased by the department and the report is sent to the program director. Dr. Zehra Ahmed has been assigned monitoring the use of and efficacy of Exam Master to enhance student learning in both the
didactic and clinical phases. This evaluation is an ongoing process. Students and their faculty advisors utilize these data to prepare individualized study plans for students for the national boards.

Student curriculum focus group will be repeated with a new student group selected from the second year class. Completion is expected at the end of the 2010 academic year. Dr. Salvatore Barese will prepare the report from the focus group meeting and share with the faculty at the department curriculum committee meeting.

Medical Terminology exam with increased focus on physiological terms. The physiology component was determined by the faculty and the students as being the most difficult component of the Anatomy & Physiology course. The exam will continue to be used to identify at-risk students and to provide advisement by faculty. Dr. Salvatore Barese will revise the examination to be given student orientation day held the week before the start of the fall semester.

Graduate Record Exam (GRE) will be required for the first time for all applicants to the program. The GRE will provide the program with an additional objective measure to predict future academic performance. Dr. Salvatore Barese, Professor Lawrence Herman, Admissions Director for the Program, and Suzana Uda-Rebecca, Admissions Coordinator will review the outcome of this new assessment tool and develop plans for its future use.
New York Institute of Technology  
Department of Physician Assistant Studies  
Student Curriculum Committee  
April 15, 2009

Minutes

The curriculum was reviewed by a select group of second year students and the program chair in order to investigate the need for changes in the curriculum and to identify curricular items that should be continued. This meeting is in keeping with an accreditation requirement to seek student input and consider this input in changes to the curriculum and program.

Individual having a problem with writing should take advantage of undergraduate writing services.

PHAS 600 Advanced Anatomy and Physiology
a. Split lab sections like the medical school does have less students attend each session.
b. Indicate at the beginning of the course that Physiology is a major component and needs to be a focus of study. Consider increase % of grade for Physiology
c. Lab assistants are great but should also be proficient in physiology
d. Cadaver lab is an important value added item for the program
e. Text not necessary for physiology because hand outs are extensive

PHAS 620 Pharmacology
Move antibiotic/antimicrobial drugs to Pharm II for alignment with Infectious Disease, HEENT, and Pulmonary medicine.

PHAS 606 Pathophysiology
Consider giving more time to this course and changing from 2 to 3 credits.

PHAS 625 Clinical Skill I
a. Increase number of professors
b. Use Teaching Assistants
c. Emphasize skills rather than medicine
d. Define disease terminology during lectures

PHAS 610 Clinical Medicine I
a. Add chest x-rays reading to Pulmonary
b. Summary cases at end of each clinical medicine subcourse
c. Include Ophthalmology surgery with HEENT
d. Overall mentioning of primary drug treatment for diseases
PHAS 630 Clinical Laboratory Medicine
  a. Add case problems at the end of each lecture with questions
  b. Mention Stick reporting of lab test i.e. lytes, CBC

PHAS 611 Clinical Medicine II
  a. Summary cases at end of each clinical medicine subcourse
  b. GI drugs need to be addressed
  c. Overall mentioning of primary drug treatment for diseases
  d. Include Urological surgery with the Renal subcourse (see Surgery below)

PHAS 615 Surgery
  a. Move obstetrics to Pediatrics
  b. Move Gynecology to Women’s Health (new course)
  c. Move Ophthalmology to HEENT Clinical Medicine I
  d. Move Urology to Clinical Medicine II with Renal
  e. Surgery will only include general surgery and orthopedic surgery

PHAS 617 Pediatrics
  a. Need to restructure course
  b. Explain why a disease is a pediatric disease, compare with adult
  c. Include obstetrics (see Surgery above)
  d. Include autism
  e. Include a pediatric exam video

PHAS 650 Research I

  Need to continue to encourage progress on master’s project.

PHAS 655 Epidemiology and Interpretation of the Medical Literature
  a. Concentrate on article reviews and analysis for validity.
  b. Have students submit key articles from their master’s project for review in class.

PHAS 690 Health Promotion Disease Prevention

  Good course
PHAS 612 Clinical Medicine III

a. Need a specialist in neurology to give course
b. Overall mentioning of primary drug treatment for diseases
c. Introduction of disease topics with mention of pathophysiology

PHAS 627 Clinical Skills III

Not enough equipment (sutures) to practice

PHAS 655 Emergency Medicine

Terrific course with lots of case references special guest lecturers.

PHAS 670 Outpatient Medicine

A midcourse correction by the Professor made the course excellent

PHAS 680 Clinical Decision Making

Great course

PHAS 675 Informatics in Medicine

Delete from curriculum, not worth the effort, move credit to Pathophysiology