1. The mission of the College of Pharmacy is to educate students to meet the pharmaceutical needs of society, to advance pharmaceutical knowledge through research and to serve the profession and the community. The competencies and learning outcomes for the Doctor of Pharmacy program, which is the College’s primary program during the 2005-2006 academic years, were:

After successfully completing the program, the students will be expected to:

1. Assess patients, utilizing patient-specific data (e.g., physical exam, laboratory tests, history, procedures), in order to provide pharmaceutical care.
2. Evaluate and prioritize patient problems and triage patients to other health professionals, as appropriate.
3. Design, implement, monitor, evaluate, and adjust a patient-specific, evidence-based pharmaceutical care plan or recommend modifications of an ongoing pharmaceutical care plan.
4. Identify, assess, and solve medication-related problems and/or issues.
5. Report and manage medication errors and adverse drug reactions.
6. Recommend and monitor non-pharmacological, nutritional, alternative and non-prescription therapies for patient-centered and population-based pharmaceutical care in an evidence-based manner.
7. Retrieve, interpret, evaluate, and apply scientific, lay, and professional information to specific patient care, population-based health care, and health policies.
8. Effectively communicate and collaborate with prescribers, allied health professionals, care-givers, policy makers, members of the community, administrative personnel, supportive personnel, and other involved providers of health care.
9. Safely and accurately evaluate, compound, package, and dispense prescriptions in appropriate dosage forms.
10. Communicate with patients in order to obtain appropriate patient-specific information on their health condition and medication history in order to ascertain the patients’ compliance, monitor medication use, determine the effectiveness of their current medical regimens, and, when applicable, devise a new medical regimen or suggest modifications to the current regimen.
11. Communicate with patients in order to counsel them regarding the purposes, proper uses, therapeutic and adverse effects, and self-monitoring of their medications and to promote wellness and health.
12. Manage medication use systems, through the ability to apply patient- and population-specific data, quality assurance strategies, and research processes, in order to minimize drug misadventuring, optimize patient
outcomes, contribute to the development of drug use and health policy, and collaborate on the design of pharmacy benefits.

13. Manage human, physical, medical, informational, and technological resources, through the ability to assure efficient, cost-effective utilization of these resources in the provision of patient care.

14. Perform the proper administration of medications via nasal, inhalation, otic, optic, and injectable (subcutaneous and intramuscular) routes.

15. Develop skills to carry out duties in accordance with legal, ethical, social, economic, and professional guidelines and to interact in an appropriate professional manner with healthcare providers and patients.

16. Develop the skills necessary to maintain professional competence by identifying and analyzing emerging issues, products, and services and to become self-directed lifelong learners.

2. During the 2005-2006 academic year, the following information and data on student learning outcomes and student services were collected:

- NAPBPLEX licensure examination scores and passing rates
- MPJE law examination scores and passing rates
- Survey of Graduates
- End of Year Surveys of years 3, 4, and 5
- Experiential preceptor evaluations
- Fourth year pharmacy practice skill development (practical) examination scores
- Fifth year Capstone written assignment scores
- Student Services Survey

3. Based on our analysis of information collected during the 2005-2006 academic year, the following is concluded about student learning and student services in the Doctor of Pharmacy program:

- Given scores on the NAPBPLEX Pharmacy licensure examination, 98.7% of our 2006 graduates passed as first time takers compared with 96.8% of first time takers statewide and 92.2% nationally. Average examination scores for our graduates were 115.1 compared with 112.7 for all graduates in the Ohio, and 107.8 for all graduates nationally.
- Given scores on the MPJE Pharmacy Law examination, 98.7% of our 2006 graduates passed as first time takers, compared with 97.5% passing statewide. Average scores were 85.6 for our graduates and 85.0 statewide.
- The graduate survey (2006 class) demonstrated that more than 80% of the respondents agreed or strongly agreed that they had achieved competency for 53 of 70 of the curriculum’s subcompetencies, with a majority of graduates agreeing or strongly agreeing that they had achieved each of the curriculum’s,
70 subcompetencies. Subcompetencies which were generally viewed as less well achieved were those which related to management skills and nutritional and alternative medicine therapy recommendations. Overall, the graduates shared that they were extremely pleased with the extent of both the depth and breadth of competency which they achieved in the Doctor of Pharmacy program.

- End of Year Surveys of students completing years 3-5 of the Doctor of Pharmacy program were conducted for the first time this year. The survey results documented the growth in the students’ competencies over the 3 year period. The third, fourth and fifth year classes denoted that they had met 26%, 70% and 77% of the 70 subcompetencies, respectively. Similar to the results for the Class of 2006, the management subcompetencies comprise the commonly noted area perceived as not being achieved as highly as others.

- Experiential preceptor evaluations of our students are conducted at the end of each of the 8 required 4 week rotations. These evaluations document that our students are both well prepared to begin and complete the tasks required of the rotations. As commonly observed in the past, experiential preceptors uniformly share that our students are very well-prepared.

- Formative assessment of pharmacy practice skills is conducted via practical examination at the end of the fourth year. Of the 103 students who took the examination, 96% passed on the first attempt with the remaining 4 students passing on a re-attempt. The average on the examination was 82.7%.

- Fifth year students are required to complete the Capstone literature evaluation written assignment. The average on this assignment was 88.4%. Students who originally score less than 80% were required to rewrite their assignment. Of the 104 students who completed the assignment, 11 were required to complete rewrites.

- A Student Survey was conducted in Fall 2005 by the College’s Office of Student Affairs, with 366 professional division Doctor of Pharmacy students responding. Overall, students were very satisfied with their experience in the College. Students agreed most strongly with statements regarding faculty knowledge, College reputation, the approachability of the pharmacy staff, and the commitment of the College to academic excellence, and ethical and professional behavior. The lowest levels of agreement were recorded for statements regarding advising as it relates to career options.

- The End of Year and Graduate Surveys included points regarding college policies, administration and student resources. The questions/statements where the least positive response was expressed related to the process for student concerns to be raised, the opportunity for student input, and the response to student concerns. The least positive responses on these issues were reported by the graduating class of 2006, with significant stepwise increases in the percent of positive responses to the same statements reported for the 2007, 2008, and 2009 graduating classes.
• The End of Year and Graduate surveys also demonstrated equivocal responses (37-65% positive) regarding the College’s management of academic and professional misconduct.

4. Based on our conclusions about student learning and services in the Doctor of Pharmacy Program, we have taken and will be the taking the following action steps during the 2006-2007 academic year.

   a. Curriculum
      i. The curriculum committee is currently closely reviewing the curriculum with the intent to incorporate significantly more hours of Early Experiential courses which will accomplish a continuum of experiences over the third through fifth years in manner which is well integrated with the required didactic curriculum. The new courses will not only expose students to the entire breadth of pharmacy practice, but will also introduce students to pharmacy care earlier in their careers. The new curriculum will also expose the students to pharmacy management applications across all areas of practice, which should facilitate student learning in the Management course series. A well delivered Early Experiential course series should significantly enhance learning in the didactic portion of the curriculum.
      ii. Additional curricular modifications which are planned will include enhanced integration of pharmacy practice and basic science courses, and incorporation of practical applications in basic science courses, and basic science principles in pharmacy practice courses. The Pharmacotherapy course series will also be initiated earlier in the curriculum in order to provide the students with greater opportunities to see clinical applications earlier in their careers.
      iii. Additional curricular modifications will also provide the opportunity for more elective courses in the Doctor of Pharmacy program, so that the completion of an Honors Thesis is possible.

   b. Instruction
      i. The College of Pharmacy is participating in the University’s piloting of Epsilen ePortfolio program. Pilot usage in third and sixth year classes are being planned.
      ii. A number of courses including PhPr 6440, PhPr6370, PhPr 6380, have been resequenced to better balance student workloads throughout the semesters and enhance student learning.
      iii. Cumulative Final examinations are being incorporated in all required courses in the Doctor of Pharmacy program as an initial step to the development of end of year assessment examinations.

   c. Student Services
      i. The Office of Student Affairs has initiated faculty advising workshops. They have also worked with advisors on a number of
measures to improve communication between advisors and students, including encouragement of routine advising emails to students and reminders to students to seek help from advisors. In addition, the APhA Career Pathway Evaluation Program Careers Pathways Evaluation Self-Assessment Tool [http://www.aphanet.org/pathways/pathways.html](http://www.aphanet.org/pathways/pathways.html) has been included in the introductory pharmacy orientation course (PHPR 1000). It has been proposed that the online version of the Career Planning Evaluation Program be introduced in PHPR 6940 (Summer between 4th and 5th year). In addition, faculty were directed to recommend this career tool to the 5th year and 6th year PharmD students.

ii. Recognizing a need for better communication with students, the Dean has made a concerted effort during the past year to assure active student participation on College committees and to communicate with the student body through the Student Council and Town Hall meetings. Student Council meeting agendas and minutes are now being sent via email to all College of Pharmacy students. The addition of a Student Council officer on the Pharmacy Council is another step the Dean has taken to assure student views are heard. In the Fall 2006 semester the Dean also engaged in discussions on College issues with students in the College Resource Center where a

iii. A Professional Conduct committee was constituted in Spring 2006 and includes student and faculty membership. Student members have full voting privileges in hearing student conduct cases. College of Pharmacy students are informed in Group Advising sessions of the committee’s role.

d. Strategic Plan

The Strategic Plan of the UTCP has recently been updated to include implementing an assessment-based curriculum as the second of its strategic plan goals. The strategic plan will be fully developed once the university completes its plan. This new plan will reflect the opportunities created for strengthening basic science and clinical programs as a result of the merger.

e. Resource Allocation

Recently, the college reviewed its financial status in light of the national standards for PharmD education, and the growing BS in Pharmaceutical Sciences program. This review revealed resource requirements in significant areas and led to revision of fees charged to upper division students. As a result, the college is now partially funded to address the following areas: experiential education; recruitment; student advising; diagnostic licensure examination; enhanced education in the compounding of prescriptions; and scholarships.