## **Major Changes in the Curriculum (1996 – 2005)**

- 1. Language change in frontier programming courses to two semesters of C++ instead of first semester in Scheme and second in C++ (1996).
- 2. Adoption of a Premajor program so that incoming students would be able to decide by the end of their first year whether or not they should continue in the discipline (1998).
- 3. Interaction with industry (1998-99): Faculty participated in a workshop with industry professionals. The continued need for fundamentals combined with practical programming experience and the need for software engineering issues were discussed. The immediate impact was to shape two courses 309 and 430 to address the concerns raised by industry.
- 4. To keep up with changes in the discipline, new courses on object-oriented analysis and design (362), and database management systems with introduction to XML (363) were introduced in 2001. Advanced 400-level electives are continually updated to cover new concepts such as Web Services, and to improve students' abilities in problem solving. An optional course in Linux (252) was introduced in 2003.
- 5. With the objective of improving the programming experiences of students, the undergraduate committee proposed and implemented a transition to Java in the frontier programming courses, 227 and 228 (2005). A third course in C/C++ (229) is also required.
- 6. Ongoing upgrades to equipment and laboratories are made on the basis of five-year equipment plans approved by the LAS College. We are currently in the last semester of the current 5-year plan and are submitting proposals for the next cycle of upgrades.
- 7. The undergraduate labs have been upgraded with much faster workstations. A Terminal Server cluster gives users remote WinXP access 24/7. Additionally, our open hours have increased from 110 to 148 per week. Disk space and printing quota have been increased several folds. Future plans include faster, dual core machines and increased quotas. Number of labs will increase from 3 to 5.
- 8. The LAS College has recognized and supported our need to maintain a student/TA ratio of 30:1.
- 9. The institution is keenly aware of the critical space needs of the Department of Computer Science and is doing everything within its power to improve it. Since the arrival of Dr. Chang in July 2002, several news areas of Atanasoff Hall were converted into Computer Science space. In roughly a year's time, the department will acquire an additional 9,000 square feet.
- 10. A joint software engineering curriculum has been developed with the Department of Electrical and Computer Engineering. This will address the concern of improving the proficiency of our students in developing software systems.