## **2004 Romeo L. Moruzzi Young Faculty Award for Innovation in Undergraduate Education Recipient**

## **Professor Kathi Fisler**

The Moruzzi Young Faculty Award is presented in memory of Romeo L. Moruzzi, a dedicated professor and founder of the WPI plan. WPI is pleased to present the 2004 Moruzzi Young Faculty Award for Innovation in Undergraduate Education to Professor Kathi Fisler of the Department of Computer Science.

In CS 2135 Programming Language Concepts, Professor Fisler departed from the traditional teaching of details of programming languages to use mainstream applications such as TurboTax and animation programming to demonstrate how languages underlie principles of good software development. The absence of textbooks written from this perspective speaks to the uniqueness of the course. The effectiveness of the approach is shown by the fact that students come back to ask for advice on outside projects that they are attempting using the material taught in the course, and report using it successfully in their jobs.

Professor Fisler was also the principal architect of the new introductory CS curriculum, to be implemented in fall of 2004. The new curriculum teaches programming languages in order of difficulty (Scheme, Java, C++). While this seems obvious, it is controversial in CS educational circles because industry uses Java and C++, but rarely Scheme. The new curriculum is expected to serve non-majors and majors by emphasizing program design rather than language detail. Students will build simple but interesting programs to explore problems from any discipline. For example, a biology student with no prior programming experience will be able to design and develop programs from scratch to simulate basic genetics experiments. Few introductory programming courses nationwide teach programming in this fashion.

WPI is proud to recognize the "brilliant and creative" (in the words of a colleague) teaching of Professor Kathi Fisler by presenting her with the 2004 Moruzzi Young Faculty Award for Innovation in Undergraduate Education.