mEmLearn: Tools for Storing, Retrieving, and Sharing Multimedia Learning Materials

The project will define tools, using the HP Tablet PCs, that enable students to annotate the course materials in an interactive way, during or after the classes, to retrieve these augmented materials at a later stage and to share them with other students or instructors.

**IMPACT ON TEACHING**
Provide an effective memory of what happens in a classroom setting, for later access and browsing. Most of the interactions that take place during a lecture or laboratory experiment are hard to record and later reproduce. The students will be able to annotate the lecture materials or illustrate the current topic of the class with their own materials, using the Tablet PCs. The massive usage of Tablet PCs on class will indicate positive results of this project.

**IMPACT ON STUDENT LEARNING**
Transform a passive and experiential learning experience in an active process, participated by all students and instructors. Student contributions promote participation and reflexive thinking. Tools that support mobile access allowing that each student can progress at its own pace. Collaboration with other colleagues that are involved in the same learning process. Constructivist learning approach where each student can benefit from a rich multimedia repository of learning materials, to build her/his own knowledge. Evaluation based on results and questionnaires. Initially applied to the Multimedia Computing course.

**TECHNOLOGY IMPLEMENTATION**

**New components to develop:**
Software that will allow the students to participate, annotate, and contribute during classes using Tablet PCs.
Software to browse the materials that were gathered during the class/lab experience.

**Existing Software:**
Software developed in a previous project, VideoStore, to store/retrieve lectures captured on video and associated materials.

**KEYWORDS**
MULTIMEDIA LECTURE CAPTURE ANNOTATIONS ACTIVE LEARNING