Environmental Science and Technology Institute Student Goals

(Content) SCIENCE and TECHNOLOGY
1. Use the scientific method (develop hypotheses, collect data, analyze data and present interpretations)
2. Use a variety of scientific disciplines to approach a local environmental problem
3. Properly document data collection methods, protocols, and results
4. Develop a sense of place for the field site (geographic, historical, cultural, ecological)
5. Expose and explain to students technology that is new to them
6. Critically evaluate information from a variety of sources (web, peer-review, books)
7. Explore science career options
8. Provide a context for larger, global environmental issues including Environmental Justice and the inequant distribution of environmental risks.

(Pedagogy) TEACHING and LEARNING
1. Encourage students to direct their own learning through inquiry, question-based approach
2. Emphasize a hands-on, experiential learning approach
3. Foster group work
4. Make findings available to stake-holders
5. Use problem-solving or “solve the mystery” approach
6. Develop transferable skills/methodologies useful for students’ future

(Social) STUDENT EXPERIENCE
1. Provide experiences for students that they do not get in traditional settings
2. Expose students to a group of like-minded, interested peers
3. Expose students to scientists as role models/educators
4. Experience living in a college environment
5. Build temporary living community with diverse peer group
6. Engage in written and oral reflection on day’s events from personal perspective
7. Have fun