

Akamai Observatory Short Course (AOSC) Goals. DRAFT: 1/12/04

Short courses are one element on an overall experience that includes:

1. Preparation for program (packet w/ reading assignments sent in spring)
2. Short course
3. Research apprenticeship (research mentors) & support meetings (EHR staff)
4. Symposium
5. Preparation for academic year (CfAO staff assists in developing tools)

In the Short Course students will gain:

1. **KNOWLEDGE** that will enhance their internship experience (productivity? and satisfaction?) and will build a foundation for pursuing educational/career paths in the (internship fields).
 - A. In depth conceptual understanding of _____ (one or two things, varies with course, that is really important to internship projects/work at sites)
 - B. AO: what it is, how it works, how it can be applied (science)
 - C. General understanding of range of related research, terminology, projects, outstanding challenges, etc.
 - D. Context of internship research/research sites within broader community
 - E. Expectations and protocols for coming internship experience
 - F. Social and organizational structure of internship workplace
2. **SKILLS** that will be used during research experience and are generally relevant to working in the field.
 - A. Teamwork/collaboration
 - B. Developing a research question/problem
 - C. Analyzing data
 - D. Interpreting results
 - E. Communication – informal to semi-formal (group meetings, etc.), ?formal
 - F. Others relevant to many projects (software, instrument, lab, etc.)
3. **ATTITUDE** for a positive, meaningful, commitment to goals
 - A. Excitement about coming research experience
 - B. Increased confidence for role as a student researcher
 - C. Self-directed (work on this one)
 - D. Something about being ready and open to be flexible, adapt to the environment, etc.?
4. **RESOURCES** that will foster independence and provide support during research experience and continuation in education/career
 - A. Peer community
 - B. Mentors, role models, and contacts in the field (instructional team and visitors)
 - C. Connection to CfAO (staff, opportunities of a national center)
 - D. Reference materials and sources of information regarding specific project and background material
 - E. Preliminary CV, academic plan, professional plan