Academic Affiliates
CONGRATULATIONS!

20th Anniversary
Three Issues

• Coping with austere budgets
• Maintaining critical numbers of students in our programs
• Implementing the 2010 AMS Policy Statement on the BS Degree
Coping with austere budgets

Common themes:

• Eliminate smaller programs which don’t have an adequate number of students to justify them.
• Restructure, combine programs/departments. Some departments combined with environmental sciences, geography, engineering, etc.
• Recruit, retain more students (includes actively marketing to non-traditional and/or working students for evening and online courses).
• Restructure how courses are taught.  
  - Create a hybrid approach of some on-line instruction and some in-class.
  - Incorporate use of UCAR’s COMET modules as a springboard for further discussion.
  - Include applied problem solving and active interaction with an instructor.
• Whenever possible, leverage and promote the uniqueness of the program.
• Retirement incentives for faculty.
Coping with austere budgets

Look for, emphasize, & build on opportunities

• Combining colleges/programs/departments also combines resources. Unexpected synergies develop. St. Cloud University, atmospheric sciences was combined with engineering school. Engineering students are taught attitude, “you’re an engineer, you’re a problem solver.” Teach this attitude to the atmospheric science student. Employers will appreciate.

• Look for other areas of growth. Millersville - risk and emergency management. Area which is 80% climate and weather related. Other disciplines brought in: societal impacts and sociological impacts of hazards. Environmental sciences – many different sub-specialties -another huge area of growth.

• Train students to become more applied and give a more solid science foundation to students from other fields.

• Climate change is emerging as a significant driver.
Maintaining critical numbers of students

- Teach students - problem solvers with critical thinking skills that other students don’t have. Promote atmospheric science or related-field students’ abilities, math background.
- Be aggressive in recruiting. Texas State University, freshman orientation. Professors talk about opportunities with a BS degree in geography and sub-majors. MOST effective tool: business cards on website as examples. Same approach to educate administrators & show value of program.
- Best recruiters are current students and/or alumni.
- Engage junior and senior level students to tutor the freshman and sophomores in challenging courses - higher math. Successful completion of course. Peer-to-peer relationships and role models.
Maintaining critical numbers of students (cont)

Internships

• Create additional and unique internships, other hands-on opportunities.
• Naval Academy -, hurricane hunters , huge dividends. Research projects, recruitment, retention all greatly impacted.
• Local TV stations – not broadcasting, student behind the scenes, helping with forecasting, experience with the computer graphics. Some weather stations will take volunteers (shadows).
• Faculty – students analyze data, get credit.
• USGS and renewable energy providers may offer internships.
• SKEP programs and air force weather.
• Alumni – contacts for job placement.
• Museums and science centers – Great resume building, different experiences than classroom.
• Connect undergraduates with grad students – ask undergrads where they live and what are they interested in.
• Need to differentiate between paid and non-paid internships.
Maintaining critical numbers of students (cont)

- Broaden curriculum – add more applied courses but embed practical experiences. More likely to persist through difficult courses.
- Offer hybrid courses (in-class and on-line). Include problem solving, applying information.
- Broaden perspective of what you are offering. Emphasize critical thinking and problem solving skills.
- Open door policy: opportunity to correct major issues, student being heard. Time well spent. Huge difference in retention.
- Develop aggressive advising program. Higher level students, direct into strengths. Mentor struggling students intensely. Tutoring and encouragement. Perhaps consider another related area such as emergency management.
- Develop, maintain discipline-wide statistics.
New AMS Policy Statement on the BS Degree

- First year of implementation.
- Changes to meet new standard?
- Some AAs were already making changes when the policy came out.
- Others have created new capabilities, such as a mesoscale lab which incorporates both satellite and radar training.
- The change is in competency not course work.
- Not strong disagreement with the AMS policy
Next round of AMS policy changes

- Establish student learning outcomes
- Not until 2015 but start now to assess.

Committee:
  - Tony Hansen
  - Eric Hoffman
  - Jose Maliekal
  - Richard Wagoner

Document to share next year with AAs.
Thank you!