Updated student skills in the 2015 ACS Guidelines for Chemistry in Two-Year College Programs

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Considerations: Four Year Skills

• Four-year guidelines
  – Problem solving
  – Chemical literature & information management
  – Laboratory safety
  – Communication
  – Team

• Are these the right skills for a two year program?
Considerations: Two Year Skills

• 2009 guidelines
  – Problem solving
  – Communication
  – Lab safety
  – Chemical literature
  – Team
  – Ethics

• Are these still the right skills?
Changes in 2015

- New title: Development of Student Skills for Academic and Professional Success
- Order of skills
- Description of skills
- Assessment of skills
- Inclusion of career preparation skills across all program types
Laboratory Safety (7.1)

- Academic safety culture
- Safety in curriculum
- Safe lab practices
- Safety data sheets
- Risk assessment
- Assessment
Problem Solving & Critical Thinking (7.2)

- Critical thinking skills
- Analysis
- Evaluation
- Scientific method
- Uncertainties
Communication (7.3)

- Oral & written
- Appropriate style
- Data presentation
- Citations
Team (7.4)

- Collaborate
- Complete tasks
- Trust others
- Lead
- Classroom & laboratory
Ethics (7.5)

- Respect
- Accurate & complete
  - Records
  - Reports
- Responsibility to general public
Chemical Information & Management (7.6)

- Databases
- Chemical literature
- Recordkeeping
- Data management
- Archiving
Career Preparation (7.7)

- Networking
- Resume writing
- Interviewing
- Research, internships etc.
- Mentoring
Questions?

- Resources available at
  - www.acs.org/2YColleges
  - www.acs.org/2YGguidelines

THANK YOU!