Summary of Changes  
Bioscience Competency Model

The Bioscience Competency Model was updated in 2025 and 2018.

**April 2025 Update:**

Updates have been made on Tiers 1 and 2, to align with the new Building Blocks Model, including the addition of new digital literacy competencies.

**September 2018 Update:**

# Tier 1 – Personal Effectiveness Competencies

* No changes were made to the Tier 1 Competencies.

# Tier 2 – Academic Competencies

* Added key behavior description to Communication block.

# 2.5 Communication – Listening & Speaking

* *2.5.2 Speaking and Presenting*
  + Added key behavior description: *2.5.2.4 Ask questions or report problems or concerns to people in authority when information or procedures are unclear or need improvement, or when feeling unsafe or threatened in the workplace.*

# Tier 3- Workplace Competencies

* No changes were made to the Tier 3 Competencies.

# Tier 4- Industry-Wide Technical Competencies

* Added and removed key behavior titles and descriptions to 4.5 Health, Safety, & Security block and updated several existing key behavior descriptions.
* Added key behavior titles *4.5.1 Maintaining a healthy and safe environment* & *4.5.2 Safeguarding one’s person*

# 4.5 Health, Safety, & Security

* 4.5.1 Maintaining a healthy and safe environment
  + Added key behavior title *4.5.1 Maintaining a healthy and safe environment*
  + Added key behavior descriptions:
    - 4.5.1.1 Take actions to ensure the safety of self and others, in accordance with established personal and jobsite (e.g., laboratory) safety practices
    - 4.5.1.2 Anticipate and prevent work-related injuries and illnesses
    - 4.5.1.3 Comply with federal, state, and local regulations, and company health and safety policies
    - 4.5.1.4 Recognize common hazards and unsafe conditions that occur at work, their risks, and appropriate controls to address them
    - 4.5.1.5 Follow organizational procedures and protocols for workplace emergencies, including safe evacuation, and emergency response
    - 4.5.1.7 Administer first aid or CPR if trained and summon assistance as needed
  + Edited key behavior descriptions:
    - ~~4.5.6~~ 4.5.1.6 Maintain a sanitary and clutter-free ~~lab or~~ work environment
    - ~~4.5.7~~ 4.5.1.8 ~~Monitor, use~~ Properly handle, store, and dispose of hazardous materials ~~properly~~.
* Added key behavior title 4.5.2 Safeguarding one’s person
  + Added key behavior descriptions:
    - 4.5.2.2 Use equipment and tools safely
    - 4.5.2.3 Use appropriate personal protective equipment
    - 4.5.2.4 Recognize how workplace risks can affect one’s life and one’s family
    - 4.5.2.5 Understand the legal rights of workers regarding workplace safety and protection from hazards
    - 4.5.2.6 Report injuries, incidents, and workplace hazards to a supervisor as soon as safely possible
    - 4.5.2.7 Identify worker's rights under law including obtaining safety training in a language you understand, being protected from toxic chemicals, and being provided required safety gear
    - 4.5.2.8 Contribute to discussion of safety concerns in the workplace, making suggestions as appropriate
  + Edited key behavior descriptions:
    - ~~4.5.4~~ 4.5.2.1 ~~Participate in safety and security training~~ Engage in safety training and security training and emergency drills
  + Deleted key behavior descriptions:
    - 4.5.1 Demonstrate personal safety, laboratory safety, and security procedures
    - 4.5.2 Identify first aid supplies, safety personnel, emergency protection areas, and evacuation plans
    - 4.5.3 Demonstrate appropriate use of personal protective equipment
    - 4.5.5 Identify unsafe or insecure conditions and take corrective action
    - 4.5.8 Follow applicable health, safety, and security regulations