UNIVERSAL DESIGN FOR LEARNING STRATEGIES FOR TIME-STRESSED UNDERPREPARED STUDENTS

Multiple Means of Representation

- Accessing background information
  - Textbook, online videos/images, TA activities
- A few foundational ideas throughout the class
  - biological macromolecules (Carbs, Lipids, Nucleic Acids, Proteins)
  - in major topics: bonds, organelles, gene expression, genetics, evolution

*For underprepared and stressed/distracted students*

Foundational concepts are used to inform and support new information
Knowledge of foundational concepts is not dependent upon 1 day/week

Multiple Means of Expression

- Replacement Quizzes
- “Pay-it-Forward” Writing Assignments
- Individual-Class Quizzes and Clicker Questions
- Individual, Group and TA Activities

*For underprepared students and stressed/distracted students*

fewer “high-stakes” days/reason to acquire foundational knowledge
multi-tasking engagement with family or community as knowledge leaders
see that knowledge is attainable by peers/knowing where to allocate effort
identification of knowledge gaps (instructor and students)
engaging kinetically and with a peer/near peer support group
peers and near peers for academic and social support

Multiple Means of Engagement

- “Pay-It-Forward” Writing Assignments
- Required Coursework As Career Stepping Stones
- Valuing Existing Student Knowledge
- Letting Students Talk

*For underprepared students and stressed/distracted students*

Build-in professional development awareness and opportunities
Value the background students have and let them talk (phobia example)
see that knowledge is attainable by peers/knowing where to allocate effort