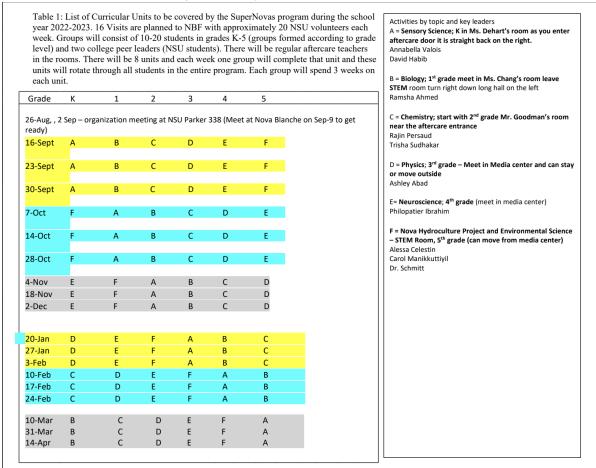
## How to Create a Science Buddies Program Near You! www.sciencealivefl.org | eschmitt@nova.edu

- 1. Connect with an elementary local school near you and a faculty from that school that is willing to help start this program with you during their afterschool care hours.
- 2. Share your interest to start the program and find a group of motivated and passionate undergraduate students that are excited to be leaders.
- 3. Split the students to be group leaders for various stem topics. Here are the STEM topics NSU group leaders chose to cover during the 2022 2023 school year:
  - a. Sensory Science
  - b. Biology
  - c. Chemistry
  - d. Physics
  - e. Neuroscience
  - f. Earth Science
- 4. Have leader(s) from each group brainstorm a list of activities for their respective STEM topic.
- 5. After brainstorming, each group must finalize three activities that they wish to do with the students.
- 6. Create lesson plans for each activity.
  - a. Here is the template that the NSU Science Buddies use to create their lesson plans: Copy of Copy of Experiment Template
  - b. Sensory Science
    - i. Sound: Sound Lesson Plan
    - ii. Skeleton Support: Skeleton Support Lesson Plan
    - iii. Mystery Sense: Mystery Sense Lesson Plan
    - iv. Play-Doh Body: Lesson Plan Play-doh Body
    - v. Build Your Own Lungs: Lesson Plan Lungs
  - c. Biology
    - i. Potato Enzyme: Potato Enzyme Activity
    - ii. Bottle of Lava: Copy of bottle of lava NSU.docx
    - iii. Bacteria Shapes with Stuffed Animals: Bacteria Shapes with Stuffed Animals
  - d. Chemistry
    - i. Quick Freeze Delight: ice cream.docx
    - ii. Foaming Fountain: foaming fountain.docx
    - iii. Penny Pipetting: Penny Pipetting.docx
  - e. Physics
    - i. Hot Wheels Gravity Check: Hot Wheels/Gravity Check Experiment
    - ii. Energy Stick: Energy Stick Activity
    - iii. Lightsaber Training: Static-lightsaber training
  - f. Neuroscience
    - i. It's hard to Remember!: Copy of Short Term Memeory-Science Alive
    - ii. Reflexes and Reaction Time: Copy of Reflexes and Reaction Time Activity
    - iii. Visual Impairments: Copy of Visual Impairments
  - g. Earth Science
    - i. What is Hydroculture: What is Hydroculture?
    - ii. Snow in Florida!: Snow in Florida!
    - iii. Create Your Own Rain: Copy of CreateYourOwnRain.docx
- 7. Create a pre-survey and post-survey to give to the students before you do the activities and after you successfully complete the three activities for your group.
  - a. The pre-survey and the post-survey should be three questions each and should be the same questions to assess their change in knowledge after doing the activities with the students.
  - b. Sensory Science: Sensory Science pre and post.docx

- c. Biology: Biology Pre and Post Questions.docx
- d. Chemistry: Chemistry pre and post.docx
- e. Physics: Physics pre and post.docx
- f. Neuroscience: Neuroscience Pre and Post Test.docx
- g. Earth Science: Hydroculture pre and post.docx
- 8. Create a rotation system for the school year. Each group should complete their three activities with a specific grade for three week (1 activity per week) and then rotate to the next grade after three weeks have gone by.
  - a. Here is the rotation system template that the NSU Science Buddies use:



- 9. Take pictures and create a website to show your work that you are doing and possibly inspire others around you!
  - a. www.sciencealivefl.org