



Health Science Program for Afterschool – Year 2

10 week Module Overview and Timeline

1. Intro to MedTrek and Health Careers – Guest Presenter: Nurse

Goal: To begin building relationships between youth and mentors, understand the module flow and experiences, and the benefits of gathering evidence of learning through MedTrek’s health science career exploration.

- Orientation/Logistics
- Mentor/Mentee Relationships – Ice Breakers
- Intro to Health Careers – 1 – 5 Levels
- “Body Stories”
- Confidentiality
- Gathering Evidence of Learning (PLPs)

2. Intro to Vital Signs - Guest presenter: Nurse

Goal: Explore tools and techniques for used by health professionals for assessing vital signs and protecting patient safety.

- Gloving & De-gloving
- Stethoscope
- Reflex testing
- Blood Pressure

3. Microscopy Guest Presenter: Science Educator, Pathologist (Could be Field Trip to Hospital)

Goal: To learn how to use a microscope and its value as a tool for pathology.

- Use of Microscopes and the concept of magnification
- Observing hair, fingernails, skin, cheek swab, etc.
- Intro to Pathology
- Comparison of abnormalities

4. Emergency Medical Systems Guest Presenter: EMS/Ambulance Staff, Emergency Room Nurse

Goal: To learn and practice emergency response skills, first aid and indicators of acute illness.

- Safe Scene
- Mock 911 Call
- Basic First Aid – Bleeding and Splinting (first aid supplies and fake blood)
- Indicators of Illness or Infection –(fake mucus and emesis)

5. The Nervous System – Guest Presenter: Neurologist, Brain researcher/Educator

Goal: To explore the four areas of brain function, brain development and implications of brain injuries.

- Card sort activity on brain functions: Voluntary, Involuntary, Memory and Learning
- Four activity stations to simulate brain functions
- Brain development
- Brain injury.

6. Surgery – Guest Presenter: Surgical nurse, anesthesiologist, surgeon

Goal: To experience the tools and techniques surgeons work to perfect and the support team process that is required to complete a surgical procedure.

- Laparoscopic surgery simulator
- Donning/Doffing PPE
- Suturing

7. Field Trip to Hospital or Sim Lab

Goal: To experience first-hand a medical or healthcare facility's department's systems, functions and skill expectations of the practitioners in the selected health science career.

8. Mentor's Choice – Local Resource or Field Trip #2

- Dental Health
- Nutritionist
- Mental Health
- Physical Therapist
- Occupational Therapist
- Maternal and Child Health
- Epidemiology
- Environmental Health

9. Presentation Prep and Common Instrument

Goal: To ensure completion of the retrospective survey for youth engaged in MedTrek and to support the selection and presentation format of youths' evidence of learning. To plan the logistics of a celebration.

- Common Instrument – Science Survey for Youth
- MedTrek Youth Presentation Preparation
- Celebration Logistics – Food, Slide Show, Goodie Bags, T-shirts, Medical Artifacts

10. Celebration

Goal: To celebrate learning through reflections and presentations by youth and to recognize the mentors and supports that went into the MedTrek learning experience.

- Youth Presentations to Guests
- Reflections
- Celebration!

Education & Career Pipeline



