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**NDC Denver Teacher Workshop Agenda**

**July 21-25th, 2014**

Location: Wings Over the Rockies Air & Space Museum, Board Room

**Monday, July 21, 2014 – Alli Westover, CASIS**

9:00am – 10:00am – Engineering Design Process- Considerations and Review

10:00 am - 10:30am -Engineering Notebook

10:30 am -11:00am: -Brainstorming Solutions

11:00 am- 11:30 am: - Design Matrix

11:30 am – 12:00pm: - Subsystems and Incremental Testing

12:00 – 1pm – LUNCH

1:00 – 4:00pm – Time to meet with CASIS Ops Team (Alli Westover, Bill McLamb and April Spinale)

**Tuesday, July 22, 2014 – Alli Westover, CASIS**

9:00am – 9:30 am - Prototype Build Procedures

9:30am – 10:00 am – Project Management

10:00 am- 11:00 am – Teacher Expectations/Timeline

11:00 am- 12:00pm - NanoRacks Web Conference

12:00 – 1pm – LUNCH

1:00 – 4:00pm – Time to meet with CASIS Ops Team/Final Questions (Alli Westover, Bill McLamb and April Spinale)

**Wednesday, July 23, 2014 - Dr. Joe Morgan from Texas A&M**

9:00am – 12:00pm

Workshop Overview

NESI+ Kit

Initial Hardware Configuration

12:00 – 1pm – LUNCH

1:00 – 4:00pm

NESI+ Hardware

Power

Digital IN

Digital OUT

Analog IN

Analog OUT

Communications

**Thursday, July 24, 2014 - Dr. Joe Morgan from Texas A&M**

9:00am – 12:00pm

Software Overview

MPLABX Setup and Configuration

NESI+ Functions I

12:00 – 1pm – LUNCH

1:00 – 4:00pm

NESI+ Functions II

Sparkfun Peripherals

Sample Program Exercises I

**Friday, July 25, 2014 - Dr. Joe Morgan from Texas A&M**

9:00am – 12:00pm

Sample Program Exercises II

Example Project I

12:00 – 1pm – LUNCH

1:00 – 4:00pm

Example Project II

Wrap Up

Mentoring scheduling -- Tentative

Project Specific Q & A