**Student CubeSat Workshop**

McMinnville, OR

August 19 – August 20, 2016

Thursday, August 18th

**­Day at Evergreen Wings & Waves Waterpark**

12:00 – 6 PM Enjoy a day at the waterpark

Friday, August 19th

**Plenary Session: Day 1**

8:30 AM Registration

9:00 AM Welcome – Introductions, discuss topics for the Day

9:15 AM CubeSat 101 and ELaNa Project - Scott Higginbotham, NASA

**Hands on Learning: Day 1**

10:15 AM Mock Satellite Design Part 1 – Denise Thorsen, Director Alaska Space Grant

* + - Introduction to Hands-On Design
    - Coffee Break & Brainstorming Session
    - Satellite Requirements: External and Internal
    - Validation of Requirements: How do you know you passed/failed
    - Concept of Operation and Mission Operations

12:15 PM Working Lunch

12:45 PM Mock Satellite Design Part 2 – Alaska Space Grant

* + - Interface Control Documents
    - Software Flow Chart

2:00 PM Flat Sat Implementation – Bob Twiggs, Moorhead University

6:00 PM End of Day 1

Saturday, August 20th

**Plenary Session: Day 2**

9:00 AM Welcome – Introductions, discuss topics for the Day

9:15 AM Mission Operations and Ground Stations – Justin Foley, CalPoly

10:15 AM Coffee Break

10:30 AM The non-technical aspects for a successful CubeSat mission– Brian Sanders, Deputy Director Colorado Space Grant Consortium

11:30 AM Lunch – Student/Participants 5 min presentations

**Hands on Learning: Day 2 Breakout Sessions**

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| **Time** | **Mechanical** | **Electrical** | **System** |
| 1:00 PM | Basic Structure (Matt Pacheco) | Command and Data Handling and Software Architecture \* | Mentor Session (Denise Thorsen) |
| 2:00 PM | Advanced Structure (Robert Miller) | Communication (Justin Long) | Science Mission(Brian Sanders) |
| 3:00 PM | Propulsion (Darren Hitt) | Attitude Control and Determination (Chic O’Dell) | Mission Operations/Ground Station (Eric Pilger) |
| 4:00 PM | Orbit/STK/Simulation  Modeling \* | Electrical Power Systems\* | Testing Requirements and Facilities (Morgan Johnson) |

5:00 PM Closing Remarks

NOTE: We still need a workshop facilitator for breakout sessions (\*), volunteers do not have to be an expert in chosen session. If interested in conducting session please contact Morgan Johnson [mjohn382@alaska.edu](mailto:mjohn382@alaska.edu)