

Alliance For Physics Excellence (APEX) Spring Weekend Workshop – Cohort 3 Physics Teacher Institute (PTI) Fluid Activities Schedule Alabama A & M University & The University of Alabama in Huntsville

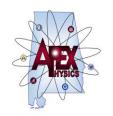


April 1 - 2, 2016

Day 1 – Friday, April 1, 2016

8:00 – 8:15 AM	Welcome/Greetings/Coffee Announcements	Mohan Aggarwal AA&MU and APEX Leadership Team
8:15 – 10:15 AM	Physical Optics #1: SINGLE, DOUBLE, & MULTIPLE SLITS – Page 9	Jane & Jim Nelson AAPT/PTRA (2 hours)
10:15 - Noon	Physical Optics #2: WAVELENGTH OF LIGHT – Page 23	Jane & Jim Nelson AAPT/PTRA (1 3/4 hour)
Noon – 1:00 PM	In House Working Lunch: (60 minutes) Demonstration with Poloriod Filters	
1:00 – 2:30 PM	Physical Optics #3: CD GROVE SPACING – Page 31	Jane & Jim Nelson AAPT/PTRA (1 1/2 hours)
2:30 – 3:00 PM	Physical Optics #4: HAIR'S DIAMETER (DISCUSSION ONLY) – Page 43	Jane & Jim Nelson AAPT/PTRA (1/2 hour)
3:00 – 4:15 PM	Physical Optics #5: THE PHOTOELECTRIC EFFECT A SIMULATION – Page 51	Jane & Jim Nelson AAPT/PTRA (1 1/4 hours)
4:15 – 5:30 PM	Physical Optics #6: LED and Planck's Constant – Page 65	Jane & Jim Nelson AAPT/PTRA (1 1/4 hour)
5:30 – 6:30 PM	Develop an Engineering Design Task	Jim Slavicek Facet Innovations (1 hour)
6:30 PM	Dinner (On Your Own)	

- Day 1 (Total = $9 \frac{1}{4}$ hours)
- AAPT/PTRA = 8 1/4 hours
- Action Research, et cetera = 0 hours
- Pedagogy = 1 hour
- Technology = 0 hour



Alliance For Physics Excellence (APEX) Spring Weekend Workshop – Cohort 3 Physics Teacher Institute (PTI) Fluid Activities Schedule Alabama A & M University

April 1 - 2, 2016

Day 2 – Saturday, April 2, 2016

8:00 – 9:30 AM	☐ PHYSICAL OPTICS ACTIVITY #7: BUBBLE COLORS – Page 75	Jane & Jim Nelson AAPT/PTRA (1 1/2 hours)	
9:30 – 10:30 AM	PHYSICAL OPTICS ACTIVITY #8: MODERN THEORIES OF LIGHT – Page 91	Jane & Jim Nelson AAPT/PTRA (1 hour)	
10:30 - Noon	PHYSICAL OPTICS ACTIVITY #11: ATOMIC SPECTRA OF UNKNOWN – Page 111	Jane & Jim Nelson AAPT/PTRA (1 1/2 hour)	
Noon - 1:00	In House Working Lunch: (60 minutes)		
PM	Mechanical Universe Video, Wave Nature of Light Physical Optics Activity #12: WAVE NATURE OF LIGHT WORKSHEET – Page 119		
1:00-2:00	OPTICS ACTIVITY #9: What's Up with μ_0 and ϵ_0 ? A Worksheet to	Jane & Jim Nelson	
PM	Enlighten!!:- Page 103	AAPT/PTRA (1 hour)	
2:00 – 2:15 PM	☐ Horizon Survey and Wrap-up	Mohan Aggarwal AA&MU, HRI and APEX Leadership (1/4 hour)	

- Day 1 (Total = $9 \frac{1}{4}$ hours)
- AAPT/PTRA = 8 1/4 hours
- Action Research, et cetera. = 0 hours
- Pedagogy = 1 hour
- Technology = 0 hour
- Overall Totals = 14 hours
- AAPT/PTRA = 12 hours
- Action Research, et cetera = 0 hours
- Pedagogy = 1 hour
- Technology = 0 hour

- **Day 2 (Total = 5 hours)**
- AAPT/PTRA = 5 hours
- Action Research, et cetera = 0 hour
- Pedagogy = 0 hour
- Technology = 0 hour

7-Habits by Eric Jensen, PhD CEO, Jensen Learning Brain-Based Education LET'S LOOK FOR THESE BEHAVIORS.

25 Things Successful Teachers Do Differently by Julie DuNeen APEX: QUESTIONS FOR SELF-REFLECTION: