

## Alliance For Physics Excellence (APEX) Winter Weekend Workshop – Cohort 1 Physics Teacher Institute (PTI) Activity Schedule Alabama A & M University



## January 16-17, 2015

## **Day 1 – Friday, January 16, 2015**

8:00 - 8:15 AM	Welcome/Greetings/Announcements	Mohan Aggarwal AA&MU and APEX Leadership	Room 129 V. M. Chambers Building		
8:15 -10:15 AM	Action Research in APEX Classrooms Session 1: Does the APEX Model affect student outcomes in Alabama physics classrooms? Reports, Debriefing, Discussion of fall 2014 classroom investigations. A focus on what worked and what did not work as planned and where do we go from here. (2 hours)	Dennis Sunal, UA			
10:15 - 11:30 AM	Yellow Light Scientific & Social Design Problem – (1 & 1/4 hours) Topic → Kinematics & Engineering	Tommi Holsenbeck, Dan O'Halloran & Jim Nelson AAPT/PTRA			
11:30 AM to Noon	Introduction to Curriculum Unit Planning (1/2 hour)	Jim Minstrell, Facet Innovation			
Noon - 1:30 PM	Working Lunch: Power Point Presentation on Making a Video for Analysis by Marius Schamschula AA&MU (1 hour)				
1:30 - 4:30 PM	Teaching with the end in mind. Planning a First Semester Curriculum Unit on Force & Motion – Newton's Laws (3 hours)	Jim Minstrell, Facet Innovation	Room 129 V. M. Chambers Building		
4:30 - 6:00 PM	Action Research in APEX Classrooms Session 1 Continued: (1 1/2 hours	Dennis Sunal, UA			

- Day 1 (Total = 9 1/4 hours)
- Action Research =  $3 \frac{1}{2}$  hours
- Pedagogy & Planning = 3 1/2 hours
- PTRA =  $1 \frac{1}{4}$  hours
- Technology = 1 hour

Day 2 – Saturday January 17, 2015							
8:00 – 11:00 AM		Teaching with the end in mind. Planning a Second Semester Curriculum Unit on Electrostatics or DC Circuits (3 hours)	Jim Minstrell, Facet Innovation				
11:00 AM - Noon		APEX Professional Learning Community Session 1 Continued: Partners in reform - Do we have one? Can we make it better? What are possible resources? (1/2 hour)	Do we have one? Can we make it better? What are possible				
		Action Research Session 2: Using the action research concept to gain expertise and E & M action research activity for the spring, 2015 (1/2 hour)					
Noon – 12:30 PM		Working Lunch: Dennis Sunal UA (1/2 hour)					
12:30 - 1:00 PM		APEX Professional Learning Community Session 2: Making a virtual professional learning community work for you. Continued (1/2 hour)	Dennis Sunal UA				
1:00 - 2:00 PM		Video Analysis of a Vernier Elastic and Inelastic Collisions Simulation.  Hands-on collision laboratory activity for participants to make their own video (1 hour) Topics → Collision, Vectors. Kinetic Energy & Momentum	Marius Schamschula AA&MU	Room 129 V. M. Chambers Building			
2:00 PM		Workshop Evaluation/Closing Remarks	Mohan Aggarwal AA&MU and APEX Leadership				

- Day 1 (Total = 9 1/4 hours)
- Action Research =  $3 \frac{1}{2}$  hours
- Pedagogy & Planning = 3 1/2 hours
- PTRA =  $1 \frac{1}{4}$  hours
- Technology = 1 hour

Total for week-end = 15 1/4 hours
Action Research = 5 1/2 hours
Pedagogy & Planning = 6 1/2 hours
PTRA Content = 1 1/4 hours
Technology = 2 hours

- Day 2 (Total = 5 1/2 hours)
- Action Research = 2 hours
- Pedagogy & Planning = 3 hours
- Technology = 1 hour