



Alliance For Physics Excellence (APEX)
Summer 2014 Workshop
Physics Teacher Institute (PTI) Activity Schedule
Kinematics, Force & Newton's Second Law
Alabama A & M University
June 15 – 27, 2014



Sunday, Orientation Meeting – June 15, 2014

TIME	TOPIC	ACTIVITY	LOCATION	RESOURCE	
6:00 p.m. – 6:10 p.m.	Welcome	Dr. Barbara Cady Alabama A & M University Announcements/Housekeeping	AAMU Ernest L. Knight Center- VIP Room	APEX Team	
6:10 p.m. – 6:30 p.m.	Greetings - APEX New PI	Dr. Mohan Aggarwal, Chairperson, AAMU Department of Physics, Chemistry and Mathematics	AAMU Ernest L. Knight Center- VIP Room	APEX Team	
6:30 p.m. – 7:00 p.m.	Buffet Dinner	-----	AAMU Ernest L. Knight Center- VIP Room		
7:00 p.m. – 8:00 p.m.	Force and Motion	Pre Institute Assessment (Participants Can Bring a Calculator)	AAMU Ernest L. Knight Center- VIP Room	AIR	Assessment
8:00 p.m. – 9:00 p.m.	Attention to Student Thinking (Ala Jim Minstrell)	Video: Private Universe	AAMU Ernest L. Knight Center- VIP Room		PCK

Monday, Day 1 – June 16, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon	Kinematics	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 p.m.	Lunch Break	Lunch On Your Own		
1:00 p.m. – 5:00 p.m.	Kinematics	PTRA Activities	J&J Nelson	DCK

Tuesday, Day 2 – June 17, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon	Kinematics	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 pm	Lunch Break	Lunch On Your Own		
1:00 – 2:00 p.m.	Kinematics	PTRA Activities	J&J Nelson	DCK
2:00 p.m. – 5:00 p.m.	Wiki	Wiki	Marius Schamschula	TPACK

Wednesday, Day 3 – June 18, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon	Kinematics	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 pm	Lunch Break	Lunch On Your Own		
1:00 – 2:00 p.m.	Why Attend to Student Thinking?	Discussion	Jim Minstrell	PCK
2:00 p.m. – 4:30 p.m.	Kinematics	PTRA Activities	J&J Nelson	DCK
4:30 p.m. – 5:30 p.m.	Eliciting Student Thinking in Kinematics	Anticipating Student Ideas	Jim Minstrell	PCK
5:30 p.m. – 7:00 p.m.	Dinner	Dinner On Your Own		
7:00 p.m. – 9:00 p.m.	Eliciting Student Thinking in Forces	Anticipating Student Ideas	Jim Minstrell	PCK

Thursday, Day 4 – June 19, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon	Force	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 p.m.	Lunch Break	Lunch On Your Own		
1:00 p.m. – 2:00 p.m.	Formative Assessment	Introducing Diagnoser	Jim Minstrell	PCK
2:00 p.m. – 4:00 p.m.	Force and Newton's Second Law	PTRA Activities	J&J Nelson	DCK
4:00 p.m. – 5:30 p.m.	Monitoring Changes in Student Thinking	Diagnoser for Data Collection	Jim Minstrell	PCK

Friday, Day 5 – June 20, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – 11:00 a.m.	Newton's Second Law	PTRA Activities	J&J Nelson	DCK
11:00 a.m. – Noon	Kinematics and Newton's Second Law	Post Institute Assessment	AIR	Assessment
Noon – 1:00 p.m.	Lunch Break	Lunch On Your Own		
1:00 – 2:00 p.m.	Action Research Using Diagnoser	Planning for Data Collection	Jim Minstrell	PCK

WEEK 2**Sunday, Day 6– June 22, 2014**

TIME	TOPIC	ACTIVITY	RESOURCE	
6:00 p.m. – 7:00 p.m.	Energy and Momentum	Pre Institute Assessment (Participants Can Bring a Calculator)	AIR	Assessment
7:00 p.m. – 8:00 p.m.	Elicitations (Ala Jim Minstrell)	Nature of Energy	J&J Nelson	PCK

Monday, Day 7– June 23, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon.	Energy	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 pm	Lunch Break	Lunch On Your Own		
1:00 p.m. – 5:00 p.m.	Energy	PTRA Activities	J&J Nelson	DCK

Tuesday, Day 8 – June 24, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon	Energy	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 pm	Lunch Break	Lunch On Your Own		
1:00 – 3:00 p.m.	Wiki	Hands on Session	Marius Schamschula	TPACK
3:00 p.m. – 5:30 p.m.	Energy	PTRA Activities	J&J Nelson	DCK

Wednesday, Day 9 – June 25, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon	Momentum	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 pm	Lunch Break	Lunch On Your Own		
1:00 – 5:00 p.m.	Momentum	PTRA Activities	J&J Nelson	DCK
5:00 p.m. – 7:00 p.m.	Dinner	Dinner On Your Own		
7:00 p.m. – 9:00 p.m.	Who are Teachers of Physics	PTR Activities	Dennis Sunal	Action Research

Thursday, Day 10 – June 26, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – Noon	Momentum	PTRA Activities	J&J Nelson	DCK
Noon – 1:00 pm	Lunch Break	Lunch On Your Own		
1:00 p.m. – 3:30 p.m.	Creating Change in Teaching Physics	PTI and PTR Activities	Dennis Sunal	Action Research
3:30 p.m. – 5:30 p.m.	Momentum	PTRA Activities	J&J Nelson	DCK

Friday, Day 11 – June 27, 2014

TIME	TOPIC	ACTIVITY	RESOURCE	
8:00 a.m. – 10:00 am	Momentum	PTRA Activities	J&J Nelson	DCK
10:00 a.m. – 11:00 a.m.	Energy and Momentum	Post Institute Assessment	AIR	Assessment
11:00 am – Noon	Lunch Break	Lunch On Your Own		
Noon – 2:00 p.m.	Computer Modeling	PTR Activities	Marius Schamschula	TPACK