

start	end	name	Title
08:30 AM	09:00 AM		Abstract
08:45 AM	09:00 AM		Board Meeting
09:00 AM	09:05 AM	Mark Plano Clark	Registration, coffee/tea, informal conversations
09:05 AM	11:05 AM	Dwain Desbrian	Welcome
			Revitalizing Courses with Alternative Techniques in Problem Solving How do we help our students develop a deeper understanding of scientific models in introductory physics? This workshop will introduce participants to several alternative techniques to solving physics problems for scenarios involving 1-D and 2-D motion, momentum, and energy topics. Using existing representational tools in new ways, the alternative problem solving methods will be presented as a means of enhancing student understanding of scientific models. One such tool specifically targets student abilities in constructing free body diagrams. Participants will be provided time to practice using the new tools, as well as discuss how the new tools could be used in their classrooms.
11:05 AM	11:15 AM		break
11:15 AM	11:25 AM	Terry Toepker	A Candle At 10 Miles From a Centrum Silver Ad: "You can see a candle at a distance of 10 miles." 1. Calculate the number of photons that would reach your eye from a 1 watt source assuming a monochromatic light 570 nm. Neglect any atmospheric effects. 2. Considering the curvature of the earth, how high must you be to see the candle on the horizon? Use the 1-2-3 equation.
11:25 AM	11:35 AM	Sandra Doty	Problem with Problem Solving Strategies Almost every introductory physics textbook includes a problem solving strategy intended to guide the novice problem solver or, at least, get them started. Those strategies, more or less, all look the same. Speaking for myself, I know that I promote them as a way of helping the student organize the task before them and clarify their thinking. But do they work? Can we correlate the ability to perform the steps in a problem solving strategy with an ability to solve problems? In this talk, I will provide preliminary results from an investigation aimed at trying to answer this question.
11:35 AM	11:45 AM	Gordon Aubrecht	Some challenges in working with middle school teachers There are multiple challenges in working with middle school teachers. Content knowledge is problematic. Basically, middle school teachers should have a master's in geology, biology, physics, and chemistry—and be able to work effectively with adolescents! Obviously, this is far from reality. Colleges of education fail to prepare teachers for the reality of the administrative-driven classroom. Inquiry is lectured about but not practiced. The granting agencies want quantitative data, but how does one provide these data? The talk will discuss these issues and some possible solutions we developed.

11:45 AM	11:55 AM	Kathy Harper	Analyzing Peer Review of Writing Feedback One goal of the Fundamentals of Engineering for Honors sequence at The Ohio State University is to develop strong technical communication skills. As part of a "cornerstone" design-and-build robotics project for second-semester engineering majors, teams write a thorough technical report. As part of the scaffolded approach of developing the report, students engage in a peer-review of writing exercise based on a draft of the report's first two sections. This study investigated the types of feedback students provided each other, the quality of that feedback, and the modifications made to subsequent drafts of the report.
11:55 AM	01:00 PM		lunch
01:00 PM	01:10 PM	Darwin Church	Tools for the Flipped Classroom After trying multiple types of technology over the past few years to help me flip my classroom, I have settled on using Screencast-O-Matic with a touch screen computer and a Smartpen. In this presentation I will explain what I do and why I chose them, addressing the pros and cons of each.
01:10 PM	02:00 PM	Lenore Horner	Hands-On Video/Screencasting Time, and some basic instructions, to try your hand at making a screencast or a video teaching some small bit of content. Hopefully volunteers will share their work at the end.
02:00 PM	02:15 PM		break
02:15 PM	02:30 PM		The Way I Do It
02:30 PM	03:15 PM		Business Meeting – all invited, members vote