

Abstract

Nanotechnology Education Curriculum Development Program

The Nanotechnology Education Curriculum Development Program [NECDP] is a project designed to create multimedia resources for educational professionals that teach at the K-12, two-year higher education, and four-year higher education levels. The open-source modules specifications include: accessibility, usability and technical standards. Language level, science and math concepts, however, will be variable according to the audience. The modules are easily modified by the end user and available on a no cost basis. The multimedia modules produced vary in length but are typically five to ten minutes long. Visual learning modules are made up of live video, 3-D, and 2-D animation.

Key Words

Nanotechnology

Multimedia

Video

Animations

Target grade level(s)

All grades and levels based on voice over and module selections.

Mode of presentation

We will provide a power point presentation with hands-on demos and a sample video from our work.

Prerequisite Knowledge

No prerequisite knowledge will be necessary.

Objective(s)

To disseminate our work to all who can utilize it and receive feedback on improvements and additional materials and topics to design modules for.

Equipment and Supplies Needed

I will bring a notebook PC and need to connect to a projector with sound. An internet connection is also requested. I can bring all the supplies for the hands-on demos.

Introduction

Doug Buckley: Chair of Electrical Engineering Technology and Professor of Robotics and Automation at the Springfield Technical Community College. Co-PI for the following grant in partnership with the University of Massachusetts, Amherst. The NECDP is funded by NSF grant CMMI 0531171 through the *Center for Hierarchical Manufacturing* at the University of Massachusetts, Amherst.

Procedure

A power point presentation with demonstrations; one visual & one with audience participation will be followed by more power point and a sample video to view. Additional data and contact information, discussion and Q & A.

Comments

Not sure what you need here but I will provide written instructions for the hands-on activity.

Evaluation of the activity

We do not require any but will be happy to make one if you feel it is useful.

References

NA

Bibliography

NA

Modules can be viewed at: http://chm.pse.umass.edu/education_outreach/instructional

My contact information is included in the email.