



המחלקה להוראת המדעים

הנכם מוזמנים לסמינר עם

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הסמינר יתקיים ביום ג', ה - 4.4.17, ה'/ניסן/תשע"ז, בשעות 13.30-14.30

בחדר הדיונים במחלקה להוראת המדעים, מכון ויצמן למדע

נושא ההרצאה:

Establishing a Collaborative Student-Centered Learning Environment using the SCALE-UP Pedagogy

The time-honored conventional lecture (“teaching by telling”) has been shown to be an ineffective mode of instruction for science classes. For the enhancement of critical thinking skills and the development of problem-solving abilities, collaborative group-learning environments have proven to be far more effective. In the SCALE-UP pedagogical approach, students sit at round tables in groups of three — in this configuration, they carry out a variety of pencil/paper exercises (“ponderables”) using small whiteboards and perform hands-on activities such as demos and labs (“tangibles”) throughout the class period. Formal lecture is reduced to a minimal level and the instructor serves more as a “coach” to facilitate the academic “drills” that the students perform. In this talk, I will present an overview of the SCALE-UP concept and I will outline the details of its implementation at George Washington University over the past 8 years. I will also discuss empirical data from assessments given to the SCALE-UP collaborative classes and the regular lecture classes at GWU in order to make a comparative study of the effectiveness of the two methodologies.