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Supplementary Video Tutorials for Introductory Physics Courses

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Problem solving is a major stumbling block in the introductory physics courses in both STEM and life science programs. Our students have been provided with an optional tool to supplement and reinforce lecture and in-class tutorial instruction. A series of video tutorials were created to address curriculum topics covered in first year physics courses. The tutorials target the topics that are known to be particularly challenging for first year students. The video tutorials consist of a theoretical introduction - review of the main concepts in the topic the video addresses - followed by problem solving tips and examples of applications. The tutorials were screen-captured using Camtasia, with voice track added to the presentations. The tutorials were made available to Ryerson University students through D2L Brightspace course management system and/or Google Drive. The video tutorials support student engagement inside and outside the classroom, by enabling students to access on demand, at their own pace and time, specific instructions, which relate directly to the material they learn in the course. Initial students' response to the resource has been very positive, and we plan to expand the project to include other topics from the first year curriculum as well as create videos for selected upper year courses. Session participants will learn about the process of creating the tutorials. Examples of video tutorials will be provided.

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