



Intermediate Mechanics Tutorials

 Indicates a research-demonstrated benefit

Overview

Small-group learning materials for teaching intermediate mechanics. The physics is Newtonian with very little Lagrangian formalism. Materials are a mix of conceptual, mathematical, and problem solving University of Washington-style tutorials, as well as related research results, examination questions, and suggested course outlines.



Type of Method Curriculum supplement, Tutorials



Level

Designed for: Advanced Undergraduate

Can be adapted for: Intermediate Undergraduate, Graduate



Setting

Designed for: Lecture - Small (<30 students), Recitation/Discussion Session

Can be adapted for: Homework, Studio



Coverage

Many topics with less depth



Topics

Mechanics





Instructor Effort




Medium



Research Validation

Based on research into: how students learn , student ideas about specific topics 

Demonstrated to improve: scores on written conceptual tests 

Studied using: conceptual pre/post exams , problem-solving pre/post exams , classroom observations 



Compatible Methods

[Peer Instruction](#), [PhET](#), [JiTT](#), [CGPS](#), [Physlets](#), [SCALE-UP](#), [OSP](#), [LA Program](#), [CAE TPS](#), [Paradigms](#), [Tutorials](#), [Clickers](#)



Similar Methods

[UW Tutorials](#), [ABP Tutorials](#), [OST Tutorials](#), [Lecture-Tutorials](#), [QuILTs](#), [Thermal Tutorials](#), [Tutorials](#)



Developer(s)

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Website

<http://faculty.gvsu.edu/ambroseb/research/IMT.html>

