



Lecture-Tutorials for Introductory Astronomy

 Indicates a research-demonstrated benefit

Overview

Socratic-dialogue driven, highly-structured collaborative learning activities for use in introductory Astronomy lecture courses.



Type of Method

Curriculum supplement, Tutorials




Level


Designed for:

Can be adapted for: Intro College Conceptual



Setting

Designed for: Lecture - Large (30+ students) 

Can be adapted for: Lecture - Small (<30 students)  , Recitation/Discussion Session, Studio



Coverage

Many topics with less depth



Topics

Astronomy



Instructor Effort

Low



Resource Needs

Cost for students





Skills

Designed for: Conceptual understanding  , Using multiple representations



Research Validation

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

Demonstrated to improve: conceptual understanding 

Studied using: student interviews  , research at multiple institutions 



Compatible Methods

[Peer Instruction](#), [PhET](#), [JiTT](#), [CGPS](#), [Physlets](#), [Context-Rich Problems](#), [OSP](#), [LA Program](#), [CAE TPS](#), [Astro Ranking Tasks](#), [CPU](#), [TEFA](#), [Tutorials](#), [Clickers](#)



Similar Methods

[UW Tutorials](#), [ABP Tutorials](#), [OST Tutorials](#), [Astro Ranking Tasks](#), [QuLLTs](#), [Thermal Tutorials](#), [Mechanics Tutorials](#), [Tutorials](#)



Website

<http://astronomy101.jpl.nasa.gov/teachingstrategies/teachingdetails/?StrategyID=9>

