

Report: DAAD Project for 2023

Digital Adaptation of Geophysics Lecture

Team

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Project Focus

Our team focuses on developing flipped classroom templates, with Introduction to Geophysics as a pilot project. The project involves creating unified digital teaching resources, such as templates for PowerPoint/Latex slides, figures, and accompanying texts. We prioritize reproducibility and ease of modification for future adaptations.

Our progress is systematically stored on a pCloud server (only for team members) and archived on GitHub (publicly accessible with the following link: <https://github.com/RezaErshadi/CIVIS>)

You can also find an example of what we are targeting to achieve in this video:

<https://www.youtube.com/watch?v=Jd-hm4U7hjl>

Tasks

Content: Determining the core concepts to be featured in the video lecture.

Literature Review: Identifying real-world applications of the lecture topic.

Visuals: Selection of essential figures and equations.

Task Distribution: Allocation of figure creation responsibilities.

Digitization: Coding slides and figures for reproducibility and flexibility (using Latex, Tikz, and Python).

Progress

Content Framework: Established a clear outline of topics, figures, and equations.

Real-World Context: Extracted classical and modern applications from reliable literature sources.

Visuals: Identified relevant equations and figures from primary sources (books and papers). Initial figures generated using Tikz and Python.

Organization: Established a Sphynx platform for streamlined progress management.

Archiving: PCloud storage for team use, with the latest versions archived on GitHub with public access.

Current Status

Status: Content, literature review, and initial figures completed.

Next Steps

Finalize template designs for slides, figures, and text.

Generate remaining figures according to the template.

Assemble presentation slides.

Meetings

Oct 2023

(Drews & Ershadi): Project initiation – defined scope and content structure.

(Ershadi, Hermann, Toetz): Project introduction to students, task explanation.

Nov 2023

(Ershadi, Hermann, Toetz): Literature review and task allocation.

Dec 2023

(Drews & Ershadi): Lecture content refinement.

(Ershadi, Hermann, Toetz): Discussing the current figures and necessary changes.

Sincerely,

Reza Ershadi

26.02.2024