





Ă

**F** 

# **Underground Mine Safety**

An integrated approach for the course and personnel development

A. Binder, A. Hutwalker, O. Langefeld, J. Bauermeister, M. Bothe-Fiekert, Nowosad, S.

Windhoek, 13.09.2022









# Are we on the same page?

Open your hand and raise it a bit

# Put a finger down if...

...safety is the topmost priority in Mining.

...you have been thrown in cold water at your first teaching experience.

... there no mining-specific program for teaching in higher education at your institution.

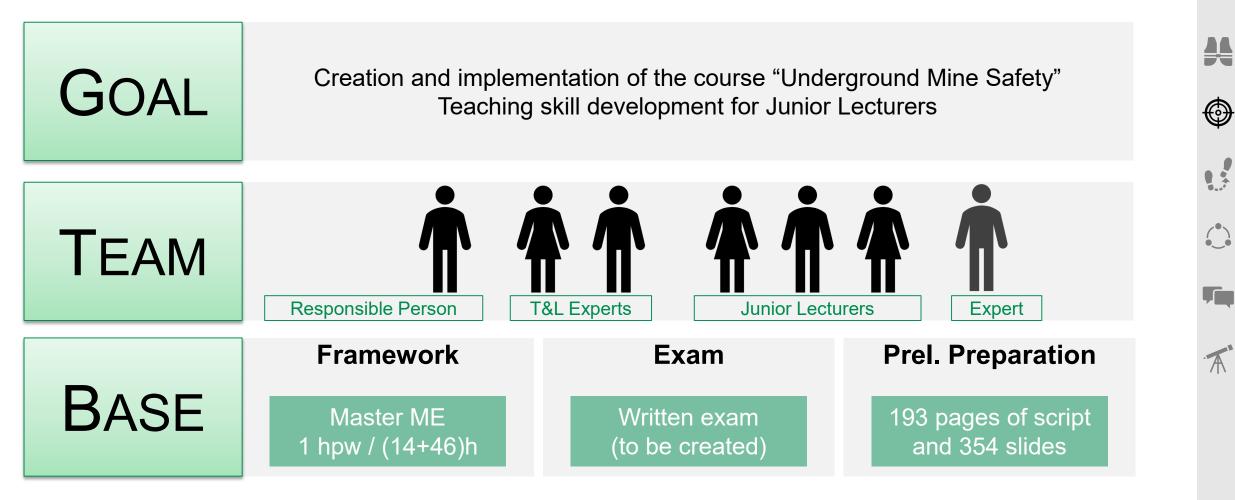
...there no structured initial course development due to many factors in your situation.







# Our goal and in a special situation

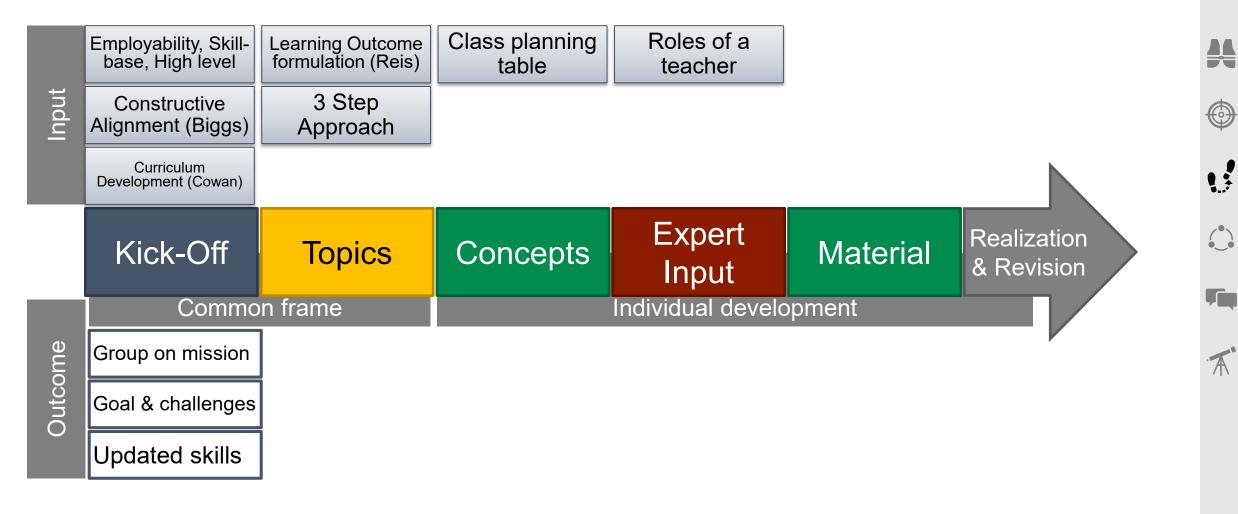








## Approach of course & personnel development



4







#### Approach of course & personnel development

						Teaching & Feedback
Input	Teaching and Learning 101 - Refresher		Feedback (www de)			Group Analysis
		Social formats	Peer Reviews	Topic-specific	Peer Reviews	
	Kick-Off	Topics	Concepts	Expert Input	Material	Realization & Revision
	Common frame			Individual develo	opment	
ome	Group on mission					
Outcome	Goal & challenges	Subtopics & goals		Inspiration		Experiences
-0	Updated skills	Responsibilities	Reviewed Concepts	Clarification	Reviewed Materials & Concepts	Revised course

Institute of Mining

5

 $\bigcirc$ 

**F** 







#### **Implementation: Course structure**

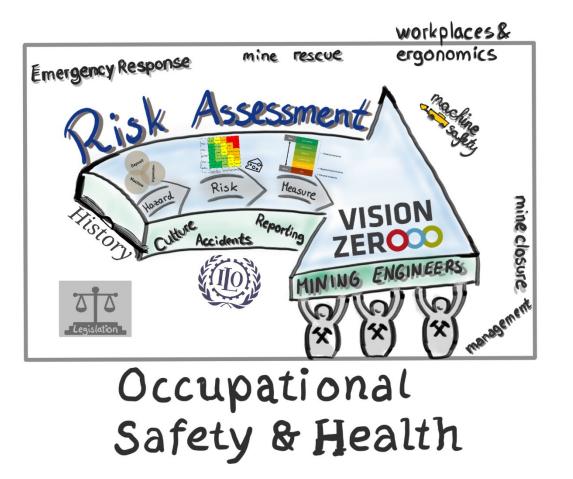
Introduction to Underground Mine Safety

Specific OSH **Hazards** in Underground Mining and Legislative Background

**Risk Matrix** as a core element of Risk Assessment

Safety Measures

**Conclusions** on Underground Mine Safety

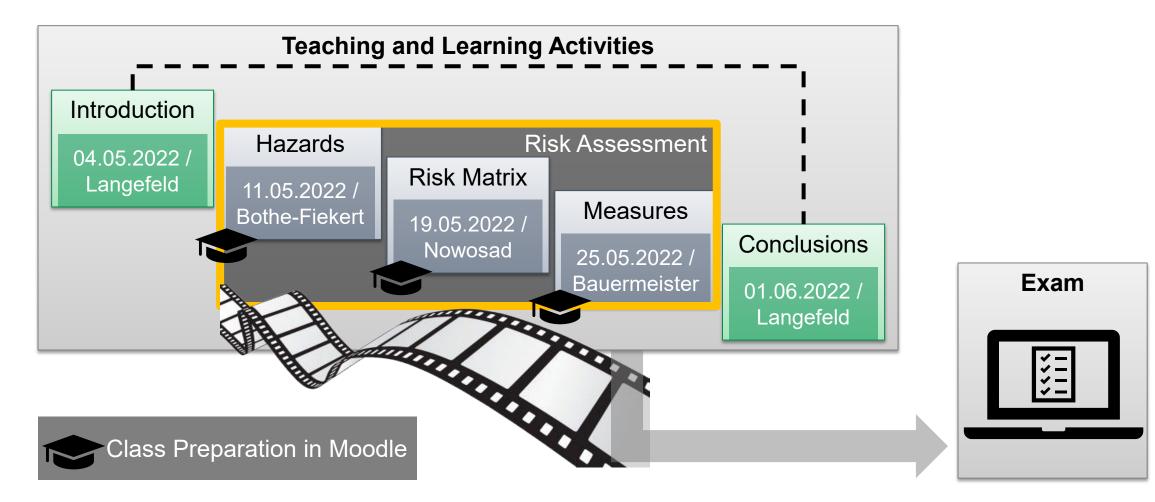








#### **Implementation: Course structure**



A

 $\bigcirc$ 

**Fin** 







#### **Implementation: Concepts**



¥

 $\bigcirc$ 

**Fin** 







#### **Experiences & results**

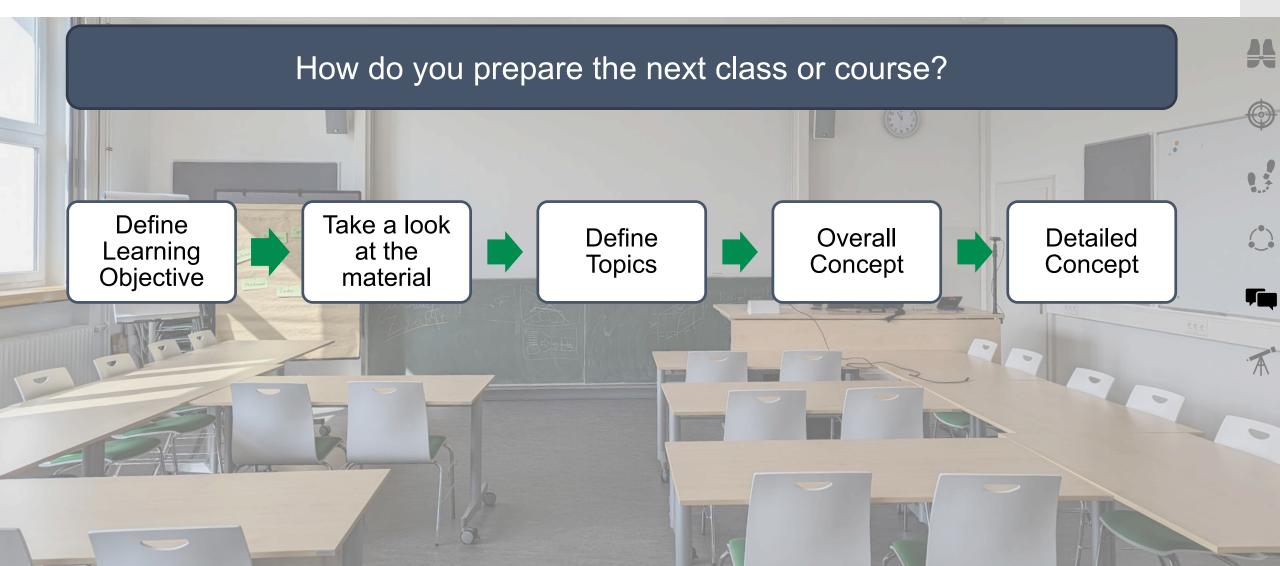








#### **Experiences & results**

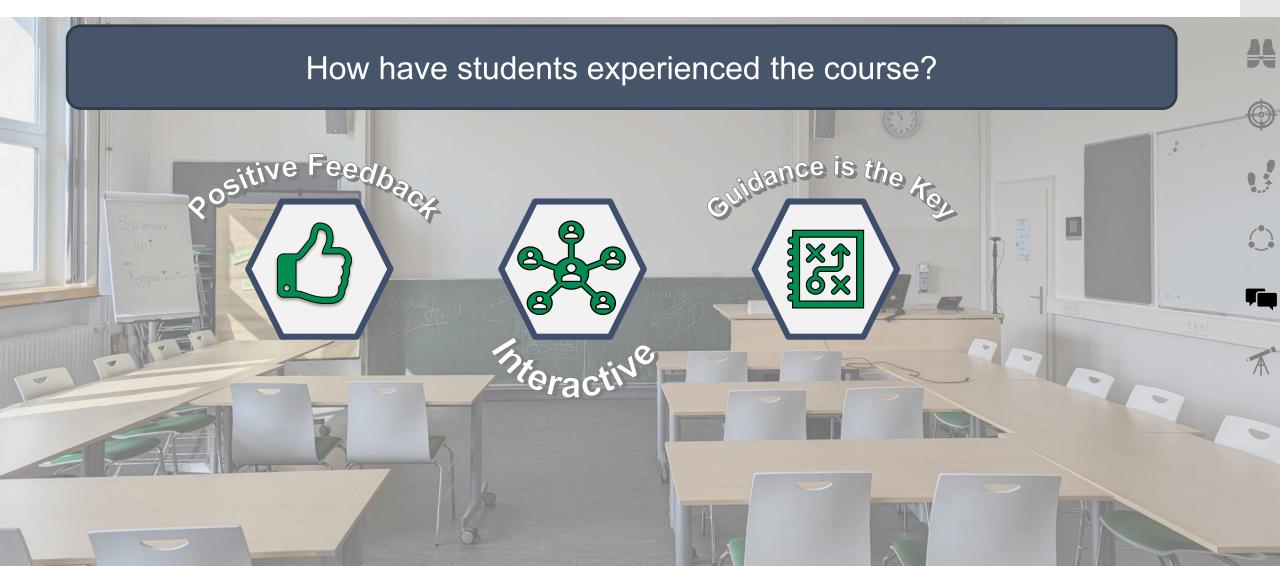








#### **Experiences & results**









## What can be take from this...

... a new mine safety course (tested & improved)

...3 trained junior lecturers ...enhanced skills and materials for course development

... a mine safety course concept

... a course development concept

· A



# Glückauf!

Institute of Mining

Angela Binder Mareike Bothe-Fiekert www.bergbau.tu-clausthal.de

angela.binder@tu-clausthal.de mareike.bothe-fiekert@tu-clausthal.de



SOCIETY OF MINING PROFESSORS

**32ND SOMP** ANNUAL MEETING AND CONFERENCE 32<sup>ND</sup> SOMP MEETING AND CONFERENCE

Safety first!