



# **Summary**

A short course (generic skill)

- "Project management and doctoral research"
- at postgraduate doctoral study.

The aim

- to strengthen the skills of PhD students in the field of PM
- with a focus on research and scientific projects
- and linking best PM practices with doctoral research.

#### **Motivation**

Excuses are seldom truthful, often handy, and rarely productive. Don't make excuses: make things happen!

QUOTEHD.COM

Rhoberta Shaler, PhD
Canadian Author

#### France

# French woman aged 91 gets PhD after 30 years

Colette Bourlier, who awarded a high distinction for her thesis on immigrant workers, said it took so long because she 'took breaks'







### Some problems

#### Lack of ...

- Well-defined scope of doctoral study
- Integration of study with research (projects)
- Clear milestones and deadlines
- Risk identification and risk mitigation
- Effective planning especially of CC/SCI papers
- Communication with mentor



# PhD research - principles and objectives

□ Rule Book on doctoral studies at the University

#### Goals:

- creation of new and relevant skills, knowledge and practices;
- education of researchers;
- training of doctoral students;
- acquisition of knowledge, experience and skills, which should enable doctors of science and art creative research-based problem solvig;
- internationalization of research at the University

#### Innovativness of doctoral program

• interdisciplinarity, collaboration, partnership with industry and business sector.



#### **Doctoral research**





# Vision of a (PhD) research







# Discussion / assignment

- When and how a Phd dissertation research field is formally confirmed?
- Define your research field, research challenges and area of interest!





### Project management concepts

#### Project

A temporary endeavor to create a unique ...

#### Progressive Elaboration

• The iterative process of ...

#### S.M.A.R.T. goals

specific, measurable, attainable, realistic, timely

#### Results:

artifact, document, potential, ..., knowledge





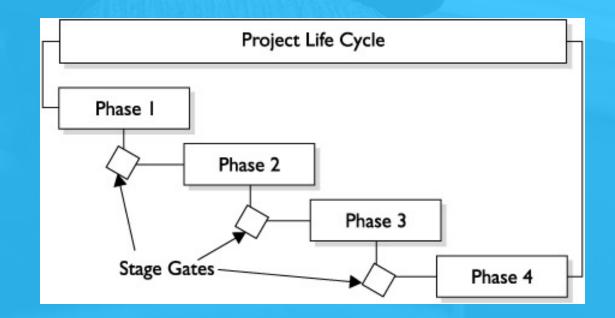
# **Scope and Creep**

- Scope project boundaries, work (not) to be done, deliverables
- Creep scope, hope, effort, feature creep



### Project phases

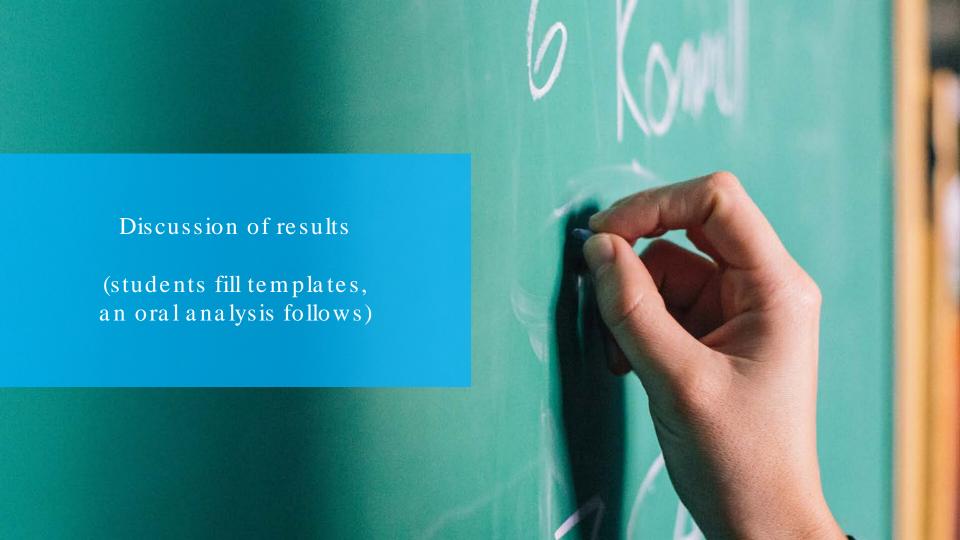
- Defining project phases & deliverables
- Monitoring project progress through the stages
- Gates: performance, deliverables, ...



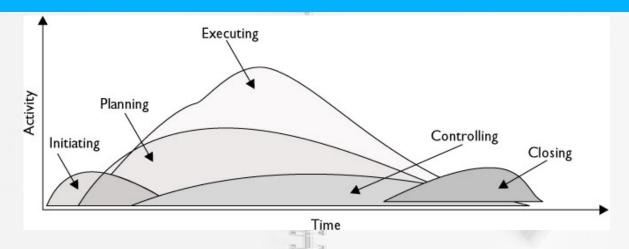


# Discussion / assignment

- Identify possible creep(s)
   of your PhD and
   appropriate mitigation(s)
- Define four main phases of your PhD
- How would phases be verified?
- How would mentor be involved?



#### PM process groups



### Discussion

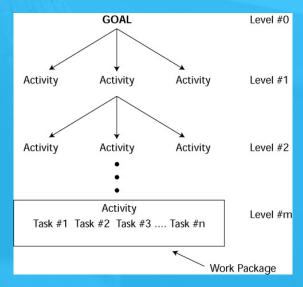
- PhD work processes?
- Critical ones?



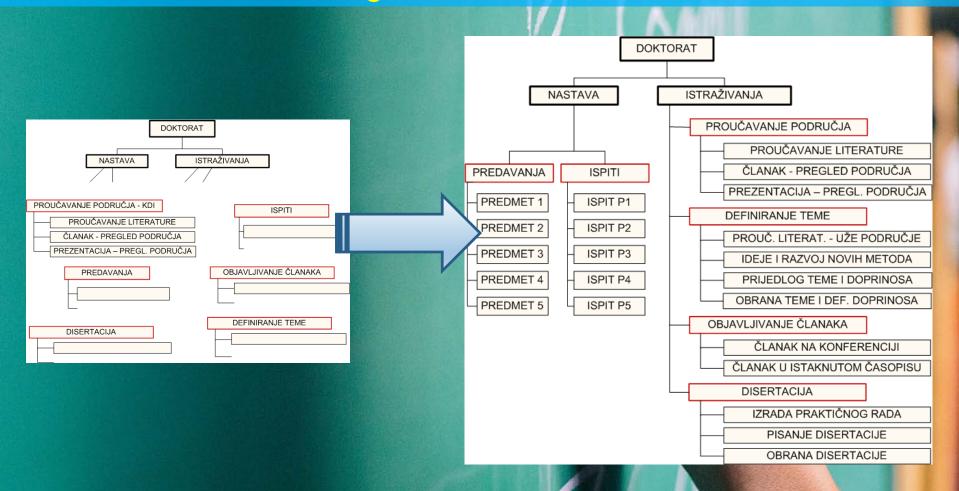


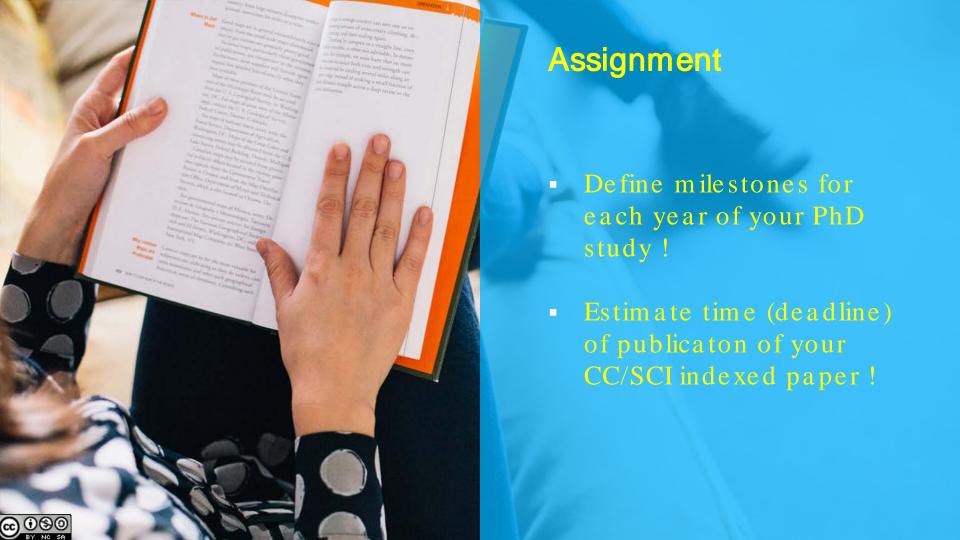
### Project planning

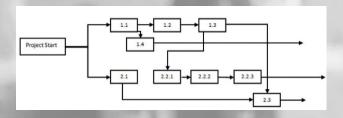
- Rolling wave planning
- Work breakdown structure (WBS)
- Activity, Work package, Task
- Project milestones

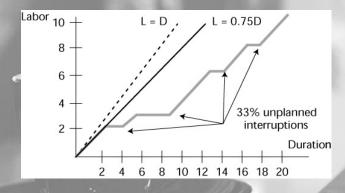


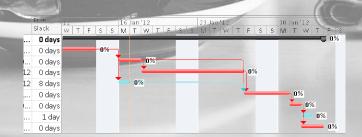
#### Brainstorming - main PhD WBS activities











# **Project scheduling**

Project NetworkDiagram (PND)

• Time, effort, duration estimation

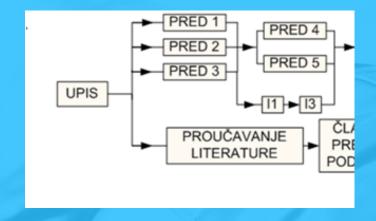
Ganttogram

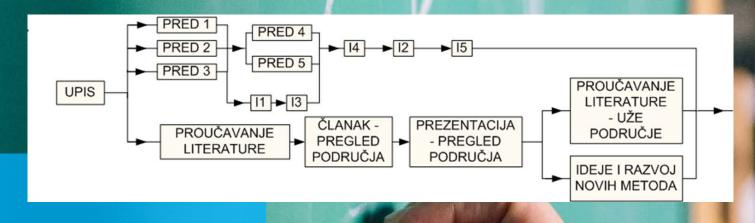




# Assignment

Draw the network diagram for your PhD WBS!





Discussion of results (students fill templates, an oral analysis follows)





### Project communications management

#### Communications planning

- within project (team) in general
- between PhD student and mentor

#### Information distribution

- Communication channels
- Communication matrix and frequency

#### Performance reporting

• Formats and volume of information

#### Manage stakeholders

Meetings and performance reporting



# Risk management

- Risk identification
- Risk analysis, including consequeces
- Risk resolution planning
- Risk monitoring



# Assignment

Identify risks of PhD as a project!

Analyse consequences (delays, costs, etc.)

Define strategy (Plan B) for each risk - trigger, resolution, time frame Sue polivale, vilo metalichi retrateno proces
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RIZIFE U PROJEKTU NAVESTI PRIMJER PROBLEM J ODUGOLAČENJEM
RECENZIJE (HVALA FERTALJ!)

# The outcome

- 2 sessions x 2 hours
- 3 teachers
- 16 students
- High satisfactionuseful,interesting,

motivating ...

Dissemination to other universities

