

Smart processes and agile methods in software engineering (IN5140)

Information on Master Course Autumn 2023



Teachers



Additional guest lecturers from industry!

Yngve Lindsjørn

- Current position: Associate Professor at University of Oslo
 - · Agile and Lean Methods,
 - Teamwork in agile teams
- Education:
 - MSc, University of Oslo, 1987
- Work experience
 - University of Oslo (IFI) since 2010
 - OsloMet since 2012
 - Comptel (now Nokia), 2008-2010
 - Own company, Kompetanseweb, 2000–2008
 - Tieto Enator, 1997-2000
 - Norsk Regnesentral 1987–1997
- Leading a large research project (TeamIT) from 2009 to 2014

Antonio Martini

- Currently:
 - Professor at UiO
 - Teaching the course from 2017
- Previously
 - Worked as a Software Developer
 - PhD in Software Engineering (Chalmers)
 - Postdoc (Chalmers)
 - Independent Consultant
 - Principal, Strategic Researcher at CA Technologies
- Hobbies
 - · Board games, strategy computer games, pool, etc.
 - Football, volleyball, beach volley, medieval fencing
 - Piano, Drumset, etc.
 - Travel!
 - ...and no time for them! ©



Group Teachers

- Karthik Shivashankar
 - karths@ifi.uio.no
- Gyda Elisa Sæter
 - gydaes@ifi.uio.no

Organization

Schedule

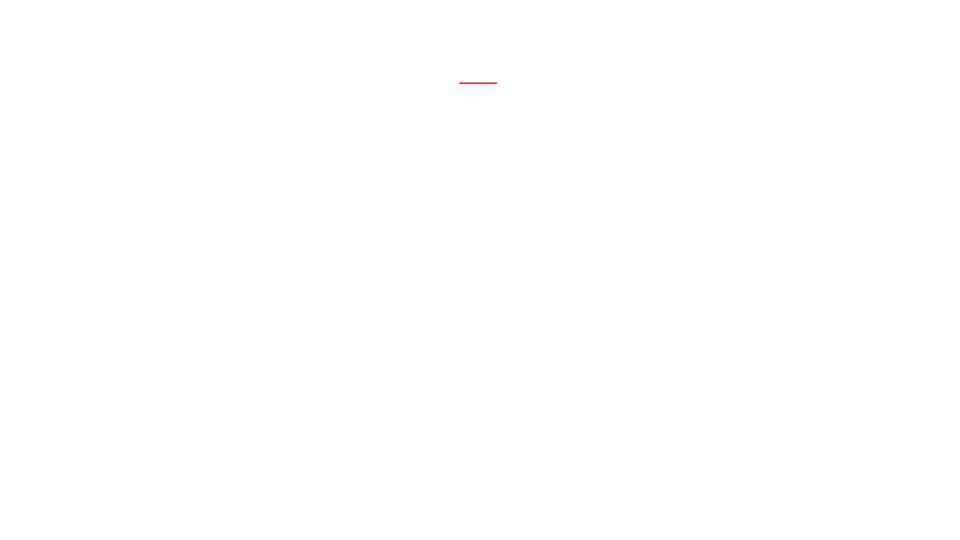
- Course is offered
 - For Master students (IN5140)
 - For PhD students (IN9140)
- Lectures
 - Live physical
 - Recorded and available on the website
- Group sessions
 - Tasks to support the lectures
 - Work on the project
 - Learning by doing

Assessment

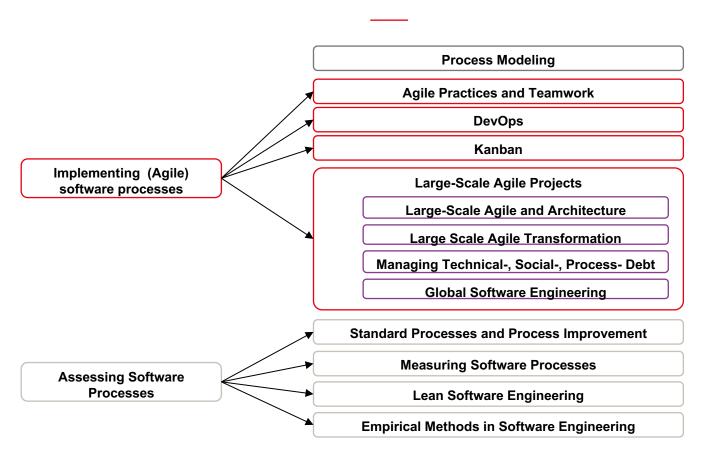
- Project (graded)
 - Design of a process improvement case
 - Case given by teacher or self-provided
 - Groups of 3-5 students
 - Write a report
- Written exam (graded)
 - 4 hours physical exam
- Final grade
 - Written exam 70%
 - Project 30%

More information

- Course page
 - https://www.uio.no/studier/emner/matnat/ifi/IN5140/h23/
- Questions (via mail)
 - ynglin@ifi.uio.no
 - antonima@ifi.uio.no
- First lecture
 - 23. august, 14.15

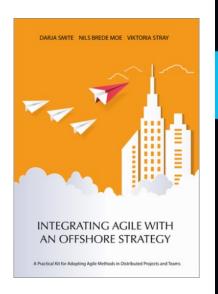


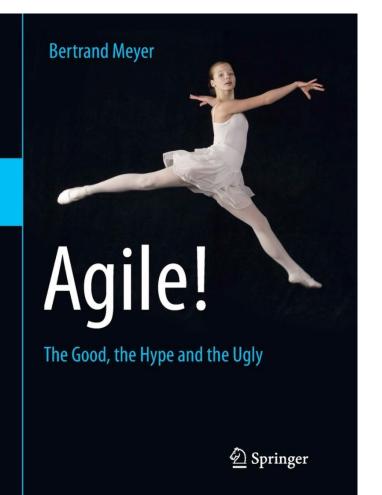
Contents



Recommended books

- https://www.springer.com/gp/book /9783319051543
- https://leanpub.com/integratingagil ewithanoffshorestrategy/c/5140 20 23





We use mentimeter!

• www.menti.com

What to expect from the course

What you get

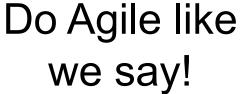
- You learn how to reason about which process is best in which situation
- You understand when a process needs to be improved
- You learn the theoretical background about processes and their assessment
- You learn about Agile and its pros and cons
- You learn from real world research studies based on rigorous approaches and evidence
- You learn from practical experiences in different industrial contexts
- You practice reasoning about a given (real) case

What you don't get

- You don't learn how to implement a specific process
- You don't apply a specific process during the project course

What to expect from the book (see preface)



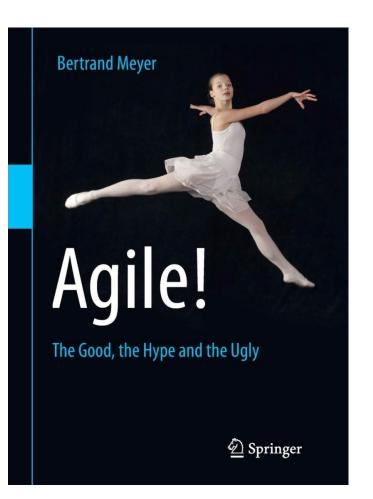




What works and what doesn't?

Agile book

Pr	Preface	
Co	Contents	
1	Overview	1
2	Deconstructing agile texts	17
3	The enemy: Big Upfront Anything	31
4	Agile principles	49
5	Agile roles	79
6	Agile practices: managerial	89
7	Agile practices: technical	103
8	Agile artifacts	117
9	Agile methods	133
10	Dealing with agile teams	145
11	The Ugly, the Hype and the Good: an assessment of the agile approach	149



Book main points

Concise description of Agile

Assessment of Agile

- The good (including the "brilliant"):
 - principles and practices some new, some not that agile authors rightly present as helpful to software
 quality and productivity.
- The hype:
 - widely touted ideas that will make little difference, good or bad, to the resulting software.
- The ugly:
 - agile-recommended techniques that are just plain wrong, contradicting proven rules of good software engineering, jeopardizing the success of projects, and harming the quality of the resulting software.

Book, slides or group work?

- Both!
- Read the books, their are easy to read, interesting and explain further the lectures
 - Using arguments from the book helps getting better grades at the exam
- Participate to the lecture and/or listen to recordings
 - The exam will cover any topic discussed in the lectures, including the guest lectures
- Participate in the group work, it will help you both for the written exam and for the project
 - We will also have some learning by doing activities