# ENGR 301 Project Management

Lecture 2 — Bodies of Knowledge

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### Project Management Hierarchy

### Terminology:

**Framework:** a project management framework informs what needs to be done at a high-level. Bodies of Knowledge are frameworks.

**Methodology:** a project management methodology describes in detail how things should be done.

Phases: steps in time (stages) toward project goals.

**Processes, Tasks and Activities:** these are the methodology implemented; these are where the detail lies.

### PMBOK Framework

#### Stakeholder needs and expectations



- Initiating
- Planning
- Executing
- Monitoring/ controlling
- Closing

#### Process groups Knowledge areas

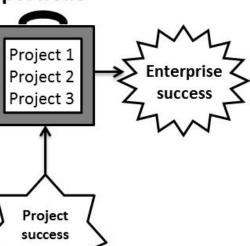
- 1. Integration
- 2. Scope
- Time
- 4. Cost
- 5. Quality
- Human resource
- 7. Communications
- 8. Risk
- 9. Procurement
- 10. Stakeholder management

### Tools and techniques





### Project portfolio



# Project Process Groups



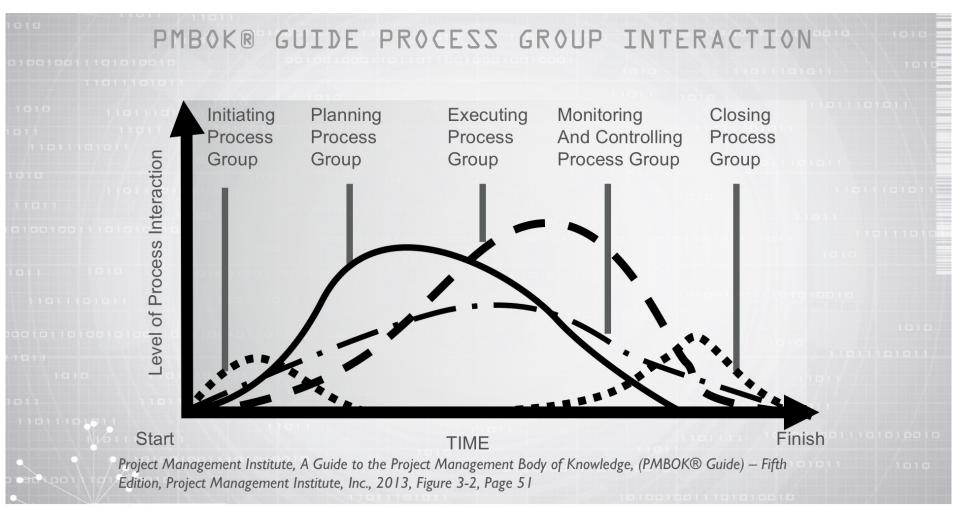
### Process Group Time Guidance

How much time should be spent on each process group?

Process Group	"Alpha" PMs	"Sub-Alpha" PMs
Initiating	2%	1%
Planning	21%	11%
Executing	69%	82%
Monitoring	5%	4%
Closing	3%	2%

Source: Alpha Project Managers: What the Top 2% Know That Everyone Else Does Not by Andy Crowe (2006)

### **Process Group Interaction**



# Project Knowledge Areas



## Subject-Specific BOKs

There are many Bodies of Knowledge which complement each other in the context of projects:

**PMBOK** Project Management Body of Knowledge

https://bit.ly/3P04Cp7

**SWEBOK** Software Engineering Body of Knowledge

https://bit.ly/3uMgZhQ

CYBOK Cyber Security Body of Knowledge

https://www.cybok.org

**SEBOK** Systems Engineering Body of Knowledge

https://bit.ly/3uQ2ABi (see also https://bit.ly/3Tb8tSU)

ISEBOK Industrial and Systems Engineering Body of Knowledge

https://bit.ly/3UPp2Fb