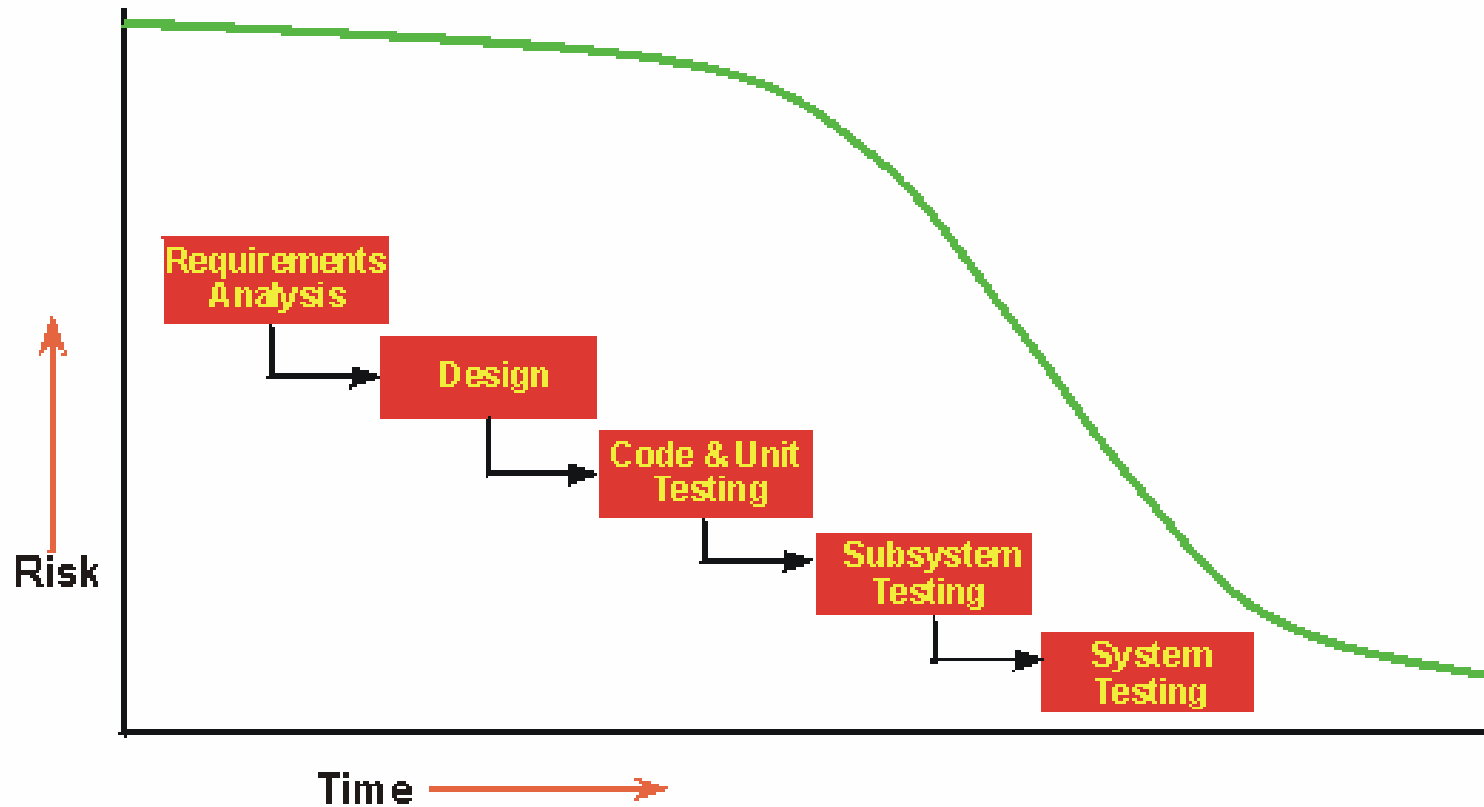


CS3733 – Software Engineering

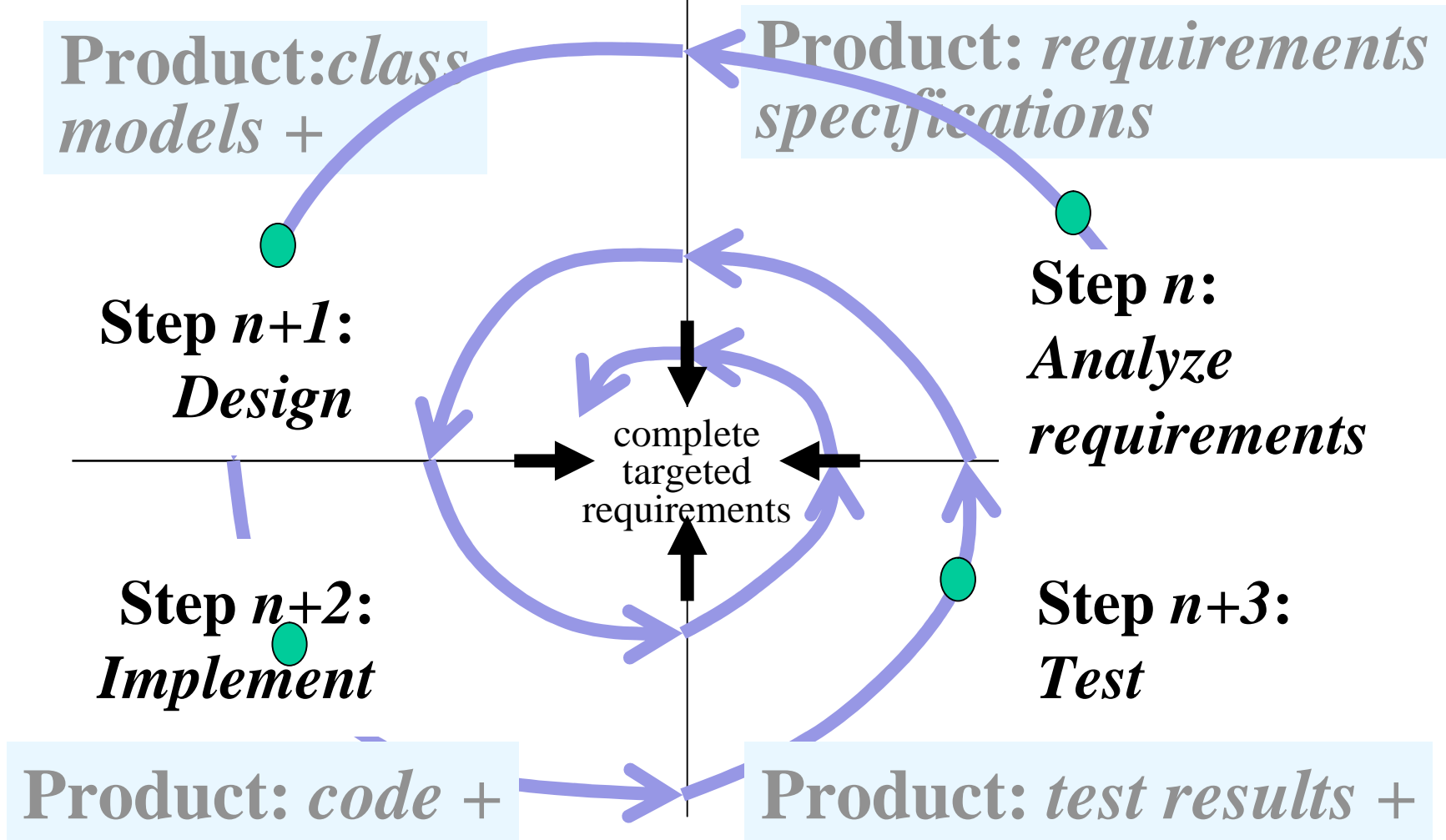
Agile Methods



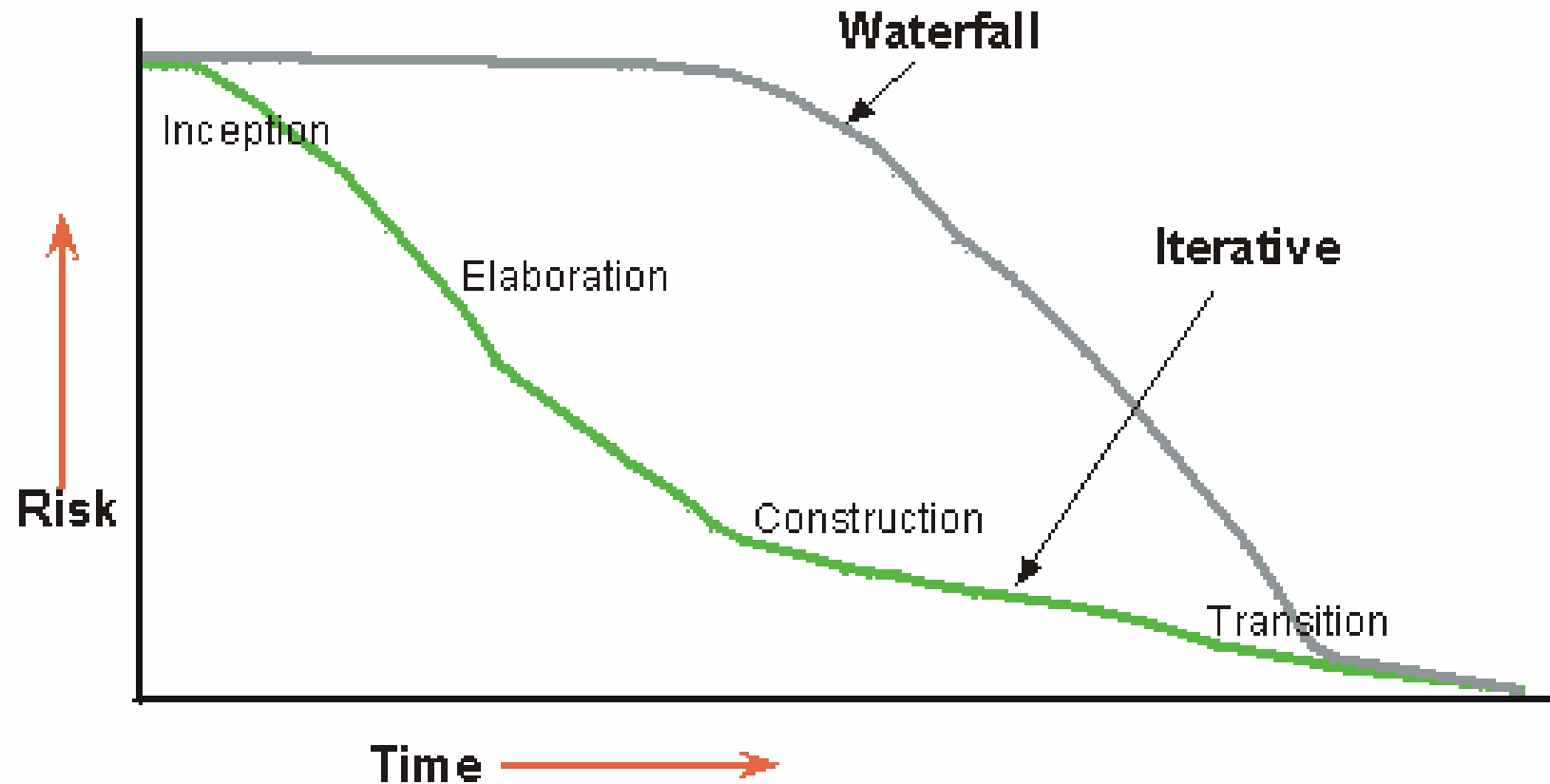
Waterfall risk profile



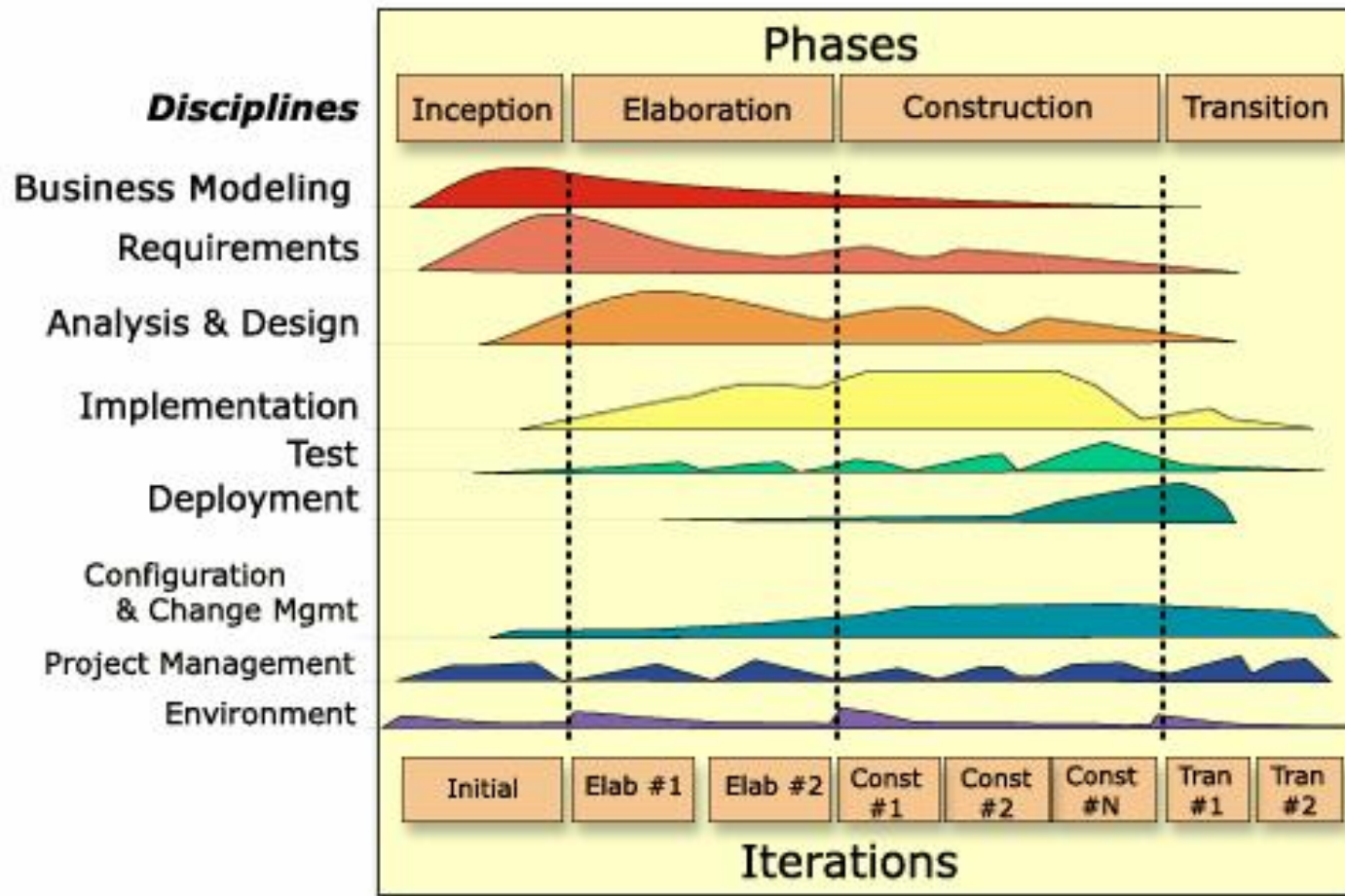
The Spiral Model



Waterfall vs. Iterative risk profile



Rational Unified Process



Not USDP (Jacobson)

Agile Values

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

<http://www.agilemanifesto.org>



One interpretation

	Processes and tools
	Comprehensive documentation
Customer collaboration	
Responding to change	

Another interpretation

Individuals and Interactions



Processes and Tools

Working Software



Comprehensive Documentation

Customer Collaboration



Contract Negotiation

Responding to Change



Following a Plan



Agile principles

- Satisfy the customer through early and continuous delivery of valuable software
- Welcome changing requirements, even late in development
- Deliver working software frequently
- Business people and developers work together daily throughout the project
- Build projects around motivated individuals



<http://www.agilemanifesto.org/principles.html>

Agile principles

- The most efficient and effective method of communicating is face-to-face
- Working software is the primary measure of progress
- The team must be able to maintain a consistent pace
- Continuous attention to technical excellence and good design
- Simplicity – maximizing the work not done – is essential

➤ Team reflects regularly upon their process



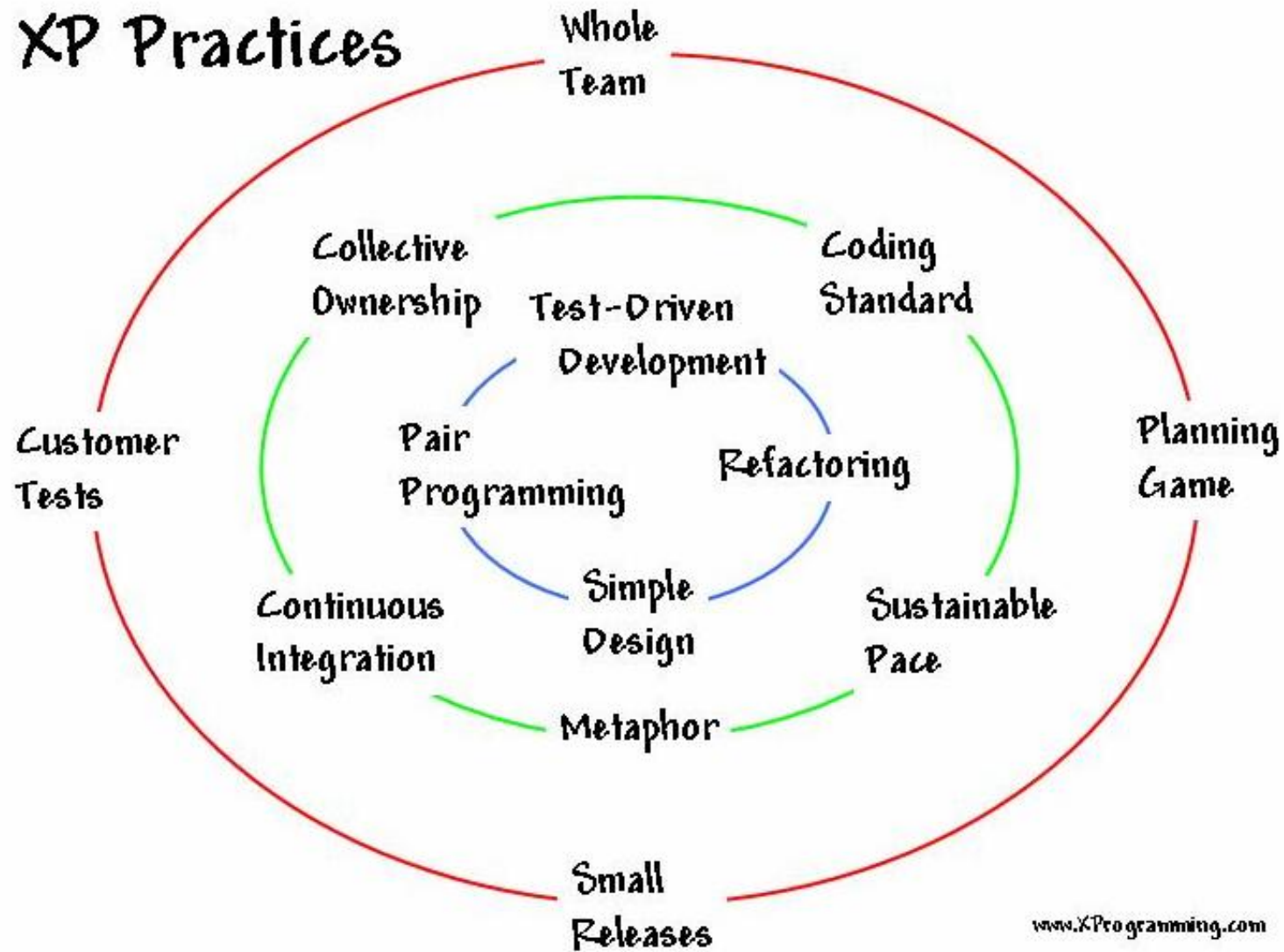
WPI

Some agile methods

- eXtreme Programming (XP)
- SCRUM
- FDD
- Crystal Light
- DSDM
- RUP



XP Practices



www.XProgramming.com

