

# Administrivia & Organizational CECS 343

The essence for making this course a  
successful one for all of us

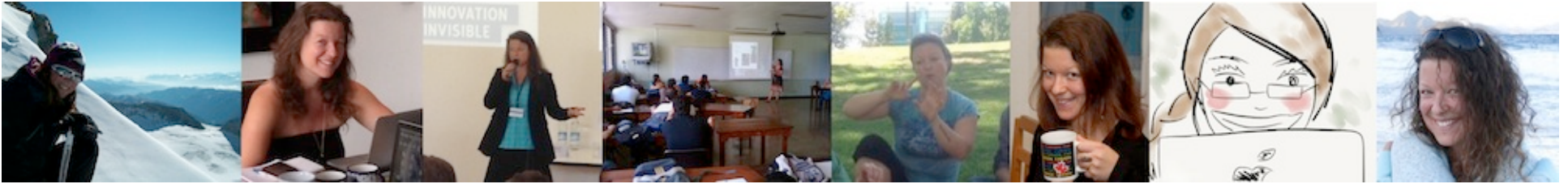
# Organizational

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- Where, when, what?
- Learning Goals
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- Assessment
- Assignments
- Grading
- Questions
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- Schedule
- Research opportunities
- What do you want out of this course?

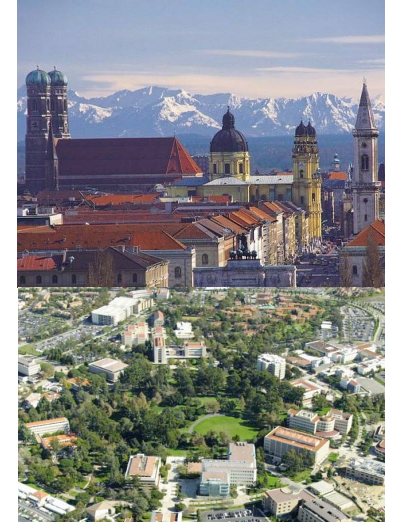
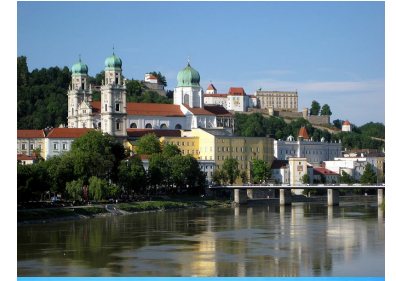
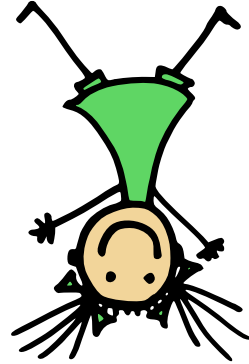
# Who?

- You: 25 students
- Professor:
  - Me: Birgit Penzenstadler  
birgit.penzenstadler@csulb.edu  
office hours: Mon/Wed 4:30-5:15





# Who am I?



# When, where, what?

- Seminar: Mon/Wed 7:00-7:50pm in VEC-417
- Lab: Mon/Wed 8:00-9:15pm in ECS-413
- Material
  - Book: Roger S. Pressman  
*Software Engineering, A practitioner's approach*  
(7<sup>th</sup> Edition, McGraw-Hill, 2010)
  - Slides
  - Exercises & discussions
  - Assignments

# Learning Goals

A knowledge of and an ability to apply

- Software engineering and its place as an engineering discipline
- The principles of object orientation
- Developing clear, concise, and sufficiently formal requirements
- Use cases and user-centered design
- Applying design principles and patterns
- Making UML class diagrams which model aspects of the domain and the software architecture
- Creating UML sequence diagrams and state machines that correctly model system behavior
- Representing software behavior: Sequence diagrams, state machines, activity diagrams
- General software design principles: decomposition, decoupling, cohesion, reuse, reusability, portability, testability, flexibility
- Implementing a simple graphical user interfaces for a system
- Simple measurement techniques for software quality
- Reusable technologies as a basis for software engineering: frameworks and design patterns (singleton, observer, delegation, façade, adapter, observer, etc.)
- Demonstrate an appreciation for the breadth of software engineering
- Introduction to testing and project management

# Rules

- You get out of this class what you put into it.
- Attend class & be actively involved
- Visit course website on BeachBoard & check e-mail regularly
- Silence mobile devices

# Assessment

- 2 mid-term exams (each 20%)
- Final exam (20%)
- Project Use Cases            10%
- Behavior Specification 10%
- Design Specification       10%
- Implementation.            10%



# Assignments

- Package properly
  - Submit as one file per assignment (PDF or zip)
  - With a cover page and description text
  - Listing the names and team
- Avoid inconsistencies
  - When feedback leads to changes, incorporate that into the older artifacts to keep consistent
- No handwriting, no deadline extensions

# Grading

- I give grades with reasons and explanation, but sometimes I might also miss something
- Disagreements: If you believe a mistake has been made, prepare the following before meeting with me.
  - What is the mistake?
  - Why is it a mistake?
  - Support that demonstrates your arguments

# Questions

- When in doubt ... ask! Preferably during class.  
Why? There might be more with same questions.
- E-mail questions
  - Answer (generally) will be copied to everyone
  - Please put [CECS 343] at the beginning of subject line and include your full name signing the email message
- Questions will not be answered on the day before assignment is due

# Exceptions

- Contact me as soon as possible, not at the last minute!
- Valid reasons
  - Serious illness, accident, family emergency, etc.
  - DOCUMENTED

# Schedule (preliminary!)

CECS 343		Lecture	Deliverables
Week 1			
	21-Jan	Intro, Orga, Overview. 1 Software and Software Engineering	
Week 2	26-Jan	1 Software and Software Engineering	
	28-Jan	2 Process models	
Week 3	2-Feb	2 Process models	
	4-Feb	2 Process models	
Week 4	9-Feb	3 Agile development	
	11-Feb	3 Agile development	
Week 5	16-Feb	4 Principles that guide practice	
	18-Feb	Mid-term I	
Week 6	23-Feb	5 Understanding requirements	
	25-Feb	5 Understanding requirements	
Week 7	2-Mar	5 Understanding requirements	Use Cases due
	4-Mar	6 Requirements modeling: Scenarios, information, and analysis classes	
Week 8	9-Mar	6 Requirements modeling: Scenarios, information, and analysis classes	
	11-Mar	6 Requirements modeling: Scenarios, information, and analysis classes	
Week 9	16-Mar	7 Requirements modeling: flow, behavior, patterns and webapps	
	18-Mar	7 Requirements modeling: flow, behavior, patterns and webapps	Behavior Specs due
Week 10	23-Mar	Mid-term II	
	25-Mar	8 Design Concepts	
Spring break	30-Mar	Spring break	
	1-Apr	Spring break	
Week 11	6-Apr	8 Design Concepts	
	8-Apr	8 Design Concepts	
Week 12	13-Apr	9 Architectural Design	
	15-Apr	9 Architectural Design	
Week 13	20-Apr	10 Component-level Design	Design due
	22-Apr	10 Component-level Design	
Week 14	27-Apr	12 Pattern-based Design	
	29-Apr	12 Pattern-based Design	
Week 15	4-May	17 Testing	Implementation due
	6-May	29 Maintenance and Reengineering	
CSULB sp Finals	13-May	Final exam	

Dates for deliverables still to be specified – this is preliminary!

# Research opportunities

- Would you like to do some research?
- Contact me for possible topics.
  - Sustainability in software engineering
  - Requirements engineering
  - Interview studies
  - Literature studies
  - Software development projects

# What do you want out of this course?

- What are your expectations?
  - Teaching methods – how do you want me to teach?
  - Learning experience – how do you want to learn?
  - Acquired skills – what do you want to learn?
- Please take a piece of paper and write down 2-3 thoughts.
- I will do an early feedback evaluation in a few weeks to see whether we are on track.