UNSW COURSE REVISION PROPOSAL

SENG2021 – Requirements and Design Workshop

Created: 20 Mar 2017 Proposal Last Updated: 22 Mar 2017

Offering Details:

Key Details and Contacts

Key Course Details	
Course Name (Official)	Requirements and Design Workshop
Standard Name (SIMS)	Reqts & Design Workshop
Course Code	SENG2021
Units of Credit (UOC)	6
Career	Undergraduate
Level	Value not found
First semester and year the revised changes will take effect	2018 Semester 1

Contact Details

Proposal Proponent

Name	Email	Role
Fethi Rabhi	f.rabhi@unsw.edu.au	Professor, School of Computer Science and Engineering

Proposal Author(s) Not specified

Proposal Contact

Name	Email	Role
Boualem Benatallah	boualem@cse.unsw.edu.au	Professor, School of Computer Science and Engineering
Fethi Rabhi	f.rabhi@unsw.edu.au	Professor, School of Computer Science and Engineering
John Shepherd	jas@cse.unsw.edu.au	Deputy Head of School (Education), School of Computer Science and Engineering

Optional Additional Endorsers	Not specified
Academic Unit responsible for course	School of Computer Science and Engineering
Parent Academic Unit	Faculty of Engineering

Proposal Concept

Summary of Proposal

Summary of Proposal	This new workshop integrates elements of SENG1031 (used to be in semester 2 year 1 and now deleted as a result of introducing the new CSE core syllabus) with the previous content of SENG202, which used to be offered in semester 2 year 2. A consequence of this change is to move this course to semester 1 year 2. The nature of the changes came as a result of the Software Engineering degree revision exercise which took place between July and October 2016.

Justification for proposal

Justification for Proposal	Without this change, students will not be getting experience in conducting requirements gathering in a practical fashion. This used to be part of SENG1031.

Attachments

Attach documentation to this proposal	None attached

Learning and Teaching

Learning & Teaching development and support

Are there Learning & Teaching space requirements for the course beyond those that can be accommodated by CATS spaces?	No

Have you discussed with the Learning Centre and Learning and Teaching what language and/or academic skills development resources and/or which teaching and learning strategies might be suited to this course?	No
Are many students in this course at a key transition point where their academic skills are likely to need development, e.g. from one kind of educational institution or type of program to another or into education after a significant break?	No

Consultation

Internal consultation

Internal Consultation	**Consultants**	None specified
	Details	This proposal is as a result of a review of the Software Engineering degree which was conducted between July and October. A steering group comprising academics from the School as well as external people was formed and met on a regular basis.
	Attachments	None specified

External consultation

External Consultation	**Consultants**	None specified
	Details	An industry advisory committee was formed and took part in the revision exercise.
	Attachments	None specified

Interested Parties	Not specified

Related Proposals

Related Proposals

Code	Proposal Name	Type	Date	Status
COMP2111	System Modelling and Design	Course Revision (UG)	Mar 2017	Draft Proposal
SENG2011	Workshop on Reasoning about Programs: from Specification to Implementation	Course Revision (UG)	Mar 2017	Draft Proposal

Endorsements and Comments

Endorsement history	No endorsements have been recorded for this proposal (yet).
Comments	No comments posted

Administration:

Key Course Details

Key Admin Details

Course Name (Official)	Requirements and Design Workshop
Student System ID	00063059
Can course be taken as General Education elective?	No
Field of Education	020103 – Programming **Effective 27 Nov 2017**: 020103 – Programming

Course Review

Next course review date	January 01, 2020
Provide details of any particular factors that need to be considered at that review.	CATEI feedback from students during first two offerings of the course.

Delivery and Attendance

Campus administering the Course	Sydney

Teaching Shares by School/Faculty

School	Teaching Share (%)
School of Computer Science and Engineering	100
Total Share	**100**

Semesters the course is offered

	Summer Semester	Semester 1	Semester 2
2017	No	No	No
2018	No	**Yes**	No
2019	No	**Yes**	No
2020	No	**Yes**	No

Teaching mode and contact hours	Standard Offering Mode

Standard offering contact hours per week

Learning Activity	Hours/Week
Lecture	0.5
Tutorial/Laboratory	1
Tutorial	0
Laboratory	0
Web-based Online Learning Activity	0.5
Clinical/Fieldwork	0
Distance Learning	0
Seminar	0
Studio	0
Meeting/Consultation	3
Total Hours per week	**5**

Primary delivery mode	Classroom
Secondary delivery modes	Directed Research
Additional information about the delivery modes for this course	Not specified

Staff

Staff associated with course

Course Convenor

Name	Email	Role
Fethi Rabhi	f.rabhi@unsw.edu.au	Professor, School of Computer Science and Engineering

Administrative Contact	Name	Email	Role
	Cassandra Nock	cassandra@CSE.UNSW.EDU.AU	Administration Manager, School of Computer Science and Engineering

Supplementary Information:

Resources

Student Resources			
Prescribed Resources	**1.**	**SENG2021 Website**	**Website**
	URL	http://www.cse.unsw.edu.au/~se2021/	
	Publisher	CSE	
	Additional Details	Not specified	
Recommended Resources	None specified		

Experience and Assumed Knowledge

Industrial Experience Component	
Industrial Experience Component	The students will also be getting experience on different aspects of designing a Web application with a major focus on the front-end. The requirements for this course will be determined in collaboration with industry partners and will relate to developing a realistic application.

Assumed Knowledge	
Assumed Knowledge	Before commencing this course, students should have: · The ability to develop requirements documents · The ability to design and implement general algorithms · Basic knowledge of essential design concepts and techniques (equivalent to UML class diagrams and ER) · Basic knowledge of scripting and Web technologies · Writing and communication skills

Academic Structure:

Academic Structure

Prerequisites	
Prerequisite courses	COMP1531 - Software Engineering Fundamentals (UG)
Prerequisite programs	Not specified
Prerequisite streams	SENGAH - Software Engineering (UG)
Prerequisite conditions	COMP1531, enrolled in SENGAH

Exclusions	
Excluded Courses	Not specified
Excluded Programs	Not specified
Excluded Streams	Not specified

Equivalent	
Equivalent courses	Not specified

Assessment

Assessment	
Grading Basis	Standard UNSW grades (e.g. HD, DN, CR, PS, FL)

Assessment items and their relationship to Course Learning Outcomes

	Assessment Title	Assessment Type	Weight (%)
1	Requirements critique	Report	10%
	Assessment Description:	Not specified	
2	Design report	Report	10%
	Assessment Description:	Not specified	
3	Prototype demonstration	Presentation	20%
	Assessment Description:	Not specified	
4	Final report	Report	40%
	Assessment Description:	Not specified	
5	Mentor individual assessment	Other	10%
	Assessment Description:	Not specified	
6	Software Specification Artifacts	Report	10%
	Assessment Description:	Not specified	
Total Weight			**100%**

Requirements critique

- Reinforce existing knowledge about the concepts and principles in the early stages of the software development life cycle
- Learn about the processes of converting requirements to design in a realistic context
- An appreciation of the many and varied issues involved in the development of software systems and the role and the importance that Software Engineering review processes play in producing quality systems

Design report

- Learn about the processes of converting requirements to design in a realistic context
- Acquire practical design skills, particularly in architectural design and software component integration

Prototype demonstration

- Learn about the processes of converting requirements to design in a realistic context
- Experience the process of implementing a prototype Web system by choosing appropriate languages, libraries and frameworks
- Acquire additional skills involved in working as part of a project team working within strict time constraints

Final report

- Learn the process of writing reports and documentation for specific needs
- Acquire practical design skills, particularly in architectural design and software component integration
- Reinforce existing knowledge about the concepts and principles in the early stages of the software development life cycle

Mentor individual assessment

- Experience with the development of project plans, brainstorming, requirement documents, prototyping techniques, issues and tasks management, peer reviews
- An appreciation of the many and varied issues involved in the development of software systems and the role and the importance that Software Engineering review processes play in producing quality systems

Software Specification Artifacts

- Experience the process of implementing a prototype Web system by choosing appropriate languages, libraries and frameworks
- Acquire practical design skills, particularly in architectural design and software component integration
- Reinforce existing knowledge about the concepts and principles in the early stages of the software development life cycle

Curriculum Mapping

Course Learning Outcomes		
Specify the learning outcomes that students should achieve upon successful completion of this course	**1**	Reinforce existing knowledge about the concepts and principles in the early stages of the software development life cycle
	2	Experience with the development of project plans, brainstorming, requirement documents, prototyping techniques, issues and tasks management, peer reviews
	3	Learn about the processes of converting requirements to design in a realistic context
	4	Acquire practical design skills, particularly in architectural design and software component integration
	5	Experience the process of implementing a prototype Web system by choosing appropriate languages, libraries and frameworks
	6	Acquire additional skills involved in working as part of a project team working within strict time constraints
	7	Learn the process of writing reports and documentation for specific needs
	8	An appreciation of the many and varied issues involved in the development of software systems and the role and the importance that Software Engineering review processes play in producing quality systems

Teaching strategies and Rationale	
Teaching Strategies and Rationale	The course uses lectures, project work, team work and mentoring to develop an understanding and experience of the process of translating a set of requirements and the related specification to a prototype implementation. This exposes students very strongly to the principles and foundation of their study of software engineering as a professional discipline.

Course Aims	
Course Aims	To develop: · a practical appreciation of the software requirements and design process; · an understanding of the relation between user requirements, design concepts and implementation considerations; · an understanding of the quality of project management and the role of managers, users, designers, programmers and analysts throughout the system's development process · an understanding of Web systems requirements, design and prototyping approaches; · an ability to produce key requirements and design documents describing how a specified system will be implemented; · an appreciation of basic usability and Human Computer Interaction (HCI) issues

Publications and Marketing:

Publications

Course Description	
Description of course that can be used in online publications (e.g. Handbook website, Faculty websites or other online catalogue systems)	This course is part the series of software engineering workshops designed to teach students to work in teams and apply their knowledge to solve real-life problems. This workshop will offer students the opportunity to concentrate on software requirements analysis and design issues including artefacts produced as well techniques and tools to support this process (brainstorming, problem statements, requirements elicitation, producing design documents and prototyping). In addition, it aims to provide students with some of the teamwork skills, requirements engineering and design techniques that an engineer would use in the early stages of the development process. Sudents will also be getting experience on different aspects of designing a Web application with a major focus on the front-end. The requirements for this course will be determined in collaboration with industry partners and will relate to developing a realistic application.

Key Search Terms	
List key search terms that might be used to search for this course (e.g. via the Handbook or Google searches).	requirements software design web application teamwork