

智能信息系统开发 教学大纲

Information System Development Methodologies

Subject Syllabus

一、课程信息 Subject Information

课程编号: Subject ID	3100213005	开课学期: Semester	4
课程分类: Category	专业教育 PA	所属课群: Section	专业平台 MT
课程学分: Credit Points	3.5	总学时/周: Total Hours/Weeks	56/14
理论学时: LECT. Hours	56	实验学时: EXP. Hours	0
PBL 学时: PBL Hours	0	实践学时/周: PRAC. Hours/Weeks	0
开课学院: College	东北大学 悉尼智能科技学院	适用专业: Stream	计算机科学与技术 CST
课程属性: Pattern	必修 Compulsory	课程模式: Mode	引进 UTS
中方课程协调人: NEU Coordinator	叶慧敏 于七龙 Huimin Ye Qilong Yu	成绩记载方式: Result Type	百分制 Marks
先修课程: Requisites	业务需求建模 Business Requirements Modeling		
英文参考教材: EN Textbooks	无 None		
中文参考教材: CN Textbooks			
教学资源: Resources			
课程负责人(撰写人): Subject Director	叶慧敏 于七龙 Huimin Ye Qilong Yu	提交日期: Submitted Date	3/3/2023
任课教师(含负责人): Taught by	叶慧敏 于七龙 Huimin Ye Qilong Yu		
审核人: Checked by	韩鹏	批准人: Approved by	史闻博
		批准日期: Approved Date	3/9/2023

二、教学目标 Subject Learning Objectives (SLOs)

注：毕业要求及指标点可参照悉尼学院本科生培养方案，可根据实际情况增减行数

Note: GA and index can be referred from undergraduate program in SSTC website. Please add/reduce lines based on subject.

<p>整体目标: Overall Objective</p>	<p>设计和开发复杂的信息系统非常困难。已经开发了许多技术和方法，但对于困扰 IT 开发项目的问题，还没有“银弹”解决方案。本课程向学生介绍了许多不同的方法，并为他们提供了识别关键领域优势和劣势所需的技能。对于那些希望成功管理软件项目的人来说，这些问题至关重要。</p> <p>Successfully designing and developing information systems is complex and difficult. A number of techniques and approaches have been developed but there are no 'silver bullet' solutions to the problems that plague IT development projects. This subject introduces students to a number of different methodologies and provides them with the skills they need to identify their strengths and weaknesses in key areas. These issues are of critical importance to those wishing to successfully manage software projects.</p>	
<p>(1) 专业目标: Professional Ability</p>	<p>1-1</p>	<p>分析许多信息系统开发方法的关键方面，以开发业务系统。 Analyse key aspects of a number of Information System development methodologies to develop business Systems.</p>
<p>1-2</p>	<p>1-2</p>	<p>解释不同的方法针对信息系统开发的不同方面，如需求收集、项目管理或跨组织开发。 Explain that different methodologies target different aspects of Information System development, such as requirements gathering, project management or cross-organisational development.</p>
<p>1-3</p>	<p>1-3</p>	<p>评估开发方法并阐明其基本理念，以解决组织信息系统问题。 Evaluate development methodologies and articulate their underlying philosophies to solve organisational Information System problems.</p>
<p>1-4</p>	<p>1-4</p>	<p>说明一种方法或不同方法的各个方面，以证实特定情况的适用性。 Illustrate a methodology, or aspects of different methodologies to substantiate the suitability of particular circumstances.</p>
<p>(2) 德育目标: Essential Quality</p>	<p>2-1</p>	<p>培养具有不畏困难、不惧失败、锲而不舍、敢于尝试、迎难而上的精神，并在学习过程中培养自己的细心和耐心的勇气和精神 Cultivate the spirit of not fearing difficulties or failure, perseverance, daring to try, and cultivate their own careful and patient courage and spirit in the process of learning</p>
<p>2-2</p>	<p>2-2</p>	<p>培养服务意识，具有“以人为本”的服务精神 Cultivate service consciousness and have the service spirit of "people-oriented"</p>
<p>2-3</p>	<p>2-3</p>	<p>培养遵守法律、懂规则、守规则的新时代公民 Cultivate citizens of the new era who abide by the law,</p>

		understand and obey the rules
	2-4	了解主要矛盾和次要矛盾, 在面对复杂问题的时候要实事求是、抓住主要矛盾 Understand the main contradiction and secondary contradiction, seek truth from facts and grasp the main contradiction in the face of complex problems
	2-5	培养有条理和计划, 做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner
课程教学目标与毕业要求的对应关系 Matrix of GA & SLOs		
毕业要求 GA	指标点 GA Index	教学目标 SLOs
3、设计/开发解决方案: 能够设计针对复杂工程问题的解决方案, 设计满足特定需求的系统、单元或流程, 并能够在设计环节中体现创新意识, 考虑社会、健康、安全、法律、文化以及环境等因素。 3. Design/Development of Solutions: Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health, and safety, cultural, societal and environmental considerations.	3-1: 能够设计针对本专业相关复杂工程问题的解决方案, 能够设计和开发实现特定功能、满足特定需求的计算机、软件或网络系统 3-1: Capable of designing solutions to complex engineering problems related to the major, and capable of designing and developing computers, software or network systems that can function specifically and meet specific requirements.	1-1 到 1-4 2-1、2-2、2-4、 2-5
	3-2: 能够对不同设计方案进行比较和优化, 在工作各环节中具有创新意识 3-2: Capable of comparing and optimizing different design schemes, and innovative in all aspects of the work.	
	3-3: 能够在设计和开发的各个环节中综合考虑社会、健康、安全、法律、文化以及环境等因素 3-3: Capable of taking social, health, safety, legal, cultural and environmental factors in consideration during all aspects of design and development.	
4、研究: 能够基于科学原理并采用科学方法对复杂工程问题进行研究, 包括设计实验、分析与解释数据、并通过信息综合得到合理有效的结论。 Investigation: Conduct investigations of complex problems using	4-1: 能够基于科学原理并采用科学方法, 在本专业相关理论指导下对复杂工程问题设计实验进行研究 4-1: Capable of designing experiments and doing research on complex engineering problems based on scientific principles and scientific methods, under the guidance of related theories of the major	1-1 到 1-4 2-1、2-2、2-4、 2-5
	4-2: 能够结合本专业对实验数据进	

<p>research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.</p>	<p>行分析与解释，设计并优化实验方案，并通过信息综合得到合理有效的结论</p> <p>4-2: Capable of analyzing and interpreting experimental data based on professional knowledge, designing and optimizing experimental schemes, and obtaining reasonable and effective conclusions through information integration</p> <p>4-3: 能够追踪国际前沿技术动态，掌握本专业涉及的重要技术指标以及达到指标所需的技术途径</p> <p>4-3: Capable of tracking the international cutting-edge technology trends, master the important technical indicators involved in the major and the technical approaches needed to achieve the indicators</p>	
<p>5、使用现代工具: 能够针对复杂工程问题，开发、选择与使用恰当的技术、资源、现代工程工具和信息技术工具，包括对复杂工程问题的预测与模拟，并能够理解其局限性。</p> <p>5. Modern Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools, including prediction and modeling, to complex engineering problems, with an understanding of the limitations.</p>	<p>5-1: 能够对本专业相关复杂工程问题进行建模与分析，理解获取相关信息参数的必要性与基本方法，并理解其局限性；指标点</p> <p>5-1: Capable of modeling and analyzing complex engineering problems related to the major, understanding the necessity and basic methods of obtaining relevant information parameters, and their limitations.</p> <p>5-2: 熟悉解决本专业相关复杂工程问题所需的技术和资源，能够运用现代信息技术进行文献检索和资料查询，获取专业解决方案</p> <p>5-2: Familiar with the technology and resources needed to solve complex engineering problems related to this major, and be able to use modern information technology for literature retrieval and data query to obtain professional solutions.</p> <p>5-3: 能够针对本专业相关复杂工程问题，选择与使用恰当的技术、资源、现代工程工具和信息技术工具</p> <p>Capable of selecting and using appropriate technology, resources, modern engineering tools and information technology tools to solve complex engineering problems related to the major.</p>	<p>1-1 到 1-4 2-5</p>

<p>9、个人与团队：能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色</p> <p>9. Individual and Teamwork: Function effectively as an individual, and as a member or leader in diverse teams and in multi disciplinary settings.</p>	<p>9-1: 能够认识团队协作的重要性, 具有强烈的团队协作意识和能力、卓越的组织管理能力、较强的表达能力和人际交往能力</p> <p>9-1: Recognition of the importance of teamwork, a strong sense and capability of teamwork, excellent organization and management skills, outstanding expression and interpersonal skills.</p> <p>9-2: 具有良好的跨文化、跨领域沟通交流能力, 适应本专业相关行业的团队协作机制积极主动的在团队中发挥作用。</p> <p>9-2: Good cross cultural and cross field communication skills, adaption to the team cooperation mechanism of the relevant industry of the major, and actively play a role in the team.</p>	<p>1-1 到 1-4 2-2、2-5</p>
<p>10、沟通：能够就本专业复杂工程问题与业界同行及社会公众进行有效沟通和交流, 包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令。具备一定的国际视野, 能够在跨文化背景下进行沟通和交流</p> <p>10. Communication: Communicate effectively on complex engineering activities with the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions. Be able to communicate in a cross-cultural context with an International vision.</p>	<p>10-1: 能够就计算机领域相关复杂工程问题与业界同行及社会公众进行有效沟通和交: 能够就计算机领域相关复杂工程问题与业界同行及社会公众进行有效沟通和交流, 能够通过口头或书面方式实现有效表达; 流, 能够通过口头或书面方式实现有效表达</p> <p>10-1: Capable of effectively communicating and communicating with industry peers and the public on complex practical issues related to the computer sciences, and effective expression through oral or written forms.</p> <p>10-2: 熟练掌握英语, 能够在本专业相关领域进行有效的技术沟通和交流。: 熟练掌握英语, 能够在本专业相关领域进行有效的技术沟通和交流</p> <p>10-2: Proficient in English, capable of carrying out effective technical communication and exchange in related fields of the major.</p>	<p>1-1 到 1-4 2-1、2-5</p>

<p>11、项目管理与财务：理解并掌握工程管理原理与经济决策方法，并能在多学科环境中应用</p> <p>11. Project Management and Finance: Demonstrate knowledge and understanding of engineering management principles and economic decision making and apply these to one's own work as a member and leader in a team, to manage projects and in multi disciplinary environments.</p>	<p>11-1: 掌握基本的工程管理原理和经济决策方法，能对计算机相关领域的新技术、新应用进行技术分析和比较</p> <p>11-1: Master of basic engineering management principles and economic decision making methods, and capable of analyzing and comparing new technology and applications in computer related fields.</p>	<p>1-1 到 1-4 2-2、2-3、2-5</p>
	<p>11-2: 具有良好的组织、管理和领导能力，能够将本专业相关工程管理原理与经济决策方法应用于多学科环境中</p> <p>11-2: Good skills on organization, management and leadership, and Capable of applying relevant engineering management principles and economic decision making methods in the multidisciplinary environment.</p>	

三、教学内容 Content (Topics)

注：以中英文填写，各部分内容的表格可根据实际知识单元数量进行复制、扩展或缩减

Note: Filled in both CN and EN, extend or reduce based on the actual numbers of knowledge unit

(1) 理论教学 Lecture

知识单元序号: Knowledge Unit No.	1	支撑教学目标: SLOs Supported	1-1、2-1、2-2
知识单元名称 Unit Title	课程概述 Introduction to ISDM		
知识点: Knowledge Delivery	信息系统概念 Information Systems		
	System Development 系统开发方法		
	Methodology for System Development		
学习目标: Learning Objectives	了解: Recognize	信息系统概念 Information Systems	
	理解: Understand	系统开发概念 System Development	
	掌握: Master	系统开发方法 Methodology for System Development	
德育目标 Moral Objectives	培养具有不畏困难、不惧失败、锲而不舍、敢于尝试、迎难而上的精神，并在学习过程中培养自己的细心和耐心的勇气和精神 Cultivate the spirit of not fearing difficulties or failure, perseverance, daring to try, and cultivate their own careful and patient courage and spirit in the process of learning		

	培养服务意识，具有“以人为本”的服务精神 Cultivate service consciousness and have the service spirit of "people-oriented"
	培养遵守法律、懂规则、守规则的新时代公民 Cultivate citizens of the new era who abide by the law, understand and obey the rules
重点: Key Points	信息系统概念 Information Systems 系统开发概念 Methodology for System Development
难点: Focal Points	系统开发方法 Methodology for System Development

知识单元序号: Knowledge Unit No.	2	支撑教学目标: SLOs Supported	1-1、1-2、2-1 到 2-5
知识单元名称 Unit Title	传统的系统开发方法 Traditional methods for IS Development		
知识点: Knowledge Delivery	成功的(开发)项目 Successful (development) project 瀑布式方法 Waterfall approach		
学习目标: Learning Objectives	了解: Recognize	成功的(开发)项目 Successful (development) project	
	理解: Understand	成功的(开发)项目 Successful (development) project	
	掌握: Master	瀑布式方法 Waterfall approach	
德育目标 Moral Objectives	了解主要矛盾和次要矛盾，在面对复杂问题的时候要实事求是、抓住主要矛盾 Understand the main contradiction and secondary contradiction, seek truth from facts and grasp the main contradiction in the face of complex problems		
重点: Key Points	瀑布式方法 Waterfall approach		
难点: Focal Points	瀑布式方法 Waterfall approach		

知识单元序号: Knowledge Unit No.	3	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	设计思维:创造与创新 Design Thinking: Creativity and Innovation		
知识点: Knowledge Delivery	设计思维介绍 Introduction to Design Thinking 底层逻辑与基本原则 Underlying Philosophy & Key Principles		

	利益相关者及复杂环境 Stakeholders & Complex Environments	
	问题背景 Problem Context	
学习目标: Learning Objectives	了解: Recognize	设计思维介绍 Introduction to Design Thinking
	理解: Understand	底层逻辑与基本原则 Underlying Philosophy & Key Principles
	掌握: Master	利益相关者及复杂环境 Stakeholders & Complex Environments
		问题背景 Problem Context
德育目标 Moral Objectives	培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner	
重点: Key Points	底层逻辑与基本原则 Underlying Philosophy & Key Principles	
	利益相关者及复杂环境 Stakeholders & Complex Environments	
难点: Focal Points	利益相关者及复杂环境 Stakeholders & Complex Environments	

知识单元序号: Knowledge Unit No.	4	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	信息系统的规划 Planning of information system		
知识点: Knowledge Delivery	战略规划 strategic planning		
	Business process planning 总体结构规划		
	项目实施与资源分配规划 Project implementation and resource allocation planning		
学习目标: Learning Objectives	了解: Recognize	战略规划 strategic planning	
	理解: Understand	Business process planning 总体结构规划	
	掌握: Master	项目实施与资源分配规划 Project implementation and resource allocation planning	
德育目标 Moral Objectives	培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner		
重点:	Business process planning		

Key Points	总体结构规划
难点: Focal Points	项目实施与资源分配规划 Project implementation and resource allocation planning

知识单元序号: Knowledge Unit No.	5	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	利益相关者分析 Stakeholder Analysis		
知识点: Knowledge Delivery	设计思维工具 Tools for Design Thinking		
	利益相关者分析 Stakeholder Analysis		
	共情映射 Empathy mapping		
学习目标: Learning Objectives	了解: Recognize	设计思维工具 Tools for Design Thinking	
	理解: Understand	利益相关者分析 Stakeholder Analysis	
	掌握: Master	共情映射 Empathy mapping	
德育目标 Moral Objectives	培养有条理和计划,做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner		
重点: Key Points	共情映射 Empathy mapping		
难点: Focal Points	共情映射 Empathy mapping		

知识单元序号: Knowledge Unit No.	6	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	价值创造 Value Creation		
知识点: Knowledge Delivery	价值创造 Value Creation		
	奥斯特瓦尔德商业模式 Osterwalder business model		
	价值主张 Value Proposition		
学习目标: Learning Objectives	了解: Recognize	价值创造 Value Creation	
	理解: Understand	数据对测试和测试计划的影响 The impact of data on testing and test plans	
	掌握: Master	奥斯特瓦尔德商业模式	

	Master	Osterwalder business model 价值主张 Value Proposition
德育目标 Moral Objectives		培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner
重点: Key Points		奥斯特瓦尔德商业模式 Osterwalder business model
难点: Focal Points		价值主张 Value Proposition

知识单元序号: Knowledge Unit No.	7	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	敏捷理念 The Agile Philosophy		
知识点: Knowledge Delivery	敏捷理念的原因 Why Agile?		
	基本理念和关键原则 Underlying Philosophy & Key Principles		
	实践中的敏捷 Agile in practice		
学习目标: Learning Objectives	了解: Recognize	敏捷理念的原因 Why Agile?	
	理解: Understand	基本理念和关键原则 Underlying Philosophy & Key Principles	
	掌握: Master	实践中的敏捷 Agile in practice	
德育目标 Moral Objectives	培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner		
重点: Key Points	基本理念和关键原则 Underlying Philosophy & Key Principles		
难点: Focal Points	实践中的敏捷 Agile in practice		

知识单元序号: Knowledge Unit No.	8	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	用户理解 User stories and Epics		
知识点: Knowledge Delivery	需求工程 Requirement Engineering		
	用户理解 User Stories & Epics		

学习目标: Learning Objectives	了解: Recognize	需求工程 Requirement Engineering
	理解: Understand	用户理解 User Stories & Epics
	掌握: Master	无 None
德育目标 Moral Objectives	培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner	
重点: Key Points	用户理解 User Stories & Epics	
难点: Focal Points	用户理解 User Stories & Epics	

知识单元序号: Knowledge Unit No.	9	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	方法 Scrum		
知识点: Knowledge Delivery	敏捷项目管理 Agile project management		
学习目标: Learning Objectives	了解: Recognize	无 None	
	理解: Understand	无 None	
	掌握: Master	敏捷项目管理 Agile project management	
德育目标 Moral Objectives	培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner		
重点: Key Points	敏捷项目管理 Agile project management		
难点: Focal Points	敏捷项目管理 Agile project management		

知识单元序号: Knowledge Unit No.	10	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	信息系统实施 Information system implementation		
知识点: Knowledge Delivery	系统测试 System testing		
	系统调试 System debugging		

学习目标: Learning Objectives	了解: Recognize	系统测试 System testing
	理解: Understand	系统调试 System debugging
	掌握: Master	系统调试 System debugging
德育目标 Moral Objectives	培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner	
重点: Key Points	系统调试 System debugging	
难点: Focal Points	系统调试 System debugging	

知识单元序号: Knowledge Unit No.	11	支撑教学目标: SLOs Supported	1-1 到 1-4 2-1 到 2-5
知识单元名称 Unit Title	其他方法 Overview of other methods		
知识点: Knowledge Delivery	介绍其他方法，例如 DSDM, Crystal,Lean 等 Introduction to DSDM, Crystal,Lean,etc.		
学习目标: Learning Objectives	了解: Recognize	介绍其他方法，例如 DSDM, Crystal,Lean 等 Introduction to DSDM, Crystal,Lean,etc.	
	理解: Understand	无 None.	
	掌握: Master	无 None.	
德育目标 Moral Objectives	培养有条理和计划，做到心中有数、有条不紊、循序渐进地完成一项工作 Cultivate a sense of order and plan, and complete a work in an orderly and gradual manner		
重点: Key Points	介绍其他方法，例如 DSDM, Crystal,Lean 等 Introduction to DSDM, Crystal,Lean,etc.		
难点: Focal Points	无 None.		

(2) 实验教学 Experiments

无
None

四、教学安排 Teaching Schedule

注：可根据实际情况增减行数

Note: Please add/reduce lines based on subject.

教学内容 Teaching Content	学时(周) Hour(Week)			
	理论 LECT.	实验 EXP.	课外实践 PBL	集中实践 PRAC.
绪论 Introduction to ISDM	4			
传统的系统开发方法 Traditional methods for IS Development	4			
设计思维:创造与创新 Design Thinking:Creativity and Innovation	8			
信息系统的规划 Planning of information system	4			
利益相关者分析 Stakeholder Analysis	8			
价值创造 Value Creation	4			
敏捷理念 The Agile Philosophy	4			
用户理解 User stories and Epics	4			
方法 Scrum	8			
信息系统实施 Information system implementation	4			
其他方法 Overview of other methods	4			
总计 Total	56			

五、教学方法 Teaching Methodology

注：可根据实际情况增减行数或修改内容

Note: Please add/reduce lines or revise content based on subject.

勾选 Check	教学方法与特色 Teaching Methodology & Characters
<input checked="" type="checkbox"/>	多媒体教学：基于信息化设备的课堂教学 Multi-media-based lecturing
<input checked="" type="checkbox"/>	实践能力传授：理论与行业、实际案例相结合 Combining theory with industrial practical problems
<input checked="" type="checkbox"/>	课程思政建设：知识讲授与德育相结合 Knowledge delivery with ethic education

<input checked="" type="checkbox"/>	PBL 教学：问题驱动的分组学习与交流 Problem-based learning
<input type="checkbox"/>	其他:单击或点击此处输入文字。 Other:单击或点击此处输入文字。

六、成绩评定 Assessment

注：可根据实际情况增减行数或修改内容

Note: Please add/reduce lines or revise content based on subject.

考核环节: Assessment Content	平时 Behavior	环节负责人: Director	叶慧敏 于七龙 Huimin Ye Qilong Yu
给分形式: Result Type	百分制 Marks	课程总成绩比重(%): Percentage (%)	5
考核方式: Measures	满分 100 分，出勤及课堂主动发言。 The full score is 100 points. Class attendance and presentation		

考核环节: Assessment Content	测试 Quiz	环节负责人: Director	叶慧敏 于七龙 Huimin Ye Qilong Yu
给分形式: Result Type	百分制 Marks	课程总成绩比重(%): Percentage (%)	15
考核方式: Measures	将有 1 个关于主题内容的多项选择题测验。 There will be one multiple choice quizzes on the content of the subject.		

考核环节: Assessment Content	任务 Assessment Task	环节负责人: Director	叶慧敏 于七龙 Huimin Ye Qilong Yu
给分形式: Result Type	百分制 Marks	课程总成绩比重(%): Percentage (%)	70
考核方式: Measures	包含 2 个小组任务，各占 35%，任务以报告方式提交。 It includes 2 group tasks, and each task is accounting for 35%. Tasks are submitted in the form of reports.		

七、改进机制 Improvement Mechanism

注：未尽事宜以教学团队以及学院教学指导委员会商定为准。

Note: Matters not covered in this file shall be determined by TAB of SSTC, NEU.

教学大纲改进机制 Subject Syllabus Improvement Mechanism			
考核周期(年): Check Period (YR)	4	修订周期(年): Revise Period (YR)	4
改进措施: Measures	<p>课程负责人根据课程教学内容与人才培养目标组织课程团队讨论并修改教学大纲，报分管教学工作副院长审核后由执行院长批准。</p> <p>The subject coordinator shall be responsible for the syllabus discussion and improvement, and the revised version shall be submitted to deputy dean (teaching affairs) for reviewing then to executive dean for approval</p>		
成绩评定改进机制 Assessment Improvement Mechanism			
考核周期(年): Check Period (YR)	1	修订周期(年): Revise Period (YR)	1
改进措施: Measures	<p>课程负责人根据课程教学内容、课堂教学效果以及成绩分布，对课程教学方法和成绩评定环节进行改进，并同步优化评定办法。</p> <p>The subject coordinator shall revise the syllabus based on the teaching content, effect and result distribution while optimize the assessment measures.</p>		