

# Web 开发与应用 教学大纲

## Web Application Development Subject Syllabus

### 一、课程信息 Subject Information

课程编号: Subject ID	3100213015	开课学期: Semester	6
课程分类: Category	专业教育 PA	所属课群: Section	专业基础 MF
课程学分: Credit Points	3	总学时/周: Total Hours/Weeks	48/10
理论学时: LECT. Hours	40	实验学时: EXP. Hours	8
PBL 学时: PBL Hours	0	实践学时/周: PRAC. Hours/Weeks	4
开课学院: College	东北大学 悉尼智能科技学院 Sydney Smart Technology College Northeastern University	适用专业: Stream	CST/CE
课程属性: Pattern	选修 Elective	课程模式: Mode	互认 EQV
中方课程协调人: NEU Coordinator	王军伟 Wan Junwei	成绩记载方式: Result Type	百分制 Marks
先修课程: Requisites	无 none		
英文参考教材: EN Textbooks	Web Application Development: Basic Concepts. Greg Heileman		
中文参考教材: CN Textbooks	JSP 实用教程（第四版），清华大学出版社，2020		
教学资源: Resources	<a href="http://www.tup.com.cn/upload/books/kj/087694-01.rar">http://www.tup.com.cn/upload/books/kj/087694-01.rar</a>		
课程负责人(撰写人): Subject Director		提交日期: Submitted Date	2/27/2023
任课教师(含负责人): Taught by	王军伟 戴庆天 Wan Junwei Dai Qingtian		
审核人: Checked by	韩鹏	批准人: Approved by	史闻博
		批准日期: Approved Date	2/27/2023

## 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>web 开发与应用是将数据库技术与 J2EE 结合的最新技术,是计算机科学实践性很强的课程。通过该门课程的学习,使学生掌握 Web 应用编程基础、JSP、Servlet、JDBC 连接、Java 连接池、基于数据库的设计及应用、Struts 及 Hibernate 技术等方面的理论和实践应用知识。</p> <p>Web application development is the latest technology that combines database technology with J2EE. It is a practical course of computer science. Through the study of this course, students can master the theoretical and practical application knowledge of web application programming foundation, JSP, servlet, JDBC connection, Java connection pool, database based design and application, struts and Hibernate technology, etc..</p>	
<p>(1) 专业目标: Professional Ability</p>	<p>1-1</p>	<p>掌握利用 JSP 开发 Web 应用程序的核心思想和基本方法。 Understand the core idea and basic method of using JSP to develop web application.</p>
	<p>1-2</p>	<p>掌握 JSP 语言基础知识与编程的必备知识和工具。 Master the basic knowledge of JSP language and the necessary knowledge and tools of programming.</p>
	<p>1-3</p>	<p>掌握 JSP 语言的基本语法、JSP 内置对象、文件操作及 JDBC、JavaBean、Servlet。 Master the basic syntax of JSP language, JSP built-in objects, file operation and JDBC, JavaBean, servlet;.</p>
	<p>1-4</p>	<p>掌握 Html、CSS、JavaScript。 Learn the knowledge of Html, CSS, JavaScript.</p>
<p>(2) 德育目标: Essential Quality</p>	<p>2-1</p>	<p>培养学生的编程思维和实际动手能力, 以及创新能力。 Cultivate students' programming thinking and practical ability, as well as innovation ability.</p>
	<p>2-2</p>	<p>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。 Be able to play the role of individual, team member and leader in a multidisciplinary team</p>
<p><b>课程教学目标与毕业要求的对应关系 Matrix of GA &amp; SLOs</b></p>		
<p>毕业要求 GA</p>	<p>指标点 GA Index</p>	<p>教学目标 SLOs</p>
<p>5、掌握计算机软硬件系统知识,包括计算机系统、数据库系统、人机交互、算法与复杂性、程序设计语言、网络与计算、软件工程等。 GA5. Master the knowledge</p>	<p>指标点 5-1: 掌握解决复杂计算机系统工程问题的基础理论知识; 指标点 5-2: 具备计算机科学与技术专业所需的设计/开发技能,能够设计针对复杂计算机工程问题的解决方案,设计满足特定需求的软硬件系统;</p>	<p>1-1, 1-3, 1-4, 2-1</p>

<p>of computer software and hardware system, including computer system, database system, human-computer interaction, algorithm and complexity, programming language, network and computing, software engineering, etc.</p>	<p>指标点 5-3: 能够综合运用理论和技术手段解决计算机领域中的实际问题;</p> <p>指标点 5-4: 培养具有一定创新意识的工程人才。</p> <p>5-1: Master the basic theoretical knowledge of solving complex computer system engineering problems;</p> <p>5-2: Master the basic theoretical knowledge of solving complex computer system engineering problems; Have the design / development skills required by computer science and technology, be able to design solutions for complex computer engineering problems, and design software and hardware systems to meet specific needs;</p> <p>5-3: Be able to solve practical problems in the field of computer by means of theory and technology;</p> <p>5-4: Cultivating engineering talents with a certain sense of innovation.</p>	
<p>6、具有计算机应用系统的分析、设计、开发、实施和项目管理的能力。具有综合运用所学科学理论和技术手段分析并解决工程问题的能力。</p> <p>GA6. Have the ability of computer application system analysis, design, development, implementation and project management. Have the ability to analyze and solve engineering problems by using scientific theory and technical means.</p>	<p>指标点 6-1: 结合计算机学科的基本原理和专业知 识, 设计实验进行探索和分析讨论, 并优化实验技术与工程方案;</p> <p>6-1: Combined with the basic principles and professional knowledge of computer science, the experiment is designed for exploration, analysis and discussion, and the experimental technology and engineering scheme are optimized;</p> <p>指标点 6-2: 掌握本专业的工程实践中涉及的重要工程技术指标, 研究达到指标的工程技术途径;</p> <p>指标点 6-3: 熟悉计算机项目管理手段、方法, 具有一定的组织管理能力、较强的表达能力和人际交往能力。</p> <p>6-2: Master the important engineering technical indexes involved in the engineering practice of the major, and study the engineering technical ways to achieve the indexes;</p> <p>6-3: Familiar with computer project management means, methods, with a</p>	<p>1-2, 2-1</p> <p>1-4, 2-1, 2-2</p>

	certain organization and management ability, strong expression ability and interpersonal skills.	
<p>9、具有良好的团队协作意识、组织管理能力和社会适应能力。</p> <p>GA9. Have a good sense of teamwork, organizational management ability and social adaptability.</p>	<p>指标点 9-1: 具有一定的组织管理能力、较强的表达能力和人际交往能力。</p> <p>指标点 9-2: 能够理解团队合作对于项目的意义, 积极在团队中发挥作用、体现能力。</p> <p>9-1 : Have certain organization and management ability, strong expression ability and interpersonal skills.</p> <p>9-2: Be able to understand the significance of teamwork for the project, and actively play a role in the team and reflect the ability.</p>	2-2

### 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 1-2 1-4
知识单元名称 Unit Title	JSP 简介 Introduction of JSP		
知识点: Knowledge Delivery	什么是 JSP What is JSP		
	安装配置 JSP 运行环境 Install and configure JSP running environment		
	JSP 页面 JSP page		
	JSP 运行原理 JSP running principle		
学习目标: Learning Objectives	了解: Recognize	Html 的发展历程; The development of HTML;	
	理解: Understand	JSP 运行原理 JSP running principle	
	掌握: Master	Html 标签、Form 表单、Css 语法、JavaScript 语法。 Html, Form, Css, JavaScript	

德育目标 Moral Objectives	2-1 2-1
重点: Key Points	建立 JSP 开发环境 Establish JSP development environment 编写第一个 JSP 程序 Start programming
难点: Focal points	建立 JSP 开发环境 Establish JSP development environment

知识单元序号: Knowledge Unit No.	2	支撑教学目标: SLOs Supported	1-2 1-3
知识单元名称 Unit Title	JSP 语法 JSP syntax		
知识点: Knowledge Delivery	JSP 页面的基本结构 The basic structure of JSP page		
	声明变量和定义方法 Declaring variables and defining function		
	Java 程序片与 Java 表达式 Java program slices and Java expressions		
	JSP 的注释 Comments on JSP		
	JSP 的指令标记与动作标记 Instruction tag and action tag of JSP		
学习目标: Learning Objectives	了解: Recognize	JSP 的注释 Comments on JSP	
	理解: Understand	JSP 页面的基本结构 The basic structure of JSP page 声明变量和定义方法 Declaring variables and defining function	
	掌握: Master	Java 程序片与 Java 表达式 Java program slices and Java expressions JSP 的指令标记与动作标记 Instruction tag and action tag of JSP	
德育目标 Moral Objectives	2-1 2-2		
重点: Key Points	Java 程序片与 Java 表达式 Java program slices and Java expressions JSP 的指令标记与动作标记 Instruction tag and action tag of JSP		
难点: Focal points	JSP 的指令标记与动作标记 Instruction tag and action tag of JSP		

知识单元序号: Knowledge Unit No.	3	支撑教学目标: SLOs Supported	1-2 1-3
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知识单元名称 Unit Title	JSP 的内置对象 Built in objects of JSP	
知识点: Knowledge Delivery	Request 对象 Request	
	Response 对象 Response	
	Session 对象 Session	
	Application 对象 Application	
	Out 对象 Out	
学习目标: Learning Objectives	理解: Understand	Session 对象、Application 对象和 Out 对象的用法 Using the objects of Session, Application and Out.
	掌握: Master	Request 对象、Response 对象的用法 Using the objects of Request and Response.
德育目标 Moral Objectives	2-1 2-2	
重点: Key Points	Request 对象、Response 对象的用法 Using the objects of Request and Response.	
难点: Focal points	Request 对象、Response 对象的用法 Using the objects of Request and Response.	

知识单元序号: Knowledge Unit No.	4	支撑教学目标: SLOs Supported	1-1 1-3 1-4
知识单元名称 Unit Title	JSP 与 JavaBean JSP and JavaBean		
知识点: Knowledge Delivery	编写和使用 JavaBean Programming and using JavaBeans		
	获取和修改 Bean 属性 Getting and modifying bean properties		
	Bean 的辅助类 Auxiliary class of bean		
	JSP 与 Bean 结合的简单例子 A simple example of JSP combined with bean		

学习目标: Learning Objectives	了解: Recognize	Bean 的辅助类 Auxiliary class of bean
	理解: Understand	JSP 与 Bean 结合的简单例子 A simple example of JSP combined with bean
	掌握: Master	编写和使用 JavaBean Programming and using JavaBeans 获取和修改 Bean 属性 Getting and modifying bean properties
德育目标 Moral Objectives	2-1 2-2	
重点: Key Points	编写和使用 JavaBean Programming and using JavaBeans 获取和修改 Bean 属性 Getting and modifying bean properties	
难点: Focal points	Bean 的辅助类 Auxiliary class of bean	

知识单元序号: Knowledge Unit No.	5	支撑教学目标: SLOs Supported	1-1 1-3
知识单元名称 Unit Title	Java Servlet 基础 Basic of Java Servlet		
知识点: Knowledge Delivery	Servlet 的部署、创建和运行 Deployment, creation and operation of Servlet		
	Servlet 的工作原理 Working principle of Servlet		
	通过 JSP 页面访问 Servlet Accessing servlet through JSP page		
	doget 和 dopost 方法 Doget and dopost methods		
	重定向和转发 SendRedirect and forward		
	使用 Session Using Session		
	学习目标: Learning Objectives	了解: Recognize	重定向和转发 SendRedirect and forward 使用 Session Using Session
理解: Understand		通过 JSP 页面访问 Servlet Accessing servlet through JSP page doget 和 dopost 方法 Doget and dopost methods	
掌握: Master		Servlet 的部署、创建和运行 Deployment, creation and operation of Servlet Servlet 的工作原理 Working principle of Servlet	

德育目标 Moral Objectives	2-1 2-2
重点: Key Points	Servlet 的部署、创建和运行 Deployment, creation and operation of Servlet Servlet 的工作原理 Working principle of Servlet
难点: Focal points	重定向和转发 SendRedirect and forward doget 和 dopost 方法 Doget and dopost methods

知识单元序号: Knowledge Unit No.	6	支撑教学目标: SLOs Supported	1-1 1-3
知识单元名称 Unit Title	MVC 模式 MVC mode		
知识点: Knowledge Delivery	MVC 模式介绍 Introduction of MVC mode		
	JSP 中的 MVC 模式 MVC mode in JSP		
	模型的生命周期与视图更新 Model life cycle and view updating		
	MVC 模式的简单实例 simple example of MVC pattern		
学习目标: Learning Objectives	了解: Recognize	JSP 中的 MVC 模式 MVC mode in JSP	
	理解: Understand	模型的生命周期与视图更新 Model life cycle and view updating	
	掌握: Master	JSP 中的 MVC 模式 MVC mode in JSP	
德育目标 Moral Objectives	2-1 2-2		
重点: Key Points	JSP 中的 MVC 模式 MVC mode in JSP		
难点: Focal points	JSP 中的 MVC 模式 MVC mode in JSP 模型的生命周期与视图更新 Model life cycle and view updating		

知识单元序号: Knowledge Unit No.	7	支撑教学目标: SLOs Supported	1-1 1-3
知识单元名称 Unit Title	JSP 中使用数据库 Using database in JSP		
知识点: Knowledge Delivery	MySQL 数据库管理系统 Mysql database management system		



	查询、更新、添加与删除记录 Query, update, add and delete records
	用结果集操作数据库中的表 Using result set to operate tables in database
	预处理语句和事务 Preprocessing statements and transactions
	标准化考试训练 Standardized examination training
学习目标: Learning Objectives	了解: Recognize 预处理语句和事务 Preprocessing statements and transactions 标准化考试训练 Standardized examination training
	理解: Understand 用结果集操作数据库中的表 Using result set to operate tables in database
	掌握: Master JSP 中使用数据库 Using database in JSP 查询、更新、添加与删除记录 Query, update, add and delete records 查询、更新、添加与删除记录 Query, update, add and delete records
德育目标 Moral Objectives	2-1 2-2
重点: Key Points	JSP 中使用数据库 Using database in JSP 查询、更新、添加与删除记录 Query, update, add and delete records 查询、更新、添加与删除记录 Query, update, add and delete records
难点: Focal points	Query, update, add and delete records 查询、更新、添加与删除记录

知识单元序号: Knowledge Unit No.	8	支撑教学目标: SLOs Supported	1-1 1-3
知识单元名称 Unit Title	JSP 中的文件操作 File operation in JSP		
知识点: Knowledge Delivery	File 类 Class File		
	RandomAccessFile 类 Class RandomAccessFile		
	文件上传 Upload File		
	文件下载 Download File		

学习目标: Learning Objectives	了解: Recognize	RandomAccessFile 类 Class RandomAccessFile
	理解: Understand	文件上传 Upload File 文件下载 Download File
	掌握: Master	File 类 Class File
德育目标 Moral Objectives	2-1 2-2	
重点: Key Points	File 类 Class File	
难点: Focal points	RandomAccessFile 类 Class RandomAccessFile	

## (2) 实验教学 Experiments

注：可根据实际情况增减行数。实验类型可分为验证性、设计性、综合性，实验性质可分为选做、必做。

Note: Please add/reduce lines based on subject. The Type contains Verify, Design, and Comprehensive, while the Pattern contains Required and Elective

序号 No.	实验项目名称 Experiment Topic	学时 Hours	每组人数 MPG*	实验类型 Type	实验性质 Pattern
1	基本开发工具的应用 The primary use of Eclipse IDE(Java EE IDE)	2	1	设计性 Design	必做 Elec
2	Request 对象的使用 The usage of Request object API.	2	1	设计性 Design	必做 Elec
3	JDBC 和 Servlet 的应用 Application of JDBC and Servlet	2	1	设计性 Design	必做 Elec
4	运用 SSH 框架编写简单程序 Using SSH framework to edit a simple JSP program.	2	1	设计性 Design	必做 Elec
	总计 Total	8			

\*MPG: Members per group

实验项目序号: Experiment No.	1	支撑教学目标: SLOs Supported	1-1 、 1-2
每组成员: Members per Group	1	指导教师: Tutor	戴庆天
实验名称: Experiment Title	基本开发工具的应用 The primary use of Eclipse IDE(Java EE IDE)		
实验内容: Content	掌握 eclipse(j2ee)开发环境。建立一个 web 工程，配置好 tomcat 服务器，将工程部署在服务器上并启动服务。 Building web projects via Eclipse IDE(JavaEE IDE), mastering		

	configurations of Tomcat. Deploy the project on the Tomcat server and start the service.
	学会使用 CSS 和 JSP 标签 Learning to use CSS technology and JSTL
	使用 CSS 表单技术对页面进行设计 Using CSS form technology to design JSP webpage
学习目标: Learning Objectives	运用基本 JSP 技术和 CSS 表单技术设计一个简单网页 Using primary JSP methods and CSS form technology to design a JSP webpage
教学要求: Requirements	掌握 eclipse(j2ee)开发环境。学会使用 CSS 和 JSP 标签 Building web projects via Eclipse IDE (Java EE IDE), mastering configurations of Tomcat. Learning to use CSS technology and JSTL
实验场地: Location	1207
实验软硬件设备: Software/Hardware	高性能计算机 High performance computer

实验项目序号: Experiment No.	2	支撑教学目标: SLOs Supported	1-2、1-3
每组成员: Members per Group	1	指导教师: Tutor	戴庆天
实验名称: Experiment Title	Request 对象的使用。 The usage of Request object API.		
实验内容: Content	编写一个 JSP 页面，该页面提供一个表单，用户通过表单输入两个数和四则运算符号提交给该页面； Editing a JSP webpage, this page offers JSP form, the client could input two numbers and four kinds of operation symbols via this form, then the input content could be offered to the JSP page 编写两个 JSP 页面，一个页面提交数字给另一个页面，另一个页面使用 response 对象做出动态响应。 Editing two JSP pages, one of the two pages offers numbers to another page, the received page uses response object API to make a dynamic response.		
学习目标: Learning Objectives	JSP 中请求和响应对象接口方法的运用 The API usage of Request and Response		
教学要求: Requirements	JSP 中请求和响应对象接口方法的运用 The API usage of Request and Response 运用请求和响应方法实现两个页面的交互 Using request and response method to realize the interaction of two JSP pages		
实验场地:	1207		

Location	
实验软硬件设备: Software/Hardware	高性能计算机 High performance computer

实验项目序号: Experiment No.	3	支撑教学目标: SLOs Supported	1-2、1-3
每组成员: Members per Group	1	指导教师: Tutor	戴庆天
实验名称: Experiment Title	Servlet 和 JDBC 的基本应用 Servlet 和 JDBC 的基本应用 Basic application of servlet and JDBC		
实验内容: Content	学习使用 servlet, 采用 JDBC 访问 mysql 数据库 Learning to use java servlet technology; using JDBC to access mysql database.		
	将 Servlet 程序部署在服务器上, 观察程序的运行 Deploying the Servlet program on the server, observing the program operation status.		
	通过 JDBC 的方式实现对数据库表中数据的增删改查。 Through the way of JDBC, the user could add, delete, modify and query the data in the database table.		
学习目标: Learning Objectives	掌握 JSP 页面中访问数据库的方法 Mastering the method of connecting databases on JSP pages		
教学要求: Requirements	通过 JDBC 的方式实现对数据库表中数据的基本操作 Primary operation in database table realized by JDBC		
实验场地: Location	1207		
实验软硬件设备: Software/Hardware	高性能计算机 High performance computer		

实验项目序号: Experiment No.	4	支撑教学目标: SLOs Supported	1-3、1-4
每组成员: Members per Group	1	指导教师: Tutor	戴庆天
实验名称: Experiment Title	SSH 框架的配置 Configuration of SSH framework		
实验内容: Content	熟悉 SSH, 并掌握基本的配置 Mastering the primary configuration of SSH framework		
	使用 SSH 框架编写一个简单的小程序。 Using SSH framework to edit a simple JSP program.		

学习目标: Learning Objectives	了解 JSP 中常用的框架, 掌握 SSH 框架的配置 Learning common frameworks in JSP Mastering Configuration of SSH framework
教学要求: Requirements	使用框架编写一个简单的网页程序, 并实现前后端交互。 Using framework to edit a simple JSP program; Realize the interaction of front and end
实验场地: Location	1207
实验软硬件设备: Software/Hardware	高性能计算机 High performance computer

#### 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.
JSP 简介 Introduction of JSP	4	2		
JSP 语法 JSP syntax	6			
JSP 的内置对象 Built in objects of JSP	6	2		
JSP 与 JavaBean JSP and JavaBean	4			
Java Servlet 基础 Basic of Java Servlet	4			
MVC 模式 MVC mode	4			
JSP 中使用数据库 Using database in JSP	8	2		
JSP 中的文件操作 File operation in JSP	4	2		
总计 Total	40	8		

#### 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
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<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 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	王军伟
给分形式: Result Type	百分制 Marks	课程总成绩比重(%): Percentage (%)	30
考核方式: Measures	<p>满分 100 分，以学生平时考勤、课堂表现，学生平时作业完成情况综合评定，其中，学生考勤、课堂表现占比 50%，学生平时作业完成情况占比 50%.</p> <p>The full score is 100. Students' attendance, classroom performance, random questions from teachers, and students' homework completion are comprehensively evaluated. Among them, students' attendance and classroom performance accounts for 50%, student's completion of homework in daily life accounts for 50%.</p>		

考核环节: Assessment Content	实验 Experiment	环节负责人: Director	戴庆天
给分形式: Result Type	百分制 Marks	课程总成绩比重(%): Percentage (%)	20
考核方式: Measures	<p>满分 100 分，以学生出勤率、实验表现、实验报告完成情况综合评定，其中，学生考勤占比 20%，平时课堂表现、课堂教师随机提问占比 30%，学生平时作业(课前预习作业、课后作业)完成情况占比 50%.</p> <p>The full score is 100. Students' attendance, classroom performance, and students' experiment report are comprehensively evaluated. Among them, students' attendance accounts for 20%, classroom performance and random questions from teachers account for 30%, and students' homework (preview homework before class and homework after class) accounts for 50%.</p>		

考核环节: Assessment Content	期末 Final	环节负责人: Director	王军伟
给分形式: Result Type	百分制 Marks	课程总成绩比重(%): Percentage (%)	50
考核方式: Measures	满分 100 分，通过批阅结课报告给出学生成绩。 The full score is 100, and students' scores are given according to the course report.		

## 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	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。 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.		
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	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。 The subject coordinator shall revise the syllabus based on the teaching content, effect and result distribution while optimize the assessment measures.		