

课程大纲 COURSE SYLLABUS

1.	课程代码/名称 Course Code/Title	研究生科学研究规范训练 Normative orientation of scientific research
2.	课程性质 Compulsory/Elective	必修/Compulsory
3.	课程学分/学时 Course Credit/Hours	2 学分/32 学时 2 credits/32 hours
4.	授课语言 Teaching Language	中英双语 Chinese/English
5.	授课教师 Instructor(s)	郭红卫等 Guo Hongwei and others
6.	是否面向本科生开放 Open to undergraduates or not	否 No
7.	先修要求 Pre-requisites	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.) 无 No
8.	教学目标 Course Objectives	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.) 本课程将系统地向学生介绍学术道德、科研伦理、实验室安全等知识, 提高学生在科研报告、科学论文阅读、写作及学术答辩等方面的能力, 并进一步使学生了解生命科学学院的科研平台仪器、学习科学文献检索、实验数据的分析及统计等方法。通过本课程的学习, 学生将较为全面地了解、建立科学研究的规范性, 为将来成为一名合格的科研工作者打下良好的基础。 This course will help the graduate students to systematically learn the knowledge of academic morality, research ethics and lab safety. It is also designed to improve the abilities of students in research report, scientific literature reading, paper writing and defense skill. Students will get insight into the platform equipment in School of Life Science and learn the statistical approach of experimental data. These trainings will enhance the normalization of scientific research for graduate students and prepare them to be qualified scientific researchers in the future.
9.	教学方法 Teaching Methods	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.) 专题讲授与讨论 Lecture and discussion
10.	教学内容 Course Contents	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)
	Section 1	生命科学学院介绍, 包括学院组成、学科方向设置等。 研究生学习及科研规划, 包括科研课题选择、科研目标确定、学术交流

	<p>等。</p> <p>Introduction of School of Life Science, including School composition discipline distribution.</p> <p>Postgraduate studies and scientific research plan, including research topic selection, objective determination and academic communication.</p>
Section 2	<p>科学研究的伦理、学术道德和规范，包括探究科学和技术领域中的学术造假、抄袭等伦理问题，讨论科研工作者在实际研究中的伦理行为。</p> <p>Ethic, morality and criterion in scientific research, including discussion on ethical issues such as academic cheating and plagiarism. In addition, this section also covers discussion on ethical conduct for researchers.</p>
Section 3	<p>研究生培养方案，包括研究生培养目标、资格考核及学术成果要求等。</p> <p>科研报告与答辩技巧，包括科研报告的格式、讲解逻辑及回答问题方式等。</p> <p>Training program including postgraduate training objectives, qualifying exam and academic achievement requirements.</p> <p>Research report and defense skill including format, logic and answer question in research report.</p>
Section 4	<p>科学文献阅读、检索和管理，包括文献的筛选、文献阅读方式及具体检索工具使用等。</p> <p>Scientific literature reading, retrieval and management, including literature search, selection and tools.</p>
Section 5	<p>实验数据的处理和整理、统计方法，包括数据分析算法、数据统计及常用工具介绍等。</p> <p>Processing, summary and statistical approach of experimental data, including data algorithm, statistics and tools.</p>
Section 6	<p>学院公用仪器平台介绍，包括超高分辨率显微镜等相关仪器简介及使用流程、注意事项等。</p> <p>Introduction to the platform equipment in School of Life Science, including the types, applications and notes of platform equipment, such as Ultra-high resolution microscopy.</p>
Section 7	<p>同位素的使用及其废弃试剂的处理等</p> <p>Isotope use and disposal of related waste reagents</p>
Section 8	<p>常用化学试剂的使用注意事项及实验安全，包括常用化学试剂的种类、保存及处理等。</p> <p>Attention for common chemical reagents and experiment safety, including the chemical types, save and disposal.</p>
Section 9	<p>实验动物及医学伦理，包括实验动物科学基本知识及动物伦理申请解析</p>

	等。 Experimental animal basics and medical ethics, including experimental animal basics and instructions for experimental animal ethics protocol application.
Section 10	研究生心理健康, 包括压力情绪分析等。 Postgraduate mental health including stress emotional analysis.
Section 11	科学论文写作, 包括学术语言的使用、论文框架的构建等 Scientific paper writing, including academic language and paper framework.
11. 课程考核 Course Assessment	
<p>(①考核形式 Form of examination; ②.分数构成 grading policy; ③如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)</p> <p>出勤 Attendance (40%)</p> <p>考试 Test (60%)</p>	
12. 教材及其它参考资料 Textbook and Supplementary Readings	
<p>参考资料为授课 PPT 及相关文献, 每一专题的参考资料由授课老师提供。 The supplementary readings are PPT slides and related scientific publications, which will be provided by the teacher.</p>	