2022 年秋季学期牛津大学研究生学术论文写作与研究方法课程

（计算机科学方向）

教学大纲

Syllabus：University of Oxford Online Scientific Writing for Computer Science Graduate Students Program
2022 Autumn

学时(45 分钟/学时)：48;　　**授课语言：**英文
Teaching Hours: 48 ;　　**Language:** English

课程介绍：

本课程源自牛津大学，是专门为国际学生设计的学术写作课程，旨在积累学术写作经验，发展自己的英语句法和学术写作的知识。课程也为那些认为他们需要提高他们的能力，使用学术语言表现令人满意的书面课程工作者而设计。

该项目介绍了对常见类型的学术文本的思想组织的基本理解，及有效地与读者沟通所需的技能。它还着眼于培养学生在使用语法、词汇、表达、风格和惯例方面的能力，这些在牛津大学的学术写作中通常使用。**该项目的内容是专门面向研究生阶段的计算机科学专业学生的。**

参加在线课程的学生将使用牛津大学的 Canvas 系统和视频会议软件访问材料并参加研讨会。

Course Description：

This course is designed for international students, with little experience in academic writing, who want to develop their knowledge of English syntax and academic writing. It is also designed for those who feel they need to advance their competence in using academic language to perform satisfactorily in their written course work.

The program introduces a foundational understanding of the organization of ideas in common types of academic texts, as well as the skills needed to communicate effectively to the reader. It also looks to develop their competence in the use of the grammar, vocabulary, expressions, style and conventions typically used in academic writing at Oxford. The program contents are specifically modified for students from major of computer science at graduate level

Students joining the Online course will access materials and take part in seminars using Oxford's Canvas, and videoconferencing software.

教学目标：

1. 培养常见学术文本(如论文、报告、学位论文、出版物)中的基本知识
2. 改进论点、证据和立场的组织和表达
3. 培养将文献中的观点融入学生写作的基本技能
4. 使用连接词和短语与读者有效地交流
5. 学会使用基本的学术语法、词汇和文体
6. 避免常见的语法、词汇和文体错误
7. 获得关于他们的学术写作的反馈，以及关于如何继续发展他们的硕博学位课程和学术论文的建议
8. 了解如何撰写计算机专业学术论文
9. 学会准备硕博阶段计算专业领域的学术论文、学术会议和展示

The purposes of the course are:

1. Develop essential knowledge of the organisation of ideas in common academic texts (e.g. essays, reports, dissertations, publications).
2. Improve the organisation and expression of arguments, evidence and stance in writing.
3. Develop essential skills to integrate ideas from the literature into the student's writing.
4. Use linking words and expressions to communicate effectively with the reader.
5. Develop use of essential academic grammar, vocabulary and style.
6. Avoid the grammatical, vocabulary and stylistic errors common to international students.
7. Receive feedback on their academic writing and advice on how to continue to develop throughout their degree program and academic paper.
8. How to write scientific texts in computer science?
9. How to write a master thesis？Students will read computer science related articles and use them as a basis for writing. Students will deliver an academic presentation suitable for a professional conference.

关于牛津大学和牛津大学出版社：

牛津大学（University of Oxford），简称“牛津”（Oxford），位于英国牛津，是世界顶尖的公立研究型大学。其与剑桥大学并称为牛剑，是罗素大学集团成员，被誉为“金三角名校”和“G5 超级精英大学”。牛津大学拥有崇高的学术地位及广泛的影响力，被公认为是当今世界最顶尖的高等教育机构之一。

牛津大学出版社(OUP)是牛津大学的一个直属部门。它通过在世界范围内发表文章提供培训及学术交流，进一步促进大学在研究、学术和教育方面的卓越目标。牛津大学出版社是世界上最大的大学出版社，面向三个主要市场：研究、教育和教学。大学的使命是创造世界一流的学术和教育资源，并尽可能广泛地提供这些资源。

教学安排 Course Schedule：

周期 Week	教学内容 Content & Details	授课学时 Hours	教学方式 Format	授课教师 Instructor
W1	Introduction：Scientific Writing and Reading 研究生科技阅读与写作课程介绍 Exercise 练习 Recognizing and Using Academic Terms 认知与使用学术语言 Intro to the common academic texts (e.g. essays, reports, dissertations, publications). 常见的学术文献介绍 How to write scientific text in CS; Scientific writing style 如何撰写计算机专业学术论文（计算机专业研究方向与选题、提纲与论文结构） The most common model: Abstract; Introduction; Related Work; Your idea; Your implementation and experimentation/Methodology; Evaluation/Data analysis/Results; Discussion and Future work; Conclusion 常见结构：摘要、引言、技术手段与方法、测试结果（数据分析）、结论讨论、建议 Intro to Journal Database and Conference Index for computer science 常见的计算机专业数据库及会议索引介绍 Interpretive Summary 解释与总结	4； 授课学时 4	讲授 案例分析 同伴互评 讨论 展示	Prof. Alex Rogers 牛津大学 计算机科学 教授（终身） **&** Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W2	Academic Communications and Integrity 跨文化学术沟通与学术道德	4； 授课学时		Dr. Chris Tomes 牛津大学&牛津大

	Academic integrity is honest, respectful, and ethical behavior within the university environment. Examples include being honest by indicating where and how often you use information created by others. You must be respectful of the work of others and communicate their ideas correctly.	3； 案例分析与讨论学时 1		学出版社 认证高级培训师
W3	Critical Reading, Critical Vocabulary, and Analysis in Computer Science 批判性阅读、词汇与分析 Reading: H. Lawrence, “The Rocking Horse Winner,” 40 Short Stories or download .pdf (Links to an external site.) John Steinbeck, “The Chrysanthemums,” 40 Short Stories or Link	4； 授课学时 3； 案例分析与讨论学时 1		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W4	Framing an Approach to the Academic paper; Avoiding Plagiarism 构建学术论文的研究方法，避免剽窃 Reading: Joyce Carol Oates, “Where Are You Going, Where Have You Been?” 40 Short Stories or download .pdf (Links to an external site.) Tim O’Brien, “The Things They Carried” 40 Short Stories or download .pdf	4； 授课学时 3； 案例分析与讨论学时 1		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W5	Revising: How to work with feedback; Exchange Peer Review Essays 修改:如何与反馈一起工作; 交换同行评审论文 Edgar Allan Poe, “The Cask of Amontillado,” 40 Short Stories or download .pdf	4； 授课学时 3； 案例分析与讨论学时 1		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W6	Academic Writing：Discussion & Introductions 学术写作：讨论与引言 Discussion Sections, Discussion Language, Introduction Sections, Introduction Language 如何完成讨论与引言部分	4； 授课学时 3； 案例分析与讨论学时 1		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W7	Academic Writing：Abstracts & Peer Review 学术写作：摘要 同伴互评	4； 授课学时 3； 案例分析与讨论学时 0.5；		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师

		同伴互评学时 0.5		
W8	Planning a comparison/contrast essay in CS and AI 准备一篇比较/对比文章在计算机与人工智能领域 37th IEEE International Conference on Data Engineering (ICDE 2021) ICDE 2021 is the flagship IEEE conference addressing research issues in designing, building, managing, and evaluating advanced data-intensive systems and applications. For over three decades, ICDE has been a leading forum for researchers, practitioners, developers, and users to explore cutting-edge ideas and exchange techniques, tools, and experiences. Reading: James Baldwin, “Sonny’s Blues,” 40 Short Stories Nathaniel Hawthorne, “Young Goodman Brown,” 40 Short Stories	4； 授课学时 4		Prof. Alex Rogers 牛津大学 计算机科学 教授（终身） **&** Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W9	Research Logs – ACM 研究日志/技术笔记-ACM （ ACM, the Association for Computing Machinery, is the world's largest educational and scientific society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.） Problem Solution & Research Log 问题/解决方案 & 研究日志/技术笔记 Publication Types & Survey Papers Revisited Conference vs Journal, Workshop Papers, IMRaD, Posters 出版物类型和实验性/测试型论文回顾	4； 授课学时 4		Prof. Alex Rogers 牛津大学 计算机科学 教授（终身）

W10	Introduction to Library Research 对于图书馆/在线图书馆的研究 Reading： Flannery O’Connor, “A Good Man is Hard to Find” 40 Short Stories	4； 授课学时 4		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W11	Presentation Skills & Peer Review 学术答辩与演讲技巧 同伴互评 Paper to Conference, Creating Slides, Explaining Visuals, Networking, Presentation Skills 会议论文如何准备展示 PPT，如何将研究成果视觉化，答辩或者演讲有何技巧	4； 授课学时 3； 讨论学时 0.5；同伴互评学时 0.5		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师
W12	Presentation 论文展示-学术论文汇报	4； 学术汇报与展示学时 4		Dr. Chris Tomes 牛津大学&牛津大学出版社 认证高级培训师

注：以上为拟定课程安排，实际安排以授课教师提供的课表为准。

授课时间安排 Time Arrangement：

Prof. Alex Rogers 08 Teaching Hours 8 课时
Dr. Chris T. 40 Teaching Hours 40 课时

考核方式 Grading Policy：

通过学习过程和学习结果的整合，结合课程项目展示的考核评选方式，全面考核评价学生的知识运用和实践综合能力，突破传统测试评价体系，综合采用以下课程考核系统评价体系。
1. 教师评价与过程评价； 2. 同伴评价；

成绩评定方面，本课程考核方向主要分为四个组成部分，出勤、作业、同伴互评和最终论文。评分方式为百分制，其中，出勤占比 20%，作业占比 20 %，同伴互评 10%，最终论文（含展示）50%。
Participation 20% Assignment 20% Peer Review 10% Final Essay 50%

项目师资 Instructors：

Prof. Alex Rogers

牛津大学 计算机科学 教授（终身）

Alex 现任牛津大学的计算机科学教授，同时担任是自主智能机器和系统博士培训中心(AIMS CDT)的联合主任，也是网络物理系统研究小组的成员。Alex 教授致力于将人工智能和机器学习应用于物理传感器系统，以解决关注可持续性的现实世界问题。导师最近的工作涉及未来能源系统，如智能电网、公民科学平台和环境监测，通常涉及在设备、智能手机或云计算中实际部署的新方法。目前的工作是智能建筑能源管理和低成本节能技术的发展。作为博士生导师，Alex 曾指导过 26 名博士生完成学业。

Alex Rogers is a Professor of Computer Science at the University of Oxford as well as the current Co-Director of the Autonomous Intelligent Machines and Systems Centre for Doctoral Training (AIMS CDT) and a member of the Cyber Physical Systems research group. His research applies artificial intelligence and machine learning within physical sensor systems to address real-world problems focusing on sustainability. Prof. Alex recent work has addressed future energy systems, such as the smart grid, citizen science platforms, and environmental monitoring, and typically involves the real-world deployment of novel approaches in devices, smartphones or the cloud. His current work addresses smart building energy management and the development of low-cost conservation technology. Alex has previously supervised 24 PhD students to completion, and is currently supervising Amanda Matthes and Jonas Beuchert.

Dr. Chris Tomes

牛津大学&牛津大学出版社 认证高级培训师

Chris 导师拥有超过 12 年的教师培训和教学经验，是牛津大学认证能够开展牛津教师学院课程培训的培训师之一。目前全球仅有不到 150 位培训师获此认证。Chris 导师在牛津大学出版社任职超过 8 年，先后担任学术导师、高级学术导师、教师培训师、高级研究员等职务，拥有丰富的教师培训经验。

Chris has over 12 years' experience of teaching and training experience and is one of fewer than 150 trainers in the world authorized to deliver Oxford Teachers' Academy courses on behalf of the University of Oxford. He has served as an English teacher, Senior Teacher and Director of Studies in educational institutions in Asia and is keen to support learners in all aspects of their development and is eager to promote the importance of project-based learning.

线上课程助教服务

每个班级分配一位线上助教辅助答疑（可选择中文），帮助学生更好地消化和吸收所学知识，破除语言的壁垒，顺利完成课程学习。

线上课程运营服务

每个班级分配一位线上班主任对学生进行课程的监督和管理，并在线上阶段每周进行课程表现的系统化反馈直到课程结束。

附件 1：项目官方证书

牛津大学出版社官方证书（仅供参考）