



北京大学社会研究中心与 北京大学—密歇根大学学院

2017 年暑期课程招生简章

2017 年 4 月

北京大学社会研究中心与北京大学—密歇根大学学院将于 2017 年 7 月在北京大学联合举办为期一个月的第 11 届暑期强化课程。任课教师均为密大和北美高校的著名教授。欢迎北大和国内高校、研究单位的教师、研究人员、硕、博研究生和高年级本科生申请本期暑期课程。课程要求学员掌握基本的统计概念和知识,熟悉回归分析模型。具体课程和任课教师介绍如下:

一、课程安排及介绍:

1、课程名称: **Understanding Complexity** 《对复杂系统的认识》

时间: 2017 年 7 月 10 日至 21 日

课时: 36 学时 招生人数: 70 人 工作语言: 英语

主讲教师: **Scott E. Page** 教授和 **Andrea Jones-Rooy** 教授

Scott E Page serves as Leonid Hurwicz Collegiate Professor of Complex Systems, Political Science, and Economics at the University of Michigan and as an external faculty member of the Santa Fe Institute. His research focuses on complex systems and diversity in social systems. He is the author of three books and more than seventy-five research papers in economics, political science, sociology, psychology, philosophy, physics, public health, geography, computer science, and management. He has filmed two video series for *The Great Courses*, and his online course Model Thinking has attracted over three quarters of a million participants. A frequent public speaker to corporations and government agencies including NASA, Bloomberg, Google, Boeing, the IMF, Genentech, Gilead, the United States Federal Reserve, and Pimco, Scott has also been a featured speaker at The World Economic Forum – Davos and The Aspen Ideas Festival. In addition to his teaching, Scott has consulted with Yahoo! Ford, DARPA, Procter and Gamble, and AB InBev. He has been the recipient of a Guggenheim Fellowship as well as fellowship at the Center for Advanced Studies in the Behavioral Sciences at Stanford. In 2011, he was elected a fellow of the American Academy of Arts and Sciences.

Andrea Jones-Rooy, Ph.D., is a social scientist specializing in complexity. She is the author of one book and several research articles (along with Scott E. Page) on complex systems, and she also contributes articles to media outlets on international relations, foreign affairs, and uncertainty. She is a research consultant for

Fortune 500 firms, helping them integrate social scientific principles into understanding, researching, and developing policies for institutional and cultural change on some of their toughest issues, including diversity, team dynamics, and adaptability. Andrea is developing an online course on Complexity with Lemma, a mathematics education startup, and formerly designed and taught NYU's first global course – also on Complexity – which was taught across four continents simultaneously. She was previously a professor of political science and global China studies at NYU Shanghai, where she founded and directed China's first undergraduate major in integrated social science. Andrea earned her Ph.D. in Political Science from the University of Michigan, Ann Arbor, and was a postdoctoral fellow in Social and Decision Sciences at Carnegie Mellon University. In addition to being a sought-after researcher and celebrated teacher, Andrea is a standup comedian and circus artist, both of which she has performed for audiences (including royalty) all over the world.

网址: <http://lsa.umich.edu/cscs/people/core-faculty/spage.html>

课程介绍:

In this course, we study foundational papers and topics in complex systems. The course assumes a general knowledge of complex adaptive systems. We focus on models, tools, concepts, and ideas from complexity theory including formal measures, non linear dynamics power laws, percolation, rugged landscapes, simulated annealing, genetic algorithms, self-organized criticality, networks, learning, and collective wisdom. The course requires calculus, some basic familiarity with difference and differential equations, but does not require any experience computer programming.

讲座介绍:

报告人: **Scott E. Page** 教授; 主持人: 谢宇教授; 时间: 暂定 2017 年 7 月 12 日下午

主题: **Many Model Thinking in a Complex World**

介绍: To predict, explain, analyze, understand, and explore the complex world, social scientists apply models. Models, by definition, simplify. Therefore, no single model can cope with the complexity of the world. In his lecture, Professor Page describes an emerging new approach to scientific understanding based on many model thinking. This approach applies multiple, diverse models and leads to more accurate predictions, deeper understandings, better policy choices, and more practical designs.

Professor Page's MOOC Model Thinking has attracted over a half a million students who've learned how to use models to explain everything from why we cannot predict stock prices to why elephants don't explode.

2、课程名称: **Advanced Quantitative Methodology** 《高级量化分析方法》

时间: 2017 年 7 月 24 日至 28 日

课时: 25 学时 招生人数: 80 人 工作语言: 英语

主讲教师: **Gary King** 教授和 **Christopher Lucas** 博士

Gary King is the Albert J. Weatherhead III University Professor at Harvard University -- one of 24 with Harvard's most distinguished faculty title -- and Director of the Institute for Quantitative Social Science. King develops and applies empirical methods in many areas of social science research, focusing on innovations that span the range from statistical theory to practical application.

King is an elected Fellow in 8 honorary societies (National Academy of Sciences, National Academy of Social Insurance, American Statistical Association, American Association for the Advancement of Science, American Academy of Arts and Sciences, Society for Political Methodology, American Academy of Political and Social Science, and the Guggenheim Foundation) and has won more than 40 "best of" awards for his work.

King was elected President of the Society for Political Methodology (1997-1999) and Vice President of the American Political Science Association (2003-2004). He has been a member of the Senior Editorial Board at Science (2015-2016), Visiting Fellow at Oxford (1994), and Senior Science Adviser to the World Health Organization (1998-2003). His more than 150 journal articles, 20 open source software packages, and 8 books span most aspects of political methodology, many fields of political science, and several other scholarly disciplines.

Christopher Lucas is a graduate student in the Government Department at Harvard University and an affiliate of the Institute for Quantitative Social Science. He studies political methodology and the political economy of information and media. His current projects include the development of models and tools to analyze text, audio, image, and video data. He applies these developments to the study of police-involved shootings in the United States, electoral accountability in Mexico, and American elections.

His research has been published in Political Analysis, Comparative Political Studies, twice in the American Journal of Political Science and received an award from the Society of Political Methodology. He has also published four open-source software packages. Ongoing projects are generously supported by J-PAL, the Weiss Family Program Fund, and various internal funding sources at Harvard.

He is a co-founder of the Harvard Experiments Working Group, a forum providing graduate students with funding for and feedback on experimental research. He also co-organized the inaugural Harvard Experimental Political Science Graduate Student Conference.

网址: <http://gking.harvard.edu/biocv>

课程介绍:

Although social scientists now have access to more data than ever before, making inferences about cause and effect remains difficult. In this course, students will learn how to leverage massive amounts of data via methods from statistics, computer science, and political methodology to improve causal inferences. We start by introducing the fundamentals of causal inference, and then introduce students to model-based inference and new developments in matching that scale to large data. We then show how machine learning methods can augment these approaches, particularly in cases where the functional form is unknown and where there exists large heterogeneity in treatment effects.

讲座介绍:

报告人: **Gary King** 教授; 主持人: 谢宇教授; 时间: 暂定 2017 年 7 月 26 日下午
主题: 待定 (TBD)

二、申请程序:

1. 报名日期 2017 年 4 月 10 日—2017 年 5 月 30 日。请登录网址 <http://www.oir.pku.edu.cn/umich> 在线报名。
2. 2017 年 6 月 5 日招生小组审核报名材料, 并通知学生录取结果。
3. 学生收到录取通知 (电子邮件) 后, 于 2017 年 6 月 5 日—25 日缴费 (具体办法和要求将在“缴费通知”中说明), 并打印保管好缴费收据。

4. 在开课报到时，凭缴费收据领取正式通知书和北大开具的票据。请注意，非北大学生：**中央非税收入统一票据**；北大学生：**中央行政事业单位资金往来结算票据**（北大学生票据抬头只能写个人姓名）。

三、课程培训费/资料费：

非北大籍学生（含港澳台）：1,200 元/人/每门课程。 教师：1,500 元/人/每门课程。

北大籍学生：1,000 元/人/每门课程。

海外学员：2,000 元/人/每门课程。

四、作业与考试：

课堂讨论、作业和考试由任课教师安排。

五、上课时间和地点：

上课时间：2017 年 7 月 10 日—7 月 28 日。

上课地点：北京大学（上课教室另行通知）

六、证书：

1、正式录取的学生学完规定的课时，完成必须的作业，通过考试后可获得规定的学分和由北京大学出具的成绩证明。

2、凡参加暑期课程的学员，完成必须的作业，通过考试后将获得由授课教师签名的单科结业证书

七、学习期间食宿：

学院不负责解决学生学习期间的食宿问题。食宿、生活等费用自理。

八、教材：教材、讲义等课程材料费用自理。

有关招生情况、师资、课程介绍、时间安排等，请登录网站：<http://www.oir.pku.edu.cn/umich/>查询。如果您有任何关于课程和申请过程的问题，欢迎与我们联系。

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