



上海交通大學
SHANGHAI JIAO TONG UNIVERSITY

2019 SJTU GLOBAL SUMMER SCHOOL



Contact :

<http://summerprogram.sjtu.edu.cn/>

Email: isc.mobility@sjtu.edu.cn

PROGRAM OVERVIEW

SJTU welcomes undergraduate and graduate students from all over the world to study in Shanghai, one of the most dynamic cities in China. This summer, we invite you to enhance your academic credentials, advance your career, and explore your interests.

The 2019 Global Summer School provides excellent opportunities for students to learn about China through academic and cultural immersion. A wide range of courses in various disciplines are provided, including Public Policy and City Governance, Knowing Satellite by Cubesat, Future Green City, and Machine Intelligence and Robotics, of which will be accompanied by Chinese language courses.

In addition to academic lectures, local excursions, cultural activities, and field trips are also available for International students. From these extracurricular activities, students will learn more about Chinese culture, history, politics and the latest developments of the country. This is a chance to experience Chinese culture firsthand and to make friends from China and all around the world.

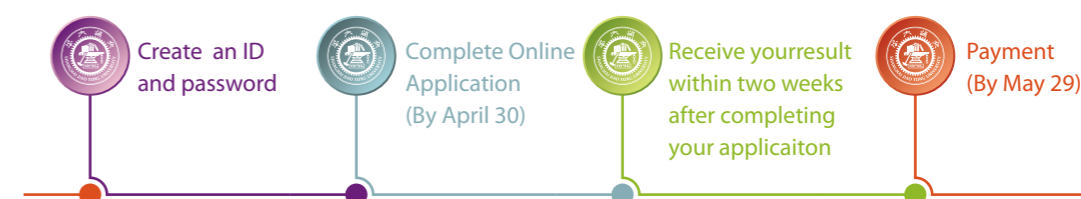
Join us this summer and discover how SJTU can help you realize your potential!



→ Eligibility

- A. Students from overseas, Hong Kong, Taiwan, and Macao must be enrolled as an undergraduate or graduate student prior to applying for this program.
- B. Students from non-English speaking countries should provide an English language proficiency certificate. Either an IELTS (no less than 6.0), TOEFL (no less than 79 points), or TOEIC (no less than 800 points). If you are studying a fully English taught program, you must provide the relevant certificate.
- C. Other prerequisites may be required by each course.

→ Application Process



- A. Please apply via the following website : <http://apply.sjtu.edu.cn>
The following items must be uploaded to the online application:
 - A scan of the ID page of the student's passport. The passport must be valid for at least 6 more months for the visa application.
 - ID photo (Similar to a passport photo)
 - Curriculum vitae (CV)
 - Motivation letter
 - Language proficiency certificate (If applicable)
- B. Applicants can only attend one course across the program.
- C. In regards to free placements for applicants from university-level exchange partners, please contact the International Office of your home university for more detailed information.

→ Course schedule

- A. Lectures will be held in the morning, and field trips or company visits will be arranged during the afternoons from Monday to Thursday. The Chinese language and culture course will be conducted every Tuesday and Thursday afternoon. There are no classes on Friday. Cultural trips will be arranged on the weekend.
- B. If the number of participants is less than 20 students, the course will be cancelled. If this is the case, students will be notified via the website by the 1st of May, 2019. Students have two course choices when filling the online application, if the first course is cancelled, the applicant will be automatically reassigned to the second course.
- C. Please check our website for the updated version of the schedule of each course.

→ **In addition to the excellent lectures, you will also experience the following when joining the program:**

- > Airport pickup service
- > Welcome reception
- > Cultural show
- > Filed trip
- > Unique cultural experiences
- > Integration with local students

→ **Credit**

Session A: 2 Credits
Session B: 3 Credits

→ **Important Dates**

	Session A	Session B
Duration	2019.7.11-2019.7.26	2019.7.11-2019.8.2
Application period	2018.12.1-2019.4.30	2018.12.1-2019.4.30
Application deadline	2019.4.30	2019.4.30
Registration & dormitory check-in	2019.7.11 8:00am-4:00pm	2019.7.11 8:00am-4:00pm
Welcome reception	2019.7.12	2019.7.12
Courses begin	2019.7.15	2019.7.15
Courses end	2019.7.26	2019.8.2
Dormitory check-out	2019.7.27 8:00am-4:00pm	2019.8.3 8:00am-4:00pm

→ **Fees**

	Session A	Session B
Application fee	RMB 400(USD 60)	RMB 400 (USD60)
Tuition fee	RMB 5000(USD 760)	RMB 7500 (USD 1130)
Total	RMB 5400(USD 820)	RMB 7900(USD1190)
Payment deadline	2019.5.29	2019.5.29

The culture trip fee is not included in the tuition fee.

→ **Refund Policy**

**The application fee is non-refundable.

Withdrawal is defined as the dropping of an entire academic program. All students who drop their academic program before May 29,2019 will not be charged. ¹

Cancelation date	Remarks
By May 29,2019	Full refund
By July 13,2019	50% refund
After July 13,2019	No refunds

→ **Announcement**

You will be notified of the result through our website, and an email within two weeks of completing the application.

→ **Accommodation**

The 2019 Global Summer School will be conducted at two campuses: Xuhui and Minhang. Students are able to choose on-campus or off-campus accommodation depending on the location of their course.

For on campus accommodation, room reservations should be made online at dorm.sjtu.edu.cn and the accommodation fee will be paid online. Due to the on-campus accommodation being limited, students can also choose to use off-campus accommodation.

More detailed information regarding the accommodation reservation will be released once you have been admitted to Global Summer School .

For more information, please contact International Student Service Center
Minhang Campus: issc_minhang@sjtu.edu.cn +86-21-34203955
Xuhui Campus: issc_xuhui@sjtu.edu.cn +86-21-62933305

¹ All cancelation requests must be sent to isc.mobility@sjtu.edu.cn.

→ **Visa**

SJTU will provide students with JW 202 and admission notice. Applicants should bring the visa paperwork, admission notice, JW 202 form and a valid passport to the local Chinese embassy or consulate to apply for a short term student visa (usually the visa type "X2"). Those who are already in China need to submit a copy of the visa page, residence registration notice, and all of the above application documents to the PCB in Shanghai after registering at SJTU.

The JW 202 form and the admission notice will be sent to the applicant via an international courier within two weeks after April 30, 2019.

* If you are a local student from Hong Kong, Macao and Taiwan, you do not need the JW202 form.

→ **Insurance**

Students who plan to attend this program should obtain insurance prior studying in China. Each student needs to present the insurance certificate to the administrative staff on the day of registration.

→ **Transcript**

Official transcripts will be sent out in September to the mailing address you indicated in your application. Students who wish to transfer credits need to obtain pre-approval from the relevant authorities at your home universities.

→ **Certificate**

An official certificate will be issued to the student who completes the course by the University.

→ **Contact**

Email: isc.mobility@sjtu.edu.cn

Website: <http://summerprogram.sjtu.edu.cn/>

CONTENT

2019
SJTU
GLOBAL
SUMMER SCHOOL

SESSION A

- TOPIC 1: S021 Discover China
- TOPIC 2: S022 China's Public Policy and City Governance
- TOPIC 3 : S023 China's Policy on Climate Change, Energy, and Environment
- TOPIC 4: S024 Social Welfare Policies and Practices in Modern China
- TOPIC 5: S025 China Design
- TOPIC 6: S026 Sustainable Ecological Design in China
- TOPIC 7: S027 Green City Green Future
- TOPIC 8: S028 Green Technology for Environmental Pollution Control
- TOPIC 9: S029 China's Urban Forest and Ecosystem Monitoring
- TOPIC 10: S0210 Knowing Satellite by Cubesat
- TOPIC 11: S0211 Chinese Traditional Exercise and Health

SESSION B

- TOPIC 12: S031 Machine Intelligence and Robotics
- TOPIC 13: S032 Reversing Climate Change

S021

Discover China

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Xuhui

Course Description »

This course provides you with an overview of key social, cultural, political, and economic areas for understanding the changes and challenges of contemporary China, and it will be taught from a multi-disciplinary perspective. We will arrange visits to the Shanghai Urban Forest Research Station to demonstrate the metropolis' ecological balance strategy, and SJTU's advanced laboratories to exchange opinions with professors about the most promising technologies in the future. This program provides students with the critical and essential tools to understand how to do business in China through a combination of subject-specific modules, company visits, and cultural activities. Students who attend this program do not only take part in an unforgettable experience but also gain skills that will equip them for global success.

Highlight »

- > Understand China's development process from the perspective of Shanghai's globalisation.
- > Discover how business in China works.
- > Learn about traditional Chinese medicine and culture and learn how to make sachets.
- > Study at SJTU to experience campus and daily Chinese life.
- > Exchange ideas by communicating with students from different countries.

Instructors »

Associate Prof. Zhaoyang ZHANG
Email: zzy001@sjtu.edu.cn

Zhaoyang Zhang acquired his Ph.D. in history from University of California at Berkeley, and is an associate professor in the Department of History. He has published a number of important articles in leading academic journals and taught various history courses in English.

Associate Prof. Chongsheng PENG
Email: cspeng@sjtu.edu.cn

Dr. Chongsheng Peng, associate professor at the school of pharmacy at the Shanghai Jiao Tong University (SJTU), is an expert in both the SJTU general education courses and storehouses of the China Association of Pharmaceutical Education (CAPE). He received his Ph.D. at the West China University in medical science and a bachelor's degree from the Anhui University of Chinese Medicine. He was a visiting scholar (2005-2006) at the Institute of Molecular Bioscience (IMB) in University of Queensland. Additionally, his course "Traditional Chinese Medicine & Chinese Culture" has been regarded as a key course for general education in Shanghai since April 2015 and at SJTU since 2012. The course is also available globally on four MOOC platforms including Coursera, China MOOC (CNMOOC), Zhihuishu and Ewant. The English version of this course was successfully developed to be the first international course with blended learning for the universities at 21 summer

schools in 2016 and has attracted more than 130 students online and 65 students participating in offline hands-on practices from 18 universities in 11 countries.

Associate Prof. Shan YIN
Email: yinshan@sjtu.edu.cn

Dr. Shan Yin is an associate professor at the school of agriculture and biology at Shanghai Jiao Tong University since 2012. He got his MD and PhD in environmental engineering at Shanghai Jiao Tong University, and used to work at the Institute of Urban and Regional Development, University of California Berkeley as a joint PhD researcher. He is the vice director of Shanghai Urban Forest Research Station and the State Forestry Administration. His work focuses on long-term monitoring of urban forests, air pollutants and climate change.

Dr. Ming JIANG
Email: mjiang@sjtu.edu.cn

Dr. Ming Jiang is an assistant professor of economics at Shanghai Jiao Tong University Antai College of Economics and Management. He received his Ph.D. from the University of Michigan. His research interests include experimental economics, behavioral economics, and economics of the Internet. He has been published in top academic journals, which include Management Science, and Games and Economic Behavior.

Assessment

Attendance: 50%
Assignment: 30%
Final presentation: 20%

Contact

Program Coordinator: Ziyi JIA (zyjia@sjtu.edu.cn)



S022

China's Public Policy and City Governance

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Xuhui

Course Description »

This course focuses on current important issues regarding Chinese political developments and government reforms, with an interdisciplinary approach to examining China. Through seminars, field trips, and other activities, students have the opportunity to experience traditional Chinese culture and conduct in-depth analysis of public policy with Chinese experts. The course covers the following areas: Public policy analysis and Shanghai governance case studies, which will include a field trip to visit the City Planning Exhibition Hall or urban communities. Other activities will also include traditional cultural activities, such as dumpling making, and calligraphy. Students will develop extensive knowledge of popular Chinese political and economic issues, understand Chinese urban governance through theoretical and practical research, and ultimately form unique insights modern China.

Highlight »

- > 7 lectures from distinguished Chinese experts, who will be sharing their latest research results on public policy and city governance
- > 2 field trips to the Shanghai City Planning Exhibition Center and Urban Communities.
- > Group research experience with Ph.D. students.
- > Cultural trips during the weekends to experience the local culture.
- > By the end of this 2-week study, students will have a basic knowledge and understanding of the public policies and governance of not only Shanghai, but also China.

Instructors »

Prof. Yang ZHONG

Email: zhongyang@sjtu.edu.cn

Professor Zhong Yang is the Consultative Committee member and former Dean of SIPA, SJTU. He is also a Chang Jiang Chair Professor, which was awarded by The Chinese Ministry of Education. Additionally, he is also the Zhiyuan Chair Professor at Shanghai Jiao Tong University, and a tenured professor of Political Science at the University of Tennessee. His research interests include local governance in China, political culture, and political participation.

Prof. Bo PENG

Email: bpeng@sjtu.edu.cn

Professor Bo PENG is the Vice Dean of SIPA, SJTU. He received his Ph.D. degree from Fudan University, and his main research fields include local politics, urban study, and public policy analysis. He published two books: Village Governance: State Intervention and System Selection (China Society Press, 2002), and Path Dependence and Governance Choice: The Urban Community Reform in Contemporary China (China Society Press, 2007), three translations, and over 50 articles at Ritsumeikan Journal of Asian Pacific Studies, China Perspective, Political Science Research, etc.

Prof. Dahai ZHAO

Email: dahaizhao@sjtu.edu.cn

Dahai ZHAO received his PhD in Public Administration at Fudan University, and is now vice director of Public Economics and Social Policy Department of the School of International and Public Policy. He was a visiting scholar at Yale University from 2016

to 2017. He also serves as a research fellow at the China Institute for Urban Governance. Professor Zhao's research interests include public economics, and social policy as well as healthcare policy and social security.

Dr. Fan YANG

Email: fanyoung99@163.com

Dr. Fan YANG is a researcher with sociology and social work background. In recent years, he has been keen on investigating how urbanization is associated with Chinese older people's mental health (e.g. depression, Alzheimer's) and how to design interventions both at the family and community level. His other research interests include long-term care and urban poverty.

Dr. Yungpin LV

Email: yungpin@sjtu.edu.cn

Yung Pin Lu is an assistant professor as well as the Vice-Director of Third-Sector Study Center of SIPA, SJTU. Dr. Lu has PhD in Leadership Studies, and a Masters in Business Administration from the U.S.A. His research focuses on social organization, social enterprise, leadership, cross-sector collaboration development, etc.

Dr. Ping HUANG

Email: hping@sjtu.edu.cn

Huang Ping is an assistant professor in Department of International Relations, School of International and Public Affairs at SJTU. Her research interests include religion, homosexuality, mediatization, empowerment, and sexual inclusivity in contemporary China.

Assessment

Attendance: 30%

Participation in discussion: 20%

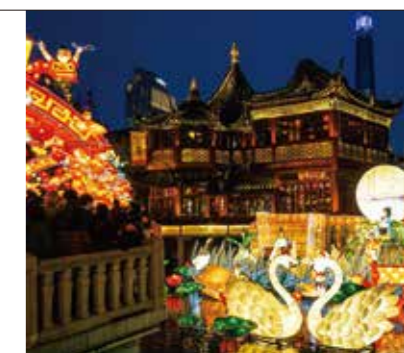
Group presentation: 40% (15 minutes each group)

Final program summary: 10% (more than 500 words)

Contact

Program Director: Prof. Bo PENG (bpeng@sjtu.edu.cn)

Program Coordinator: Ms. Lin HE (superhelen-@sjtu.edu.cn)



S023

China's Policy on Climate Change, Energy, and Environment

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Xuhui

Course Description »

This course explores the challenges associated with climate change, energy and environmental policies from multiple perspectives, disciplines and scales. It provides an in-depth insight of what in the world and particularly in China is happening after Trump's retreat from the Paris Agreement. Students will be trained to examine the evolving science and policy of climate change, tussles among big global emitters regarding commitments and responsibility, the conflicts between energy giants and interest groups in China. Parallel to that, China's energy and environmental policies will be scrutinized in a context of global and domestic politics. Through various case studies, students are encouraged to grasp the nature of China's national development strategies and the risks and challenges the country is facing in implementing its "green policies". At the same time, students will be expected to apply theories of IPE while conducting analysis.

Highlight »

- > Understand the interaction between politics and economics, especially in a Chinese context.
- > Understand the economic dimension of foreign policy and international politics regarding energy and environmental issues.
- > Understand the interaction between mitigation, energy efficiency and technology innovation.
- > Integrate different stakeholder perspectives, disciplines, scales and geographic contexts in evaluating China's mitigation efforts, energy and environmental policies.
- > Understand China's developmentalist approach and the shift from a GDP-orientation to a more balanced development.
- > Develop both oral and written communication skills to facilitate systematic analysis and effective consideration of these complex issues.

Instructors »

Prof. Junhua ZHANG
Email: junhuazhang@sjtu.edu.cn

Professor Zhang is a visiting professor of the SIPA of SJTU. At the same time, he is a senior fellow of the European Institute for Asian Studies (EIAS) in Brussels. He was previously a fulltime professor of Political Science at the School of International and Public Affairs at Shanghai Jiao Tong University (SJTU). Additionally, Zhang has also previously been the director of both the Centre for Israel Studies and the International Master's Degree in China's Political Economy.

Dr. Zhang received his PhD in philosophy from the J. W. Goethe-University in Germany. Apart from his long-term academic career at the Free University Berlin and Wissenschaftszentrum Berlin (WZB) in Germany, he has also served as a guest professor at several universities in Canada, Israel, Austria and France.

In addition, he worked as guest editor for the Journal of Historical Sociology based in London. His research fields are Internet Policy, International Political economy with a focus on China, and Social Memory. He has published numerous articles in several international journals.

Dr. Jin LI
Email: lijinpiga@163.com

Dr. Li Jin is an assistant manager of Shanghai Environment and Energy Exchange and the Director of the R&D Department. She holds a PhD in Environmental and Energy Economics, and she is now a senior economist. She joined the Exchange during its conception in 2009, and has contributed to every step of carbon market construction as a key member of Shanghai's ETS. Li manages trading rule design, operation, product innovation and the regulation of Shanghai's carbon market. She has been responsible for several Shanghai ETS pilot projects designated by national and local governments as well as some international cooperation projects with the World Bank, the Asian Development Bank, the British Embassy, and the US Energy Foundation. Li has been responsible for the design of carbon collateral financing, carbon repository, and carbon lending and promotion through business models among businesses. In 2016, she took charge of the design of China's first

carbon allowance forward derivatives in the exchange cooperated with SH Clearing House. She has published several research papers about Environmental Finance, the Carbon Market, Environmental and Climate Change Policy.

Prof. Hongyuan YU
Email: hongyuanyu@126.com

YU Hongyuan is a professor and Director of the Institute for Comparative Politics and Public Policy at the Shanghai Institute for International Studies. In 2010, he was the winner of the Newcomer Award for Shanghai Social Sciences. He is also the Vice President of Shanghai Association of Ecological Economy, an honorary fellow of Center for International Energy Strategy Studies (Renmin University of China), and a visiting fellow at the Sustainable Developmental Research Center in the China Academy for Social Science.

Dr. Fuqiang YANG
Email: FYang@nrdc-china.org

Fuqiang Yang is a senior adviser on Climate Change, Energy, and Environment at the NRDC. He has been involved in Energy and Environmental issues for more than three decades. Mr Yang was the Director of Global Climate Solutions at WWF International from 2008 to 2010. He was vice-president of the Energy Foundation and chief representative of the foundation's office in Beijing from 2000 to 2008. Mr Yang received his PhD in industrial engineering at West Virginia University (US) in 1991 and his BS in physics at Jilin University (China) in 1977. Earlier in his career, Mr Yang worked with the Lawrence Berkeley National Laboratory on China's energy and environmental issues. In 1984, he worked on regional energy planning at Cornell University as a fellow of the World Bank. Before he moved to the United States in 1984, he worked with the Energy Research Institute of the National Development and

Reform Commission in China on renewable and rural energy policy, energy modeling and forecasting, project evaluation, and long-term planning. He has published dozens of papers and reports in those areas.

Dr. Xin LIANG
Email: xinliang@sjtu.edu.cn

Dr. Liang is an assistant professor at SIPA, SJTU. She received her doctoral degree from Hong Kong Polytechnic University, and she received her Master and Bachelor degrees at Peking University. Her research fields include sustainable development, environment and energy policy, and project management. She served as the consultant for China Southern Grid, Guangzhou from 2010 to 2013. Dr. Liang went to the Building Technology and Urban Systems Division, Lawrence Berkeley National Laboratory, CA, USA as a visiting scholar from 2015 to 2016. She is currently carrying out a Shanghai Pujiang Program, studying energy use behavior in public buildings.

Dr. Yungpin LU
Email: yungpin@sjtu.edu.cn

Yung Pin Lu is the Vice-Director of Third-Sector Study Center, and an assistant professor at SIPA, SJTU. Dr. Lu has a PhD in Leadership Studies, and a Master Degree in Business Administration from U.S.A. Dr. Lu has over 10 years of experience in cross cultures in government, profit and non-profit organization sectors. His research focuses on Social Organization, Social Enterprises, leadership, and cross-sector collaboration development.

Dr. Xinlei LI
Email: lixinlei@sdu.edu.cn

Dr. Li Xinlei is an Associate Professor in the School of Political Science and Public Administration, and also the Deputy Director of the Environmental Politics Research Institute at Shandong University. She received her doctoral degree in Environmental Policy Research Centre & Centre for Global Politics, Free University of Berlin, Germany. She specializes in studying energy and environmental policy, with a particular focus on renewable energy policy, climate diplomacy, and transnational municipal climate networks (TMCNs). Currently, she has extended her research interests to transnational river basin governance, water diplomacy, and environmental risk governance.



Assessment
Attendance: 30%
Participation in question discussion: 20%
Group presentation: 40%
Final program summary: 10%

Contact
Program Director: Prof. Junhua ZHANG (junhuazhang@sjtu.edu.cn)
Program Coordinator: Ms. Lin HE (superhelen-@sjtu.edu.cn)



S024

Social Welfare Policies and Practices in Modern China

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Xuhui

Course Description »

Social welfare policies and practices is a mirror of the relationship between state and people. China's social welfare policies have witnessed vast changes in the last 50 years. This course focuses in introducing the dynamic process and revealing the internal logic which will provide a desirable angle for foreign students to understand China, as well as foster their critical thinking with existing frameworks in analyzing Chinese society and policy processes. This course is divided into two major sections, namely 1) the welfare policy introduction and analysis and 2) the welfare policy implementation mechanism analysis. The welfare policies covered include: pension, medical insurance, social assistance, housing, and migrant children welfare.

Highlights »

Through this course, students are able to:

- > Have systematic knowledge about China's social welfare policies.
- > Analyze the implementation processes and agencies of these policies.
- > Use critical thinking as with the applicability and limitation of western frameworks in analyzing China's social welfare policies.

Instructors »

Dr. Fan YANG

Email : fan_yang86@sjtu.edu.cn

Dr. Fan Yang is currently an Assistant Professor at the School of International and Public Affairs at Shanghai Jiao Tong University (SJTU). He is the holder of Shanghai Pujiang Talent Reward and China's Natural Science Foundation project. His research interests are mainly on the mental health of disadvantaged groups, such as left-behind elderly, left-behind children, and the poor. Dr. Yang received his PhD in social work from the University of Hong Kong and was a visiting scholar at the University of Pennsylvania. Apart from academic work, he has also served as a freelancer for an English newspaper, and chaired several government evaluation projects on welfare services. In addition, he has worked as reviewer for several international journals, and published a number of academic articles in both Chinese and English journals.

Prof. Xiaoyi ZHANG

Email : xyzhang@sjtu.edu.cn

Prof. Zhang is the Head of the Department of Public Economics and Social Policy at Shanghai Jiao Tong University, the Director of Shanghai Social Security Research Committee, and the Vice Director of Shanghai Public Administration Research Committee. In her long career within welfare services for the poor and elderly population, Prof. Zhang has won many academic rewards from both Shanghai and China as a whole. She is also chairing some national and World Bank projects. Prof. Zhang has published more than thirty academic articles and several books, she has also chaired over forty research projects. Her major focus is on social protection and long-term care. Currently she is a senior advisory consultant for Shanghai's Bureau of Civil Affairs, and constantly advocates for vulnerable groups in the public media.

Dr. Vivian LOU Weiqun

Email : wlou@hku.hk

Dr. Vivian Lou is an associate professor in the University of Hong Kong (HKU). She is currently the Director of the Sau Po Center of Ageing, a



world-class research hub of gerontology. She is also the Program Director of HKU's Master of Social Science – Gerontology, as well as the Honorary Professor in a number of China's major universities. She has won a number of world-level academic rewards in gerontological studies and got over twenty research scholarships from prestigious foundations and academic institutions. Dr. Vivian Lou has studied widely on family caregiving and its health impacts. Specifically examining the mental health of Chinese family caregivers' in both Shanghai and Hong Kong, this was a pioneering study that generated high impact publications. Recently, Dr. Lou's study extended to examining the positive and/or resilient capacity of the family caregiver in a Chinese context, which includes studying secondary caregivers, social support, and the role of the domestic helper.

Prof. Chenxi HUANG

Email : cxhuang@soci.ecnu.edu.cn

Prof. Huang is a professor and Vice Dean of the School of Social Development in the East China Normal University. He is the Vice Secretary of China's Social Welfare Research Committee, senior research fellow of the East China Normal University – New York University Joint Institute on Social Development, and the Head of Minhang District's Social Worker Association, Shanghai.

He has authored over ten books and more than thirty academic articles. His major interests are on migrant population, poverty reduction, and social

work interventions. Much of his research has generated policy improvements in Shanghai and beyond.

Dr. Fang FU

Email : fufang812@163.com

Dr. Fang Fu is an associate professor of the School of Social Development and Public Policy, and is the Secretary of Medical Social Work Professional Committee. Fu received her PhD degree on Social Work and Social Administration at Hong Kong University in 2013, she also received a scholarship to visit Utrecht University in Netherlands during her PhD study. Meanwhile, she is the visiting scholar at Smith College and Eastern Finland University. She has published more than 10 papers in different international journals, such as *Journal of Loss and Trauma*, *OMEGA: Journal of Death and Dying*, *International Social Work*, etc. She also chaired and participated in research programs of National Social Science Fund, Ministry of Education Fund, Ministry of Civil Affairs Fund and Shanghai policy decision-making consultation.

Dr. Shanshan HE

Email : 34644836@qq.com

Dr. Shanshan He, is an associate professor in the School of Social Development, East China Normal University. He obtained her bachelor degree in Medicine, her master's degree in Psychology and Doctorate degree in Social Work. She often interplays her interests with her research. Research

she has conducted includes domestic violence, health in the social sector, issues related to ageing, and children and women's social welfare...etc. He has published several articles in SSCI journals...e.g., *Journal of Sex Research*, *Violence and Victims*. Recently she has conducted a social work intervention program for first-time mothers by collaborating with the Children's Hospital of Shanghai. She is currently chairing research projects sponsored by the Ministry of Education of China and Shanghai Bureau of Education.

Dr. Yang SHEN

Email : shenyang0118@gmail.com

Dr. Yang Shen did her PhD in Gender Studies at the London School of Economics. She is an assistant professor at the School of International and Public Affairs at Shanghai Jiao Tong University. Her PhD thesis focuses on the gendered experiences of migrant workers within the Chinese service sector. Her current research focuses on housing and intimacy, online dating, migrant housing, and informal settlements in China. Her research interests lie in feminist theories, qualitative methods, contemporary China studies, migration studies, and urban informal settlements. Her academic articles appeared in *China Quarterly*, and *Asia & the Pacific Policy Studies*. She is an ad hoc reviewer for peer-reviewed journals including *Men and Masculinities* and *Chinese Sociological Review*. Dr. Shen is also a script consultant and freelance writer for various media outlets in and outside of China. Her current research is supported by a number of prestigious foundations.

Assessment

Attendance: 30%

Participation in question discussion: 20%

Group presentation: 40%

Final program summary: 10%

Contact

Program Director: Dr. Fan YANG (fan_yang86@sjtu.edu.cn)

Program Coordinator: Ms. Lin He (superhelen-@sjtu.edu.cn)

S025

China Design

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Minhang



Course Description »

China is now a large manufacturing country, and many international brands have factories in China. On the basis of being a manufacturing country, China should step forward towards becoming a manufacturing power. On the basis of simple manufacturing, the country should pay more attention to the power of design. As only design can inject innovative elements into the manufacturing process, enhance the brand influence, and ultimately promote the development of China's manufacturing industry/related industries. Therefore, we hope that through the course "China Design" students will come to understand the development and achievements of design in China. This will be achieved by teaching international advanced design concepts combined with intelligent manufacturing, smart city, digital construction, and other hot spot fields. With this the course aims to show the significance of Chinese design and encourages students to think about the future of design in China.

Highlights »

- > Studying at Shanghai jiao Tong University to experience campus culture and learn Chinese culture.
- > Tours of Shanghai Bund architecture, some design companies and individual studios...etc to allow students to gage a general understanding regarding the development of "China Design".
- > Students from different countries can work together with others and exchange their ideas.
- > We will offer some classes about the Chinese design, Chinese property market and architecture regulation to those who are interested to work in China in the future.

Instructors »

Prof. Wenjun MA
Email: mwj@sjtu.edu.cn
Prof. Ma Wenjun is a Professor of Architecture Department of Design College in Shanghai Jiaotong University. He received his bachelor, master and doctor degrees from Tongji University (Urban Planning), and gained his postdoctoral degree from Fudan University (Applied Economics). His main research fields are urban planning and design, urban development strategy and management, urban programming, and some smart city related fields.

Assessment

Attendance: 20%
Participation in question discussion: 30%
Final program summary: 50%

Contacts

Program Director : Prof. Ma Wenjun (mwj@sjtu.edu.cn)



S026

Sustainable Ecological Design in China

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Minhang

Course Description »

This course aims to introduce sustainable ecological design in China to participants. Key focuses include history, development, current status, and the future of Chinese and Shanghai sustainable ecological design. The course will incorporate the ecological thoughts within traditional Chinese gardens, sustainable ecological theories, sustainable ecological design practice, the application of fauna within sustainable ecological design. Through theory lectures, field trips, case studies, and design practices, students will come to fully understand the sustainable ecological design in China.

Highlights »

- > Field trips to traditional Chinese gardens in Suzhou to understand the ecological thoughts encompassed within traditional Chinese Gardens (The Humble Administrator's garden, Master of Nets Garden...etc.).
- > Field trips of landscape such as the West Lake area in Hangzhou. Through this students will experience the progression of ecological thought from ancient China to modern China.
- > Field trips at Fangta garden, Drunken Bai Pond, and Yu Garden to understand the ecological thoughts entrenched in traditional Chinese gardens in Shanghai. A visit to the Chenshan Botanic garden to learn about sustainable ecological design practice.
- > By the end of this 2-week study experience, students should have a basic knowledge and understanding of the history, theory, and practice, of sustainable ecological design in not only Shanghai but also the rest of China.

Instructors »

Prof. Shengquan CHE
Email: chsqs@sjtu.edu.cn

Professor Che is a doctoral supervisor and the Vice Dean of the School of Design. His research areas include the education and research of landscape ecological planning and design, landscape evaluation and protection, as well as rural landscaping.

Prof. Yun WANG
Email: wangyun03@sjtu.edu.cn

Dr. Wang is an Associate Professor from the School of Design, and the department head of Landscape Architecture. He has a multi-disciplinary background of landscape planning, design and architecture. His research areas are focused on the culture, history and construction of Chinese gardens. He has supervised more than 200 planning and design projects.

Prof. Dongqin TANG
Email: dqtang@sjtu.edu.cn

Dr. Tang is an Associate Professor from the School of Design. She has an interdisciplinary background of botany, biochemistry, and molecular biology. She has hosted many national programs regarding the ecological system of forests, urban forests in Shanghai, flower selection, and the gene cloning of ACS.

Dr. Dan CHEN
Email: danchen.gator@sjtu.edu.cn

Dr. Chen obtained her Ph.D. in Landscape Architecture from the University of Florida. She is in charge of undergraduate courses including preliminary design, landscape planning and design. Her major research areas are ecosystem planning, ecological protection and restoration.

Dr. Bingqin YU
Email: yubingchin1983@sjtu.edu.cn

Dr. Yu is a visiting scholar from the TU Berlin. Her research fields are theoretical research and practical sponge cities, urban community's ecological recreation, planning and design of an ecological community, Western modern history and the practice of landscaping.

Assessment

Attendance and daily score: 20%
Group presentation: 50%
Final program summary: 30%

Contact

Program Director : Prof. Yun Wang (wangyun03@sjtu.edu.cn)
Program Coordinator: Dr. Dan Chen (danchen.gator@sjtu.edu.cn)

S027

Green City Green Future

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Xuhui



Course Description »

This course aims to provide the student with an understanding of the environmental and resource implications of urban planning and construction within the context of green development. It discusses the cause and impact of climate change, and the issues of how modern urban development can mitigate or react to such impacts. It also considers the theoretical and methodological basis of approaches to justify various design choices made at different stages of urban development. On the practical side, it also introduces state-of-the-art green technologies, and tools that may contribute to the sustainable development through several visits to exemplar projects or the engagement of hand-on activities.

The course is open to students from various background and levels. A broad course coverage was designed which is embedded in a PROJECT based exercise. Multiple novel delivery methods will be employed including specialist seminars, technical visits, work exhibition, and interactive debates with professionals. It has been proven that this type of project-based delivery method has incredibly helped students understand the key contents around the main subject. In order to enhance students' learning experience during the course, a Buddy scheme will be arranged where each international student will be allocated with a local student acting as a buddy. Buddies will provide assistance for both study and living in Shanghai.

Highlight »

- > First class delivery team comprising world class academics and industrialists with rich global experience in the subject area.
- > A well-mixed delivery method including class-teaching, virtual reality simulation, site/office visits, group project, and hand-on activities.
- > A visit to the world's second highest building, the highest LEED platinum project, Shanghai Tower located in Shanghai.
- > A visit to the world's first 3D printing building Winsun located in Suzhou.
- > An experience of interviewing the project management team of Shanghai Disney Project, one of the world's most complicated projects.
- > Two site visits, i.e. an off-site construction project and an award winning green building.
- > Tours of Shanghai city and its municipal construction together with a visit to the Shanghai Construction Museum.
- > An experience of working on a real life global project mentored with the practitioners of global consultancy company in Shanghai.
- > Have social networking activities with the Students/Graduates/Chartered Members of ICE (the largest learned society in Civil Engineering in the world) in the region near Shanghai.

Instructors »

Prof. Jian YANG

Email: j.yang.1@sjtu.edu.cn

Prof. Jian Yang, Deputy Head in the Department of Civil Engineering at Shanghai Jiao Tong University. Yang has over 15 years of experience in teaching, research and consultancy at various universities/-companies, most of which were from the UK. He is one of the youngest Fellow of Institute of Civil Engineers (ICE) and a chartered member of the Institute of Structural Engineers (MIStructE). He serves on several international and national professional committees, e.g. UK Concrete Society, IStructE, ICE and Chinese Ceramic Society. Yang also sits on the editorial board for the Magazine of Concrete Research, Glass Structures and Engineering, the Journal of Civil Engineering and Architecture. In his present role, he is leading a team mainly focusing on the research in the field of sustainable construction materials and novel structural systems including

recycled concrete, and other newly emerging construction materials such as integrated structural and functional glass. He is also researching the Modern Method of Construction including PC and 3D modular steel constructions. In 2016, he was awarded as one of the '10 Kaiyuan Lecturers'.

Prof. Charalampos Baniotopoulos

Email: C.Baniotopoulos@bham.ac.uk

Prof. Baniotopoulos (LB) is Professor and Chair of Sustainable Energy Systems, School of Engineering, University of Birmingham, UK. He is also a Visiting Professor at the Taylor's University, Malaysia and Honorary Professor at JUST, Jordan. He is the head of the group of Structural Engineering lecturing in the graduate and post-graduate program of Civil Engineering courses. During 1998 to 2014, LB was Full Professor and Director of the Institute of Metal

Structures, School of Civil Engineering, at the Aristotle University of Thessaloniki. He acted also as Head of that School from 2006 to 2008 and 2008-10 respectively. He has been Alexander von Humboldt (AvH) Visiting Professor at the Leibniz University Hannover, Germany (2011), HCM Visiting Fellow at the JRC-Ispra, Italy (1993-94) and AvH Research Fellow at the TU Aachen, Germany (1987-88). He acted as member of Management Committees of several COST Actions of Urban Development (1996 to date) and Chair of the COST Action TU1304 (2014-2018). He coordinated as project leader more than 50 research projects funded by national and international research organizations, and the private sector (industry). He is the author or editor of 18 engineering books and author/co-author of more than 300 scientific papers in international peer-reviewed journals and conference proceedings.

Prof. Jamal Khatib

Email: jmkhatib@yahoo.com

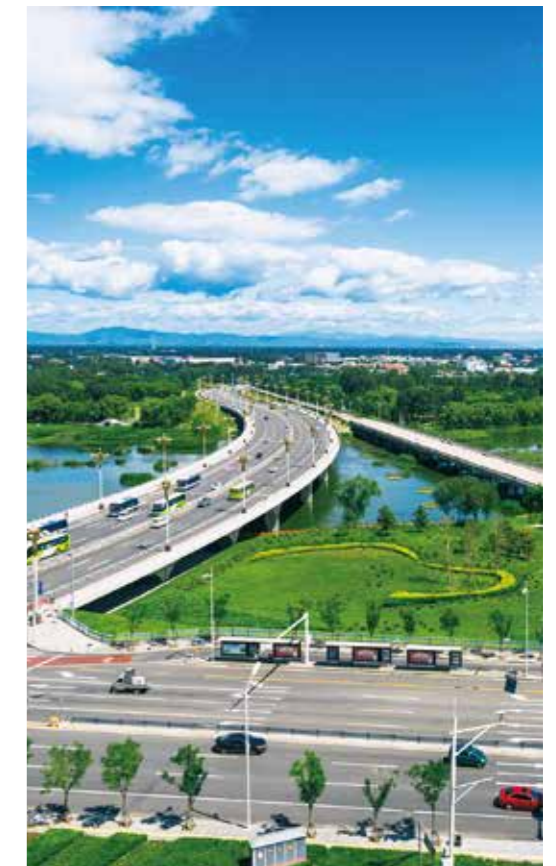
Prof. Khatib is presently the Professor of Civil Engineering (Sustainable Construction Materials), Faculty of Science and Engineering at the University of Wolverhampton (UoW) - UK. He was awarded the 'Shanghai Foreign Expert' in 2015 and is now a visiting professor in SJTU. His research areas mainly fall in the area of sustainable construction materials. The products of his extensive research activities have been comprehensively disseminated through:

over 250 refereed academic journal & conference papers; text books, research seminars and workshops; articles and features in the construction press. He sits on the technical committees of many international research conferences. He is an Editorial Board member of four academic Journals and an Associate Editor for the Journal of Emerging Trend in Engineering & Applied Sciences.

Mr. Gonzalo Ortega Barnuevo

Email: gobar@osaspain.com

Mr. Barnuevo is the Director of OSA Spain. He is a chartered Architect with over 25 years architectural design experience, resulting in over 100 design projects. One of his key design philosophys is to design buildings passively, where natural resources can be fully utilized. His work has won numerous awards both internationally and nationally.



Assessment

Attendance and professionalism: 40%

Project presentation and Q&A: 40%

Innovation/critical comments: 20%

Contacts

Program Director : Prof. Jian Yang (j.yang.1@sjtu.edu.cn)

Program Coordinator: Dr. Bai Li (baili888@hotmail.com)

S028

Green Technology for Environmental Pollution Control

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Minhang



Course Description »

Environmental pollution control using green technology is one of the sustainable ways, which could not only solve pollution, but also save energy and resources. The course uses multidisciplinary theories and methods to expound the relationship, connotation and principles between environment and sustainable development. To interpret the relationship between economic and social development with environmental protection, energy conservation and emissions reduction, China will be chosen as the case study, as the most populous and rapid urbanization

process country. The development process of water resources, waste sector, soil reclamation, and air pollution control will be introduced in detail, and students will then understand the core factors that caused the shift from the industrial civilization development model to the modern ecological civilization. Students in this course should be devoted in the lessons, including group discussion, study tour, and listening and answering questions. All of students have a chance to give a presentation on a certain topic in class.

Instructors »

Prof. Xinde CAO
Email: xdcao@sjtu.edu.cn

Xinde Cao is a Professor of Environmental Chemistry and Director of Institute for Contaminated Site Remediation at Shanghai Jiao Tong University. His research interest includes:

1. The characterization and remediation of contaminated sites.
2. Biochar-based C sequestration and its eco-environmental effect.
3. The development and application of solid waste-derived functional materials for environmental remediation.
4. Metal speciation, bioavailability, and human health.

Highlight

- > Half day tour of Laogang solid waste treatment base.
- > Half day tour of Qingcaosha drinking water reservoir.
- > One day tour of Chongming island.

Assessment

Attendance: 15%
Participation in question discussion: 20%
Visit report: 30%
Final program summary: 35%

Contact

Program Director : Prof. Xinde Cao (xdcao@sjtu.edu.cn)



S029

China's Urban Forest and Ecosystem Monitoring

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Minhang

Course Description »

This course focuses on urban forest and urban ecosystem monitoring with an interdisciplinary approach to examining China. Through seminars, field trips, and other activities, students have the opportunity to experience the important role of urban forest development and in-situ monitoring for a mega-city. The course covers the following areas: Lectures on Urban Forest and the Urban Ecosystem, Shanghai urban forest case studies, including field trips to visit Shanghai Urban Forest Research Station (Zhongshan Park Site, Jinhai Wetland Park Site, Chongming Island Park), country

parks, and botanical gardens. Research practices, including recognizing different species of plants and monitoring environmental factors such as air pollutants, meteorological indicators, air-ecosystem exchange factors, and traditional cultural activities including Chinese paper cutting, Chinese knotting, farm plucking, and calligraphy. Students can then come to understand not only Shanghai's, but also China's urban forest and urban ecosystem, through the theoretical courses, field trips, and practical research.

Highlights »

- > 5-7 lectures from distinguished experts to share their latest research results on urban forest.
- > 2-3 days field trips to the Shanghai Urban Forest Research Station, country parks, and botanical gardens.

- > Group research experience with Ph.D. students.
- > Cultural trips during weekend to experience the local culture.
- > By the end of this 2-week study, students should have basic knowledge and understanding of urban forest.



Instructors »



Professor Chunjiang LIU
Email: chjliu@sjtu.edu.cn

Professor Chunjiang Liu is a member of the academic committee in SJTU and Director of Shanghai Urban Forest Ecosystem Research Station. He is the Vice Director of SJTU Research Centre for Low-Carbon Agriculture, a member of the science board of Shanghai Administration Department of Afforestation and City Appearance, a member of Ecological Society of Shanghai, a finalist of the Shanghai Pujiang Talents Scheme, and a part-time professor at the University of Helsinki.



Associate Prof. Shan YIN
Email: yinshan@sjtu.edu.cn

Shan YIN is an associate professor at School of Agriculture and Biology, SJTU. He received his PhD at Shanghai JiaoTong University, and is now Vice Director of Shanghai Urban Forest Research Station. He was a visiting scholar at the California State University at Berkeley. His research interests include the ecology of urban forests, the biogeochemical cycle, and model application.



Professor Markku Kulmalai
Email: markku.kulmala@helsinki.fi

Professor Markku Kulmala is a foreign academic in the Chinese Academy of Sciences, a member of the Academia Europaea, and is also apart of the Finland Academy of Sciences. He is a world leader in atmospheric aerosol science and a founder of "terrestrial ecosystem meteorology," a new wide perspective interdisciplinary field addressing theoretical and experimental physics, atmospheric chemistry, observational meteorology, and biophysics. Professor Kulmala's research focus is on atmospheric aerosol science, and biosphere-aerosol-cloud-climate interactions.



Professor Bing WANG
Email: wangbing@caf.ac.cn

Bing WANG is a professor at Chinese Academy of Forestry, Wang is the chief expert in the long-term observation and simulation of key processes in ecosystems, Director of Chinese Forest Ecosystem Research Network, and Director of Dagangshan Forest Ecosystem National Science Observation Research Station. His research interests include long-term observation and simulation of key processes in ecosystems and Forest ecosystem services.



Prof. Gaofeng WANG
Email: gwang@clemson.edu

Gaofeng Wang is a tenured professor at Clemson university, School of Agriculture, Forestry and Environmental Sciences. He is a member of the

Assessment

Attendance: 30%
Participation in discussion: 20%
Group presentation: 40% (15 minutes each group)
Final program summary: 10% (more than 500 words)

Contact

Program Director: Dr. Shan YIN (yinshan@sjtu.edu.cn)
Program Coordinator: Mr. Ningxiao SUN (nxsun@sjtu.edu.cn)



Chinese Ecological Society, the American Ecological Society, the American Forest Society, and the Chinese Forest Society. He has received the distinguished leadership and personal achievement award from the White House conference on cooperative conservation of resources. His research interests include forest ecology and forest cultivation.



Prof. Francesco N. Tubiello
Email francesco.tubiello@fao.org

Professor Francesco N. Tubiello is an international expert in agriculture, agriculture data analysis, and capacity development, with a focus on climate change, food security, adaptation, and mitigation solutions. As an IPCC lead author, he has over twenty years experience in formulating, managing and implementing policy relevant research, in academia, international agencies and the private sector.



Prof. Martin Romantschuk
Email martin.romantschuk@helsinki.fi

Professor Martin Romantschuk received his PhD at the University of Helsinki. His post-doctoral period at Oregon State University was on molecular biology and electron microscopy. Professor Martin's research interests include molecular biology of plant microbe interaction and bioremediation and microbiology of soil contaminated with organic contaminants. In addition to the above, he is currently involved in developing microalgal production of high value products for use in food as well as in cosmetics, and possibly for pharmaceutical purposes.

SESSION A

S0210

Knowing Satellite by Cubesat

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Minhang

Course Description »

Currently, Cubesat with a 10 cm cube (10×10×10 cm³) and a mass of up to 1.33 kg has become the lowest cost turnkey access to Space, which has become the most popular educational tool or low cost technology demonstration platform that could be developed and launched within a short period. The course aims to train participants to study space technology and satellite engineering by Cubesat technology. Satellite engineering practice will be the basic baseline of the course. In the course, the professional satellite engineer will serve as an instructor to share satellite engineering experiences.

Participants have the opportunity to experience the process beginning from the practical design, assembly, integration, and test of satellites. Students will also learn how to operate and control the satellite via being shown in a Satellite Station. Meanwhile the course will give the chance to explore and discuss New Space technologies, and carry your innovation invention or idea into future real space missions. The course will provide an opportunity for participants to understand the satellite, inspire more interest in space, and explore the new space technologies.

Instructors »

Prof. ShuFan WU
Email: shufan.wu@sjtu.edu.cn

Dr. Shufan Wu is currently the Chair Professor at SJTU and Director of The Smart Satellite Technology Centre (SSTC). Wu mainly focuses on micro/nano satellite technologies and applications. On Sept 25th 2015, his team launched 3 Cube Satellites, called STU-2 mission or TW-1 mission, from Jiuquan, China, as the first bunch of CubeSats in China, targeting CubeSat technologies and application for Earth observation and marine/air traffic monitoring. Before joining SJTU, he worked for the Shanghai Engineering Centre for microsatellites for 4 years, he was also with the European Space Research and Technology Centre in the Netherlands for 11 years, he spent an additional 3 years at the Surrey Space Centre in UK for, and 2 more years at the TU Braunschweig in Germany. He served also as associate and full professor at the Nanjing University of Aeronautics and Astronautics (NUAA) for 6 years after his PhD program from NUAA. He is an associate fellow with the AIAA (American Institute of Aeronautics and Astronautics).

Dr. ZhongCheng MU
Email: muzhongcheng@sjtu.edu.cn

Dr. ZhongCheng Mu, senior satellite system engineer, is currently with the Shanghai Jiao Tong University (SJTU), School of Aeronautics and Astronautics, as an associate researcher and the member of Smart Satellite Technology Centre (SSTC). Mu graduated from the Harbin Institute of Technology in China, has since published 15 papers and 4 patents. As the system engineer he attended the STU-2 Cubesat project, which was launched successfully into the orbit on Sep. 25. 2015, as the first networking CubeSat mission in China. Meanwhile at the end of 2014 he was awarded the title of Shanghai science and technology talent. He has finished three research projects for the micro/nano-satellite technologies. Currently he is in charge of an intelligent satellite mission, which is scheduled to launch at the beginning of 2018.

Highlight »

- > A real satellite will be used during the course.
- > An opportunity to explore new space technologies, and carry your innovation invention or idea into the future real space missions.
- > A chance to operate and control the satellite via a Satellite Station.
- > General engineer of a Satellite mission will be the main instructor, some key engineering experiences will be shared.

Assessment

Attendance: 15%
Participation in question discussion: 20%
Visit report: 30%
Final program summary: 35%

Contact

Program Director: Prof. ShuFan Wu
(shufan.wu@sjtu.edu.cn)
Program Coordinator: Dr. ZhongCheng Mu
(muzhongcheng@sjtu.edu.cn)
Program Coordinator: QianWu
(wuqian18@sjtu.edu.cn)

S0211

Chinese Traditional Exercise and Health

Duration:
2019.7.11-2019.7.26
(2 weeks)

Campus:
Minhang

Course Description »

This course aims to introduce history, basic principles, basic methods, the philosophy of Chinese traditional exercise, and reviewing the evidence of using Chinese traditional exercise in improving well-being, the prevention and treatment for metabolic diseases, musculoskeletal diseases, anxiety, depression, mood and cognitive functioning. Meanwhile, through the system of technical teaching and practice, the students can master some typical Chinese traditional exercise, such as Tai Ji, Kungfu and Ba Duan Jin.

Highlight »

- > Tours of Chinese Martial Arts Museum.
- > Sharing ideas with a master of Chinese traditional exercise, and experience delicate Oriental culture.
- > By the end of this 2-week study experience, students should have basic knowledge and understanding of the history, philosophy, and future of urban horticulture in Shanghai and in China.
- > Practice and learn Chinese traditional exercise with the masters, and master at least one typical Chinese traditional exercise.

Instructors »

Prof.Sulin CHENG

Email: sulin.cheng@sjtu.edu.cn

Dr. Cheng is a Professor at Shanghai Jiao Tong University, and a professor of Health Science and Technology at the Faculty of Sports and Health Sciences, University of Jyväskylä, Finland. Dr. Cheng's research spans a wide range of disciplines including body composition, physical activity, nutrition, public health, endocrinology, physiology and genetics. Dr. Cheng has conducted several multidisciplinary and multi-center projects in Finland, USA, and China in the field of body composition related health and technology issues spanning from childhood to old age. She also has conducted several exercise, dietary, and drug interventions in patients with metabolic diseases such as metabolic syndrome, obesity, sleep disorder, prediabetes, diabetes, and non-alcoholic fatty liver disease. She has given lectures related to Chinese traditional medicine and exercise.

Prof.Zuohui WEN

Email: wzhwushu@163.com

Professor Zuohui Wen is a former director of Department of Wushu at Chengdu Institute of Physical Education. Professor Wen is a Chinese Wushu Eight paragraphs, and an International A-level martial arts referee. Now as Deputy Director of the Chinese Wushu Association's referee Committee, a member of the martial arts branch of the Chinese Academy of Physical Education, members of the qualification appraisal Group of Sichuan Sports Science Professors, a vice chairman of Sichuan Province and Chengdu Wushu Association. She was awarded as "National Wushu Outstanding Referee" by the State Administration of Sport during 1997-2001, an "Excellent Referee in the Sichuan province" in

1998, and twice awarded by the State Sports administration of Wushu Management Center as one of the "National Top Ten Referees".

Prof.Dinghai YU

Email: 13601622424@126.com

Professor Dinghai Yu is a Chinese Martial Arts Nine paragraphs, Chinese Fitness Qigong Nine Paragraphs, and Martial Arts National Referee, Fitness Qigong national referee. He is a Shanghai Institute of Physical Education level two professor, a former director of Scientific Research Department of Shanghai Institute of Physical Education, Dean of Wushu Academy, and a curator of The Chinese Martial Arts Museum. Currently, Professor Yu is the Director of the Scientific Research Committee of China Health Qigong Association. He has chaired more than 30 projects including the World Health Organization (WHO) research project, the National Natural Science Foundation project, and the National Social Science Fund project. He has more than 60 national and international publications, and more than 20 national textbooks. He won the 2008 and 2013 China Sports Science Society Science and Technology Progress Second Prize, and the 2006 and 2009 Shanghai Science and Technology Progress Award, as well as the National Sport Administration teaching Achievements second-class award". Professor Yu has been the International Martial Arts Competition and the International Fitness Qigong Competition General Referee and Arbitration Director. He has been invited to the United States, Canada, Britain, France, Germany, the Netherlands, Switzerland, Australia, New Zealand, Japan, Korea, Mexico, Cuba, Taiwan and 20 more other countries to teach Taijiquan and fitness Qigong.

Assessment

Attendance: 15%
Participation in question discussion: 30%
Demonstration: 20%
Final program summary: 35%

Contact

Program Director : Prof. Sulin Cheng
(sulin.cheng@sjtu.edu.cn)
Program Coordinator: Dr. Xiaowei Ojanen
(xiaowei.ojanen@sjtu.edu.cn)

S031

Machine Intelligence and Robotics

Duration:
2019.7.11-2019.8.2
(3 weeks)

Campus:
Minhang

Course Description »

This course, Machine Intelligence and Robotics, aims to provide both an overview and practical experience regarding artificial intelligence, specifically its applications on robotics, as well as on manufacturing processes. In this course, theory and methods for machine learning, robotics, and networks with multi-agents will be given. Together with practical courses on industrial automation systems programming and intelligent robotics, students will be able to gain a range of theoretical and practical skills necessary to develop real intelligent systems. The summer course will provide a good opportunity to network with people working in the field, meet prominent researchers, share best practices, and to establish contacts through social interactions that may lead to research collaborations in the future.

Highlights »

- > The students will have the chance to study theoretical knowledge as well as apply algorithms to real systems.
- > Hand-on labs for programming industrial control systems and robotics, including Institute of Pattern Recognition and Image Processing, Autonomous Robot Lab, Center for Intelligent Wireless Networking, all of which belong to the Key Laboratory of Ministry of Education. The students will explore these top Chinese labs by visiting, colloquia, and be part of potential joint projects.
- > Tours for intelligent industrial companies in Shanghai, including Tencent, Rockwell Automation, Siemens AG, Huawei, and Hikvision, which cover artificial intelligence and applications in modern industry.



Instructors »

Prof. Jie YANG
Email: jieryang@sjtu.edu.cn

Prof. Jie Yang director of Image Processing and Pattern Recognition Institute, Shanghai Jiao Tong University. He received his Ph.D. degree on computer science from the University of Hamburg, Germany. He has led many research projects (e.g., National Science Foundation, 863 National High Tech. Plan), has one book published in Germany, and 5 monographs. He has published more than 300 SCI papers and obtained six provincial and ministerial level achievement awards.

Prof. Yuemin ZHU
Email: yue-min.zhu@insa-lyon.fr

Prof. Yuemin Zhu is a permanent Research Director of the CNRS (Centre National de la Recherche Scientifique) of France. He received his B.Sc. degree in telecommunication in 1982 from Huazhong University of Science and Technology (HUST), China, M.Sc. degree in 1984 and Ph.D. in 1988 from the INSA, Lyon, France. He obtained the "Habilitation à Diriger des Recherches" in 1993, France. He received The French National Center for Scientific Research (CNRS) lifelong researcher, the French National Institute of Applied Sciences Professor Yue-min Zhu. He obtained the French National Outstanding Scientific Research Award in 2010 and 2014, and the French Knight Medal in January 2016.

Prof. Hesheng WANG
Email: wanghesheng@sjtu.edu.cn

Prof. Hesheng Wang received his Ph.D. degree in Automation & Computer-Aided Engineering from the Chinese University of Hong Kong, Hong Kong in 2007. From 2007 to 2009, he was a Postdoctoral Fellow and Researcher Assistant in the Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong. He joined Shanghai Jiao Tong University as an Associate Professor in 2009. Currently, he is a Professor of Department of Automation, Shanghai Jiao Tong University, China. He worked as a visiting profes-

sor at University of Zurich in Switzerland. His research interests include visual serving, service robot, robot control and computer vision. He was a recipient of Shanghai Rising Star Award in 2014 and was awarded Outstanding Youth Foundation from NSFC in 2017.

Associate Prof. Xiaolin HUANG
Email: xiaolinhuang@sjtu.edu.cn

Dr. Xiaolin Huang received his Ph.D. degree from Tsinghua University in 2012. From 2012 to 2015, he worked as a postdoctoral researcher in KU Leuven, Belgium. After that he was selected as an Alexander von Humboldt Fellow and working in Pattern Recognition Lab, the Friedrich-Alexander-University Erlangen-Nuremberg, Germany, where he was appointed as a group head. From 2016, he has been an Associate Professor at Shanghai Jiao Tong University, Shanghai, China. In 2017, he was awarded the "1000-Talent" (Young Program).

Associate Prof. Jianping HE
Email: jphe@sjtu.edu.cn

Dr. He received his Ph.D. degree in Control Science and Engineering at Zhejiang University, China, in 2013. Since then, he has been a research fellow in Communication Networks Lab (CNLAB) at The University of Victoria, Canada. He is now an Associate Professor at Shanghai Jiao Tong University. In 2018, he was awarded as "1000-Talent" (Young Program).

Associate Prof. Xiang YIN
Email: yinxiang@sjtu.edu.cn

Dr. Yin received a Ph.D. degree in Electrical Engineering Systems at the University of Michigan, 2017. Since then, he joined the Department of Automation, Shanghai Jiao Tong University in 2017, where he is currently an Associate Professor. In 2018, he was awarded as "1000-Talent" (Young Program).

Associate Prof. Yu QIAO
Email: qiaoyu@sjtu.edu.cn

Dr. Yu Qiao received his Ph.D. degree from National University of Singapore in 2004. Since 2010, he has been an Associate Professor at Shanghai Jiao Tong University. His research topics cover artificial Intelligence and intelligent instruments. He received a "Certificate of Merit" from the Radiological Society of North America (RSNA).

Associate Prof. Wenbin DAI
Email: w.dai@sjtu.edu.cn

Dr. Wenbin Dai is an Associate Professor at Shanghai Jiao Tong University, China. He received his PhD in

Electrical and Electronic Engineering at the Department of Electrical and Computer Engineering, the University of Auckland, New Zealand in 2012. He was a Postdoc Fellow at Lulea University of Technology, Sweden from 2013 to 2014. He was also a software engineer from Glidepath Limited – a New Zealand based airport baggage handling system provider from 2007 to 2013. His research interests are IEC 61131-3 PLC, IEC 61499 function blocks, industrial cyber-physical systems, semantic web technologies in industrial automation and industrial software agents.

Assistant Prof. Yue GAO
Email: yuegao@sjtu.edu.cn

Dr. Yue Gao received her Ph.D. degree for Computer Science from Cornell University in 2016. After that she joined Shanghai Jiao Tong University as an Assistant Professor. Her research lies at the intersection of artificial intelligence, machine learning, and how it can affect computing and robotics.



Assessment

Attendance: 20%
Lab report and Assignment: 40%
Final Project Presentation: 40%

Contact

Program Director: Prof. Jie Yang
(jieryang@sjtu.edu.cn)
Program Coordinator: Associate Prof. Xiaolin Huang
(xiaolinhuang@sjtu.edu.cn)

S032

Reversing Climate Change

Duration:
2019.7.11-2019.8.2
(3 weeks)

Campus:
Xuhui

Course Description »

The course will start from the Earth's history and the basic Earth processes of heat flux, balance, atmospheric and ocean circulation, heat storage and carbon flux, causes and history of global climate change. The course will also summarize the anthropogenic CO₂ contributions from developing agriculture, deforest, industries and metropolitan cities. A review will also be included of existing zero-CO₂ emission technologies of renewable electricity, fuel, heat, and agriculture. The course will aim to inspire students to find innovative technologies for removing CO₂ in air, soil, oceans, and discuss strategies for the future.

Highlight »

- > Learn the history of the Earth and its basic processes.
- > Learn the histories of climate change, causes and processes.
- > Understand the relationships between populations, socioeconomics, science and technologies, environment and climate.
- > Learn zero CO₂ release technologies of renewable energy and agriculture.
- > Learn CO₂ removal methods in air, soil and oceans.
- > Our responsibility and action.

Instructors »

Prof. Mark Huntley

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Mark Huntley achieved his PhD in Biological Oceanography at the Dalhousie University in 1980. He is currently a Research Biologist at the University of Hawaii Hilo (2015-present), a Visiting Scholar in Biological and Environmental Engineering and Department of Animal Sciences at Cornell University (2011-present), and also an Adjunct Professor at the Nicholas School of Environment, Duke University (2013-present). Dr. Huntley served on the faculty at Scripps Institution of Oceanography, UCSD (1982-1998) and the Department of Oceanography, University of Hawaii, Manoa (1998-2011). His research career has focused on studying the impact of climate change on marine ecosystems and on

the development of algal biotechnology for biofuel production and climate change mitigation. He has published >80 peer reviewed articles and several patents. He has led two companies: Aquasearch (1988 -2002), which developed astaxanthin as a human nutritional supplement, and Cellana (2007-2011), a \$100 million joint venture with Royal Dutch Shell that developed and demonstrated algae biofuel and co-product production at the highest rates reported to date. He has served as PI of the Cornell Marine Microalgae Biofuels Consortium (2009-2015) and Co-PI of the Marine AlGae Industrialization Consortium, MAGIC (2015-present), both projects funded by the US Department of Energy.

Assessment

Attendance: 20%

Participation in question discussion: 40%

Final report: 40%

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