INTERNATIONAL SUMMER/WINTER PROGRAMMES (i-SP)

IMPORTANT NOTE
Before applying for any summer/winter programme, read the GRO website for important information on:
- General Eligibility Requirements and Application Process
- Module Mapping and Financial Aid
- Visa Application, Travel Advisories and Student Insurance

Peking University Globex Julmester Program 2023
(Updated as of February 2023)

Host University Website: https://globex.coe.pku.edu.cn/
Programme Location: Beijing, China
Programme Dates: 3 – 21 Jul 2023
Application Deadline: 15 April 2023
No. of Placements: Unlimited

ESTIMATED COST OF PARTICIPATION

<table>
<thead>
<tr>
<th>1</th>
<th>Programme Fee</th>
<th>CNY12,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Students may choose up to two courses (3-6 PKU credits).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Projected Expenditure</th>
<th>Item</th>
<th>Estimated Cost (CNY)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Registration fee (non-refundable)</td>
<td>CNY 300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Programme/tuition fee</td>
<td>CNY 12,000</td>
</tr>
</tbody>
</table>

Please take note of the programme refund policy at https://globex.coe.pku.edu.cn/studenthandbook/globexfaq/index.htm

<table>
<thead>
<tr>
<th>3</th>
<th>Financial Aid</th>
<th>As a participant of this programme, you are eligible to apply for:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- NASA Enhancement Bursary <em>(Singapore Citizens only)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- China Initiatives Steering Committee Funding <em>(Singapore Citizens &amp; PRs only)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Overseas Student Programme Loan <em>(Singapore Citizens only)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- PSEA Fund Withdrawal <em>(Singapore Citizens only)</em></td>
</tr>
</tbody>
</table>

PROGRAMME DETAILS

<table>
<thead>
<tr>
<th>4</th>
<th>Academic Content</th>
<th>PKU College of Engineering (COE) offers the Globex Julmester Programme which welcomes worldwide students from all disciplines of study. To enhance students' global and professional experience. Globex offers courses that focus on: 1) engineering &amp; science, 2) innovation &amp; entrepreneurship, and 3) China economy &amp; culture.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Engineering and science generate new knowledge and skills for society to advance and prosper. To convert into useful products, the acquired knowledge and skills need to be commercialized through innovation and entrepreneurship.</td>
</tr>
</tbody>
</table>
Globex offers students an opportunity to study China and its culture from engineering perspective.

Globex students can select 1 or 2 courses (3-6 credits) from the various themes. Details of academic content is available at [https://globex.coe.pku.edu.cn/globexcourses/syllabus/index.htm](https://globex.coe.pku.edu.cn/globexcourses/syllabus/index.htm) and in the brochure attached at the end of this information sheet.

<table>
<thead>
<tr>
<th>5</th>
<th>Eligibility Requirements</th>
<th>NUS' generic eligibility requirements apply, please see GRO website for details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Accommodation</td>
<td>Refer to the <a href="https://globex.coe.pku.edu.cn/globexcourses/syllabus/index.htm">host university website</a> for the accommodation arrangements. Should university-arranged accommodation not be available, you will be responsible for securing your own accommodation.</td>
</tr>
</tbody>
</table>
| 7 | Application Procedure   | • Apply in [NUS Education Records System (EduRec)](http://register.pkuglobex.cn/member/login.php) in order to proceed with module mapping, submission financial aids application.  
• Apply concurrently for the summer programme directly with PKU COE at [http://register.pkuglobex.cn/member/login.php](http://register.pkuglobex.cn/member/login.php). Please use NUS email address for the application.  
• Final acceptance to the summer programme is decided by PKU COE Globex Office. |
| 8 | Module Mapping          | Students interested in obtaining credit can start the module mapping process after applying and accepting the offer for the programme in EduRec. Module mapping request is subjected to approval from the Faculties. Click [here](http://register.pkuglobex.cn/member/login.php) for a step-by-step guide on applying for module mapping. Also note the following:  

Students may map up to a maximum of 10 MCs for each Summer Programme and up to a maximum of 5 MCs for each Winter Programme. Module mapping will be subject to approval from the respective Faculties/Schools.  

A total of 12 MCs from a maximum of 2 overseas summer/winter and research programmes can be mapped without having to pay NUS tuition. Additional MCs mapped will be subjected to Special Term fees. For details, visit the [Registrar’s Office website](https://globex.coe.pku.edu.cn/globexcourses/syllabus/index.htm). |
| 9 | Visa Application        | Successful applicants will receive an admission package which include JW202 Form and Admission Notice for visa application. [https://globex.coe.pku.edu.cn/studenthandbook/globexfaq/index.htm](https://globex.coe.pku.edu.cn/studenthandbook/globexfaq/index.htm)  

You will require X2 visa to enter the China and participate in this programme. The documents you require for your visa application will be provided after the host university accepts you and you have paid the programme fee.  

For information on visa application in Singapore, please refer to [https://www.visaforchina.cn/SGP2_EN/](https://www.visaforchina.cn/SGP2_EN/) |
<table>
<thead>
<tr>
<th></th>
<th>Travel Advisories</th>
<th>Visit the <a href="https://mfa.gov.sg">MFA website</a> for travel advisories on various countries/regions from the Singapore government.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Student Insurance</td>
<td><a href="https://www.nus.edu.sg/studentlife/travelinsurance">NUS Student Travel Insurance</a> is provided for your participation in this programme.</td>
</tr>
</tbody>
</table>
| 12| Contact Information| Questions about the programme? Contact the host university at: [globex@pku.edu.cn](mailto:globex@pku.edu.cn)  
Questions specific to NUS GRO? Contact us at: [global@nus.edu.sg](mailto:global@nus.edu.sg) |
2023 GLOBEX PROGRAM AT PEKING UNIVERSITY, CHINA

The Globex at the College of Engineering, Peking University is a professional mobility program with a worldwide exchange of students from all disciplines of study. To enhance students’ global and professional experience, Globex offers courses that focus on: 1) engineering & science, 2) innovation & entrepreneurship, and 3) China & globalization. Engineering and science generate new knowledge and skills for society to advance and prosper. To convert into useful products, the acquired knowledge and skills need to be commercialized through innovation and entrepreneurship. Societies everywhere are being profoundly impacted by China, as it grows to become the world’s largest economy. Globex offers students an opportunity to study China and its culture from engineering perspective. Globex students can select courses up to 6 credits from the various themes.

ONLINE APPLICATION DEADLINE AND TUITION PAYMENT DEADLINE

Registration must be done at http://globex.coe.pku.edu.cn and requires a compulsory payment of RMB 300.

Online Application Deadline: April 15, 2023
Tuition and Other Fee Payment Deadline: April 30, 2023

PROGRAM START-END DATES

Registration
June 30, July 1, 2023

First and last day of class
July 3, 2023 – July 21, 2023

Final exams
July 21 or July 22, 2023

Field trip and tour (optional)
Pre- & Mid-Globex Beijing Tour: July 1-2 / July 8, 2023
(To participate in the Pre-Globex tour on July 1-2, students need to arrive in Beijing on June 30, 2023)
After-Globex Tour: July 23 - 27, 2023

PROGRAM WEBSITE & CONTACT INFORMATION

Globex Website: http://globex.coe.pku.edu.cn/
Email Inquiry: globex@pku.edu.cn
<table>
<thead>
<tr>
<th>NO.</th>
<th>CATEGORY</th>
<th>COURSE (3 CREDITS)</th>
<th>INSTRUCTOR</th>
<th>ORGANIZATION</th>
<th>CLASS TIME MON-FRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Engineering &amp; Science</td>
<td>Machine Learning Algorithms: From Math to Code</td>
<td>WANG Ruye</td>
<td>Harvey Mudd College, USA</td>
<td>AM [9-12]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>机器学习算法：从数学到代码</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>Engineering &amp; Science</td>
<td>Intelligent Manufacturing and Service Systems</td>
<td>Andrew KUSIAK</td>
<td>The University of Iowa, USA</td>
<td>AM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>智能制造与服务系统</td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>Engineering &amp; Science</td>
<td>Simulation Methods for Optimization and Learning</td>
<td>Bernd HEIDERGOTT</td>
<td>Vrije Universiteit, Amsterdam, The</td>
<td>AM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>优化与学习模拟方法</td>
<td></td>
<td>Netherlands</td>
<td></td>
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<tr>
<td>4</td>
<td>Sustainability Theory and</td>
<td>Sustainability Theory and Practices</td>
<td>Tracy MORSE</td>
<td>The University of Strathclyde, UK</td>
<td>PM [2-5]</td>
</tr>
<tr>
<td></td>
<td>Practices</td>
<td>可持续性理论与实践</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Innovation &amp; Entrepreneurship</td>
<td>Financial Decisions in Engineering Project Management</td>
<td>Daricha SUTIVONG</td>
<td>Chulalongkorn University, Thailand</td>
<td>PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>工程项目管理中的金融决策</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>China &amp; Globalization</td>
<td>China Economy: Technology, Growth and Global Connections</td>
<td>Susan MAYS</td>
<td>The University of Texas at Austin, USA</td>
<td>AM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>中国经济：科技、增长与全球联系</td>
<td></td>
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<tr>
<td>7</td>
<td>China &amp; Globalization</td>
<td>Chinese Language and Culture</td>
<td>ZHANG Aidong</td>
<td>Nanyang Technological University, Singapore</td>
<td>PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>中华语言与文化</td>
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</tbody>
</table>
MACHINE LEARNING ALGORITHMS: FROM MATH TO CODE

INSTRUCTORS
WANG Ruye, School of Engineering, Harvey Mudd College, USA
[ruye_wang@hmc.edu]

SYNOPSIS
This course covers the most essential topics in machine learning (ML), which is in the very core of artificial intelligence, including statistical and neural network methods for both supervised learning, such as naive Bayes classification, AdaBoost algorithm, support vector machines (SVM), Gaussian process classification (GPC), decision tree learning, perceptron network and back propagation network; and unsupervised learning, such as K-means clustering, expectation maximization (EM), competitive learning network and self-organizing map (SOM). The course also discusses various related issues in data compression and feature selection, including dimension reduction methods such as principal component analysis (PCA). The course also covers some related numerical methods necessary for the various learning algorithms, such as algorithms for solving eigenvalue problems, and for linear and quadratic optimization problems both with and without constraints. The course emphasizes the necessary theories and mathematics behind the various algorithms, discussed in class, as well as the code implementation of such algorithms, carried out as homework assignments by the students in any language such as Matlab (recommended), C++, and python, of the student’s choice.

SCHEDULE
9-12 AM, M-F, July 3 – July 21, 2023

TOTAL CONTACT HOURS 45

OBJECTIVE
The students will gain: basic understanding of the essential issues in machine learning, such as the types of problems to solve, the formulation of the problems, the general methodologies and basic algorithms for solving such problems; insight and experience of applying the relevant mathematics to the ML algorithms; insight and experience of applying the relevant numerical methods needed to implement the ML algorithms; programming skill to carry out the ML algorithms by computer code.

TOPICS
- **REGRESSION ANALYSIS** Linear regression, Nonlinear regression, Logistic regression, Softmax regression, Gaussian process regression
- **CLASSIFICATION (Supervised Learning)** K nearest neighbors/minimum distance, Naive Bayes classifier, Support vector machine, Classification based on Gaussian process, AdaBoost
- **CLUSTERING (Unsupervised Learning)** K-means clustering, Gaussian mixture model, Mixture of Bernolli
- **NEURAL NETWORKS** Artificial neural networks, Hebbian Learning and Hopfield Network, Perceptron Network, Back Propagation, Competitive Learning, Self-Organizing Map
- **FEATURE SELECTION AND DIMENSION REDUCTION** Feature selection, Principal component analysis (PCA), Kernel PCA, Probabilistic PCA, Classical multidimensional scaling, t-Distributed Stochastic neighbor embedding

PREREQUISITES
The student is expected to have gained familiarity with the basic concepts in calculus, linear algebra, and probability, and proficiency in some programming language (Matlab, python, etc.).

REFERENCE
<Introduction to Machine Learning – From Math to Code>, material will be provided during the course.

NOTE
Students need to bring their own laptops for this course.

GRADING
Student grade is based on the scores of a set of coding projects.

WANG Ruye
Ruye Wang is Professor Emeritus of Engineering, Harvey Mudd College, U.S.A. Dr. Wang obtained PhD from Rutgers University. His research interests include image processing, pattern recognition, vision systems, data mining, remote sensing, neural computation and bioinformatics.
INTELLIGENT MANUFACTURING AND SERVICE SYSTEMS

INSTRUCTORS
Andrew KUSIAK, Department of Industrial and Systems Engineering, The University of Iowa, USA (andrew-kusiak@uiowa.edu)

SYNOPSIS
Manufacturing and service industry is undergoing a transformation towards greater service orientation and autonomy. The use of sensors and wireless technologies capturing data is growing across industries. Emerging configurations of systems are analyzed, optimized, and designed. Models, methodologies, and algorithms in support of design and analysis of intelligent manufacturing and business systems are discussed. Data science, computational intelligence, cloud computing, and diverse x-as-a-service systems are introduced.

AUDIENCE
Year 3 & 4 Undergraduate and Graduate Students

SCHEDULE
9 – 12 AM, M – F, July 3 – July 21, 2023

TOTAL CONTACT HOURS 45

TOPICS
- Introduction to intelligent manufacturing and service applications
- Digitization in manufacturing and service industry
- Systems modeling
- System analysis
- Process optimization
- System decomposition
- Reliability and quality analysis
- Resiliency and sustainability analysis
- Data science
- Computational intelligence in x-as-a-service systems
- Emerging developments in intelligent manufacturing and business applications
- Innovation science and the industry of the future

NOTE
Students will use their own laptops in this course

GRADING

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Classroom exercises</td>
<td>30%</td>
</tr>
<tr>
<td>Project</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

Andrew KUSIAK

Andrew Kusiak is a Professor in the Department of Mechanical and Industrial Engineering at The University of Iowa, Iowa City and Director of the Intelligent Systems Laboratory. He has chaired two departments, Industrial Engineering (1988-95) and Mechanical and Industrial Engineering (2010-15). His current research interests include applications of computational intelligence and big data in automation, manufacturing, product development, renewable energy, sustainability, and healthcare. He has published numerous books and hundreds of technical papers in journals sponsored by professional societies, such as the Association for the Advancement of Artificial Intelligence, the American Society of Mechanical Engineers, Institute of Industrial Engineers, Institute of Electrical and Electronics Engineers, Nature, and other societies. He speaks frequently at international meetings, conducts professional seminars, and consults for industrial corporations. Dr. Kusiak has served in elected professional society positions as well as various editorial boards of over fifty journals, including five different IEEE Transactions.
SIMULATION METHODS FOR OPTIMIZATION AND LEARNING

Bernd HEIDEGGOT, Vrije Universiteit, Amsterdam, The Netherlands
Email: b.f.heidergott@vu.nl

SYNOPSIS

This course gives a broad treatment of the important aspects of the use of computer simulation for the analysis and optimization of dynamic stochastic models. The emphasis is on modeling the stochastic system as a discrete event dynamic system, and analyzing and improving its performance by means of discrete event simulation. Applications will stem from a wide range of domains: from Social Networks to Computer Networks, and Financial Engineering to Business Processes. The course will introduce students to the use of computer simulation in analyzing dynamic stochastic models through simulation-based/data-driven methods for optimization and learning. The leading question of the course is how to use simulation to make better and more responsible decisions for real-life problems. The course will also reflect on the technological and mathematical developments we witness in our societies. While actively working on simulation projects, the course will provide space for reflecting on the mathematical/technological paradigm. That is, next to learning the actual techniques, students will be stimulated to reflect on the history of science and the technological developments around them.

AUDIENCE

Year 3 & 4 Undergraduate and Graduate Students

SCHEDULE

9-12 AM, M-F, July 3 – 21, 2023
TOTAL CONTACT HOURS: 45

OBJECTIVE

Students learn how to model and analyze real-life problems by Monte Carlo simulation. After successful completion of this course, students will be able to conduct a Monte Carlo simulation based analysis of a problem, provide an output analysis, and place their research into the broader historical and societal context.

TOPICS

- Programming language is Python (basic programs will be provided). Other programming languages, such as Matlab, are also fine but are not supported.
- Basics of Monte Carlo Simulation: random number generation, discrete event simulation, output analysis
- Standard simulation models: queuing systems, social networks, financial products, inventory systems, news vendor problem
- Data and simulation: combining simulation with available historical data
- Estimation of gradients via simulation and their application in learning and optimization: stochastic gradient method, stochastic approximation, supervised learning, non-supervised learning

PREREQUISITES

Material will be provided during the course.
Additional recommended reading

NOTE

Students need to bring their own laptops for this course.

GRADING

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation and written report</td>
<td>30%</td>
</tr>
<tr>
<td>Simulation project written report</td>
<td>30%</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
</tr>
<tr>
<td>Attendance and discussion</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Bernd HEIDEGGOT

Bernd HEIDEGGOT earned his PhD degree from Center of Mathematical Statistics and Stochastic Processes, Department of Mathematics, University of Hamburg. Now he is teaching mathematics and statistics for economists in Department of Econometrics and Operations Research at the Vrije Universiteit Amsterdam. He also teaches a course on Convex Analysis and Optimization for econometricians. Received the Best Lecturer Award of the faculty of Economics and Business Administration of the VU for the academic year 2008/2009. His main current research directions are gradient estimation, differentiation theory, Taylor series expansions and Max-plus algebra.
INSTRUCTORS
Tracy MORSE, Centre for Sustainable Development, The University of Strathclyde, UK (tracy.thomson@strath.ac.uk)

SYNOPSIS
This course will introduce students to sustainability in the context of energy supply and demand both now and in the future. Using case studies and practical examples, the course will examine current and future energy demands in terms of CO2 emissions and climate change, future challenges and opportunities in the energy sector for high and low income countries, trans/interdisciplinary and cross sectoral engagement in the development of energy solutions, and how these solutions may affect society, economies and the environment. This course will be led by Dr Tracy Morse and will feature lectures from a range of experts from across the University of Strathclyde.

AUDIENCE
Year 3 & 4 Undergraduate and Graduate Students

SCHEDULE
2-5 PM, M-F, July 3 - 21, 2023

TOTAL CONTACT HOURS 45

OBJECTIVE
To develop an understanding of the principles of sustainability, and how the many facets of sustainability relate to the current and future demand for energy

TOPICS
- Understanding the principles of sustainability
- Sustainability and systems thinking
- Introduction to key sustainability issues around energy
- Current and future energy demands
- Energy system transitions and sustainability
- Energy justice through the system transition

REFERENCE
Material will be provided during the course
Additional recommended reading
https://politybooks.com/subjectlanding/index.php/bookdetail/?isbn=9781509540310&subject_id=9&tag_id=77

GRADING

<table>
<thead>
<tr>
<th>3 x weekly assessments</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and discussion</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Tracy MORSE

Tracy Morse is Senior Lecturer and Head of Strathclyde Centre for Sustainable Development. Having previously been based in Malawi for 20 years, she leads an interdisciplinary research team with a focus on addressing the determinants of health in low and middle income countries. Working with a number of partners globally, she is focused on promoting the importance of transdisciplinary research in addressing sustainable development for all, and supporting the transformational change needed to support attainment of UN SDGs.
FINANCIAL DECISIONS IN ENGINEERING PROJECT MANAGEMENT

INSTRUCTORS
Daricha SUTIVONG, Department of Industrial Engineering, Chulalongkorn University, Thailand [daricha.s@gmail.com]

SYNOPSIS
The course introduces widely-used financial techniques for project evaluation. Based on the time value of money concept, the course examines how to analyze and valuate various cash flow patterns and provides popular economic measures for project assessment and selection, including the net present value and the rate of return, along with the application criteria for single and multiple project decisions. The course also addresses decision under uncertainties using techniques such as breakeven analysis, sensitivity analysis, decision tree, etc. Students will have an opportunity to perform a financial analysis of their interested problem in a group project and create management report and presentation.

AUDIENCE
Undergraduate and Graduate Students (all majors and all levels) with no prerequisites

SCHEDULE
2-5 PM, M-F, July 3-21, 2023

TOTAL CONTACT HOURS 45

OBJECTIVE
To develop an understanding of financial techniques used for project evaluation, project selection and decision under risk and uncertainties. Students will apply their knowledge to a real-world problem in a team environment.

TOPICS
- Time Value of Money, Interest Rate, Economic Equivalence, Simple and Compound Interests
- Nominal and Effective Interest Rates: Discrete Time Period, Continuous Compounding
- Present Value Analysis: Equal-life Alternatives, Different-life Alternatives, Capitalized Cost, Payback Period
- Annual Value Analysis: Capital Recovery, Equivalent Annual Value
- Rate of Return Analysis: Single Alternative
- Rate of Return Analysis: Multiple Alternatives
- Breakeven Analysis: Single and Multiple Alternatives
- Decision under Uncertainties: Sensitivity Analysis, Three Estimates, Expected Value Decision, Decision Tree
- Financial Analysis Modeling
- Creating Report and Presentation for Management

GRADING

<table>
<thead>
<tr>
<th>Quiz 1 (Topic 1-3)</th>
<th>Quiz 2 (Topic 4-7)</th>
<th>Group Project Presentation and Report</th>
<th>Attendance and discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>35%</td>
<td>30%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Total 100%

Daricha SUTIVONG

Daricha SUTIVONG, now professor in Department of Industrial Engineering at Chulalongkorn University, earned her PhD from Management Science and Engineering, Stanford University and Masters in Engineering from Stanford University and MIT. Her research interests mainly focus on Engineering economic analysis and modeling, information technology investment, information markets, economics of electricity and energy, decision analysis and risk management.
INSTRUCTORS
Susan MAYS, Center for Asian American Studies, The University of Texas at Austin, USA  

SYNOPSIS
This course addresses economic development in China, in global context. The course examines trends in trade, foreign investment, ownership [i.e., public vs. private], finance, the workforce, and consumption. The class also considers challenges and opportunities in China in the areas of environment, energy, education, and healthcare. Taught by an economic historian, the course considers China’s unique history, culture, and business context, as well as global partnerships and influences. The reading and course materials are by scholars, leaders in business, economics and policy, as well as journalists.

AUDIENCE
Undergraduate and Graduate Students (all majors and all levels) with no prerequisites

NOTE
Students-in-person in the classroom. TA in the classroom. Instructor via video [class is not livestreamed nor recorded]

SCHEDULE
9-12 AM, M-F, July 3 - 21, 2023

TOTAL CONTACT HOURS 45

TOPICS
- China’s Reform and Opening from 1978 and Chinese Governance
- Rural-to-Urban Labor Migration, Export-led Development, and Foreign Trade
- Business Ownership [private, state-owned, Sino-foreign joint ventures, foreign owned]
- Financial Services and the Legal System
- High Tech Sectors and Entrepreneurship
- The Education System and China’s Talent Pool
- Energy and Environmental Challenges
- Family Economics and the Healthcare Industry
- The Foreign Sector in China and Chinese Investments Abroad
- Infrastructure Initiatives

GRADING

Undergraduate Students:

- 2 Noncumulative Quizzes (multiple choice) 50%
- 8 Written Reactions (short reactions to daily reading) 25%
- Individual Paper or Group Project (chose one) 25%

Total 100%

Graduate Students: Same grading as above, except requires an Individual Paper of 6000+ words.

Susan MAYS

Susan Mays holds a PhD from Columbia University in Global Economic History (Asia/China focus), an MA from Harvard University in East Asian Studies (China focus), an MS from Stanford University in Engineering-Economic Systems, and a BS from Purdue University in Engineering. Prior to academia, Dr. Mays worked in business and technology with Fortune 500 companies initially as an engineer and later as a management consultant with Kearney. Susan Mays’ primary focus is economic and technological development in Asia, particularly China. Her interdisciplinary projects have addressed high technology sectors in China/East Asia including how global trade, investment, and supply chains influence organizations and human capital. She focuses on macro-economic trends and trends in business, technology, and human resources.
CHINESE LANGUAGE AND CULTURE

INSTRUCTORS
ZHANG Aidong, Asian Languages and Cultures, NIE, Nanyang Technological University
Academic Director, OCCB International, Singapore [azhang2020@outlook.com]

SYNOPSIS
This course is designed to introduce different aspects of Chinese language and culture, including the relationship between Chinese thought, culture, and language. The characteristics of Chinese language and scripts. Chinese society, folklore, and language. Chinese thought patterns and thinking styles. Eastern and Western ways of thinking and the cultural attributes embedded. The social and cultural changes as well as its influence on Chinese language.

AUDIENCE
Undergraduate and Graduate Students [all majors and all levels] with prerequisite: Basic Chinese reading and listening skills

SCHEDULE
2-5 PM, M-F, July 3 - 21, 2023

TOTAL CONTACT HOURS 45

OBJECTIVE
• Better appreciate Chinese language and culture
• To enhance communication and social interchange skills involving Chinese language and culture
• To facilitate students’ career development and various undertakings in a global context and fast changing world.

TOPICS
• Chinese language, culture, and thought
• Cultural exchange and languages
• Chinese Language, characters, Chinese cultural circle
• Chinese Language, Literature, and Theatre
• Chinese writing and oral expression, the elegant and vulgar
• Society, Folklore, and Language
• Appellation and name
• Proverbs and the Chinese view of the world
• “Qi”: its thinking and language
• Numbers and Chinese culture
• Thinking: East vs West, and its cultural characteristics
• The Language-Culture Pyramid

GRADING

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Presentation</th>
<th>Test</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>30%</td>
<td>50%</td>
<td>100%</td>
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ZHANG Aidong

Dr. Zhang comes from Asian Languages and Cultures, NIE, Nanyang Technological University and is the Academic Director from OCCB International, Singapore. She teaches in the areas of Classical Chinese Literature, Chinese Language and Culture, and Modern Chinese Literature.

Her current research interests include Classical Chinese Literature, Chinese Poetics, and Comparative Literature. She has published widely in academic journals East and West.
## PROGRAM EXPENSES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST</th>
<th>ESTIMATED EXPENSES FOR A 1-MONTH (IN JULY) STAY IN BEIJING (pro-rate your expenses if your stay is less than 31 days)</th>
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</thead>
<tbody>
<tr>
<td><strong>REGISTRATION FEE</strong></td>
<td>USD 43 (CNY 300)</td>
<td>Compulsory Registration Fee for All Applicants</td>
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<tr>
<td><strong>ACCOMMODATION</strong></td>
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<tr>
<td>31-Day Stay</td>
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<tr>
<td>A: USD 930 (CNY 6510)</td>
<td>Beijing Post &amp; Telecom Conference Center</td>
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<tr>
<td>B: USD 1100 (CNY 7750)</td>
<td>Type A – Standard Double Occupancy: CNY 210/day/person</td>
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<tr>
<td>C: USD 1170 (CNY 8215)</td>
<td>Type B – Superior Double Occupancy: CNY 250/day/person</td>
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<tr>
<td>D: USD 1395 (CNY 9765)</td>
<td>Ariva Beijing West Hotel &amp; Serviced Apartment</td>
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<td>Type C - Superior Double Occupancy: CNY 265/day/person</td>
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<td>Type D - Loft Double Occupancy: CNY 315/day/person</td>
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<tr>
<td><strong>MEALS</strong></td>
<td>– USD 220 (CNY 1550)</td>
<td>CNY 50/day X 31 days [meals at PKU cafeteria]</td>
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<tr>
<td><strong>MISCELLANEOUS</strong></td>
<td>– USD 220 (CNY 1550)</td>
<td>Personal Items, transportation etc.</td>
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<tr>
<td><strong>BASIC TOTAL</strong></td>
<td>USD 1415-1880</td>
<td>Recommended minimum Expenses are estimates, your actual cost may be different Airfare not included</td>
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<tr>
<td>(CNY 9910-13165)</td>
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<tr>
<td><strong>GLOBEX TUITION</strong></td>
<td>USD 0-1714</td>
<td>Full tuition waiver [you may still need to pay tuition to your home school]</td>
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<tr>
<td>(CNY 0-12,000)</td>
<td>Partial tuition waiver</td>
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<td>Full cost recovery</td>
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<tr>
<td><strong>FIELD TRIP &amp; TOUR</strong></td>
<td>~ USD 150</td>
<td>Pre-/Mid-Globex Beijing Tour (Including the Great Wall, Forbidden City, Summer Palace etc.)</td>
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<tr>
<td>(Optional)</td>
<td>(CNY 1050)</td>
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<td>~ USD 400~450</td>
<td>After-Globex Tour [round-trip sleeping berth/high-speed train]</td>
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<tr>
<td>(CNY 2800~3150)</td>
<td>Xi’an Terra Cotta Warriors-Huaqing Palace-Qianling-Ming City Wall (5 days, ~USD 450)</td>
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<td>Hangzhou-Suzhou-Wuzhen-Shanghai (5 days, ~USD 430)</td>
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<td>Baotu Spring-Taishan Mountain-Qufu Confucius Temple (3 days, ~USD 400)</td>
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## MISCELLANEOUS INFO:
CREDIT TRANSFER, CHINESE VISA, HEALTH INSURANCE, TRANSCRIPT ETC.

Globex will provide course syllabi and PKU transcript to facilitate course credit transfer, it does not however, guarantee that the credits will be acceptable by the student’s home university.

Globex will provide the necessary documents for applicants to apply for their Chinese visas.

It is mandatory for all Globex students to process a valid medical insurance during their stay in China.

Official PKU transcript and certificate of completion will be offered in September, 2023.

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