

**Course 1**

<b>AE8104 Finite Element Analysis of Composites</b>	
Number of Credits	3
Offering School	School of Aeronautics and Astronautics
Course Instructor	<a href="#">Yile Hu</a>
Course Level	Senior Undergraduate and Postgraduate
Language of Instruction	English
First Day of Class	16-Sept-2021
Last Day of Class	02-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Thursdays 18:00 p.m.-20:00 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Prerequisites: Student should have previous knowledge or currently registered to courses: Solid Mechanics (AE8124), Mechanics of Composites (AE8102), Linear Algebra, and Numerical analysis. Moreover, this course requires some programming knowledge with C/C++, FORTRAN, Java, Python or any other computer language you prefer. Matlab is not recommended for graduate students.
Course Description	This course aims at providing fundamental and practical notions in finite element analysis. The course will present systematic approaches for the derivation of various finite elements. The students will also be introduced to numerical techniques for the solution of the discretized governing equations. Practical aspects such as mesh generation and choice related to numerical integration will also be presented. This course will mostly be based on structural analysis, focusing on both isotropic and composite materials. Students need to program their own FE code to accomplish homework and final project.
Course Outline	<a href="#">English</a>

**Course 2**

<b>GE6001 Scientific Writing, Integrity and Ethics</b>	
Credits	1
Offering School	School of Biomedical Engineering
Course Instructors	<a href="#">Shanbao Tong</a> , <a href="#">Guanning Lin</a> , <a href="#">Zongyuan Cai</a> , <a href="#">Guoyuan Yang</a>
Course Level	Postgraduate
Language of Instruction	English
Starting Date	18-Nov-2021
Ending Date	06-Jan-2022
Course Type	Lecture
Modes of Delivery	Synchronous (Online + On-campus)
Meetings	Thursdays 14:00 p.m.-15:40 p.m. Course recordings will be available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	-
Course Description	GE6001 is an introductory course targeting the graduate students and senior undergraduates. The course is aiming to introduce the basic rules and ethics in the activities of scientific research and communications, and establish the sense of fundamental ethics and integrity for the future engineers or researchers. The eight lectures are going to cover the topics on the most important rules and ethics in scientific research including designing a study, conducting experiments and collecting data, analyzing the data, and writing the results as journal papers or presenting in conferences.
Course Outline	<a href="#">English</a>

**Course 3**

<b>MSE2605 Fundamentals of Materials Science Part I</b>	
Number of Credits	3
Offering School	School of Materials Science & Engineering
Course Instructor	<a href="#">Qiang Guo</a>
Course Level	Undergraduate
Language of Instruction	English
First Day of Class	13-Sept-2021
Last Day of Class	29-Nov-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Mondays 10 a.m.-11:40 a.m.; Thursday 14:00 p.m.-15:40 p.m.
Time Zone	Beijing Time (UTC+8)
Restrictions	For materials science & metallurgy students. Prerequisites include calculus, college physics, and thermodynamics.
Course Description	<p>Materials are the physical foundations for the development of science and technology. The human civilizations are historically designated by the evolution of materials, such as the Stone Age, the Bronze Age and the Iron Age. Nowadays, materials science and technology support most of the industrial sectors, including aerospace, telecommunications, transportation, architecture, infrastructure and so on. Fundamentals of Materials Science is a core module for undergraduates majored in materials science and engineering.</p> <p>An integrated approach of combining metallic, ceramic and polymeric materials will be adopted in this course, for the attendants to attain a deep understanding on the correlation of composition, microstructure, processing and properties in materials science. The first part of this course (MT 206) will cover atomic bonding, structure of solids, defects, and mechanical properties of materials.</p>
Course Outline	<a href="#">English</a>

**Course 4**

<b>MT319 Materials Physics</b>	
Number of Credits	4
Offering School	School of Materials Science and Engineering
Course Instructor	<a href="#">Tao Hang</a>
Course Level	Undergraduate
Language of Instruction	English
First Day of Class	06-Sep-2021
Last Day of Class	09-Jan-2022
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Friday Afternoon 14:00 p.m.-16:00p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Prerequisites: Calculus, General Physics, Thermal dynamics, Fundamentals of Materials Science
Course Description	Basic principles of modern physics and quantum mechanics as pertain to solid state physics and the physical behavior of materials on the atomic scale. Applications to solid state materials will be emphasized on those topics including thermal capacity, electric conductivity, and semiconductors.
Course Outline	<a href="#">English</a>

**Course 5**

<b>ICE6202 Digital Image Processing</b>	
Number of Credits	3
Offering School	School of Electronic Information and Electrical Engineering
Course Instructor	<a href="#">Rui Zhang</a>
Course Level	Senior Undergraduate and Postgraduate
Language of Instruction	English
First Day of Class	21-Sep-2021
Last Day of Class	04-Jan-2022
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Tuesdays, 12:55 p.m. -15:40 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Prerequisites: Digital Signal Processing, Matrix Theory, Probability Theory, Random Procedure
Course Description	<p>This course is offered for senior undergraduates, master students and Ph.D candidates. It introduces fundamental principles and practical techniques of digital image processing. The content of the course comprises of 3 parts. Part one, fundamental principles, includes the theories of 2-D signal processing and visual psychology, results of information theory and image transforms. Part two, human visual system based practical techniques, includes the principles and the methods of image enhancement, image restoration, image reconstruction and image compression. Part three, content recognition and understanding based practical techniques, introduces image segmentation and image description in the view of digital image processing. This course completely reflects the new progress of digital image processing, not only gives the research hotspots, but also gives practical methods and techniques of this field.</p>
Course Outline	<a href="#">English</a>

**Course 6**

<b>BIO8101 Application of Viral Techniques and Introduction to Molecular Virology</b>	
Number of Credits	2
Offering School	School of Life Sciences and Biotechnology
Course Teacher	<a href="#">Ilya A. Vinnikov</a>
Course Level	Postgraduate
Language of Instruction	English
First Day of Class	24-Sept-2021
Last Day of Class	07-Jan-2022
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Fridays, 10:00 a.m.-11:40 a.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	The students should have basic knowledge in molecular biology and biochemistry
Course Description	This course involves a comprehensive overview of replication, integration and transcription mechanisms of both RNA- and DNA-containing viruses of prokaryotes and eukaryotes. It is therefore primarily intended for undergraduate or graduate students already familiar with basic molecular biology. The course will focus on regulatory molecular biology mechanisms in order to give the students a broad overview as well as aid them to understand deeper signaling pathway interactions, solve genetic problems and ideate their future projects. This course may meet the needs of advanced undergraduate students with interests in molecular biology and virology. At the same time, it may serve as a refresher course in molecular biology for graduate students willing to explore replication and transcription regulation from different, often extreme angles which in viruses often go beyond basic mechanisms. This is a typical lecture course in which topics are narrated by the instructor.
Course Outline	<a href="#">English</a>

**Course 7**

<b>MATH9111 Basic Geometric Mechanics</b>	
Number of Credits	3
Offering School	School of Mathematical Sciences
Course Instructor	<a href="#">Tudor Stefan Ratiu</a>
Course Level	Postgraduate
Language of Instruction	English
First Day of Class	15-Sept-2021
Last Day of Class	29-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Wednesdays, 18:00 p.m. – 20:45 p.m. with 2 breaks Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	<p>Solid undergraduate Linear Algebra and Analysis. <b>Basic theory of Ordinary Differential Equations.</b> A knowledge of differential geometry is helpful but not mandatory since a review will be presented in class. <b>Required major: Mathematics, or Physics, or Engineering.</b></p> <p>No exam, Report at the end of the semester on a topic mutually agreed with the instructor</p>
Course Description	The course is an introduction to modern methods in theoretical mechanics and mathematical physics. It covers basic symplectic geometry and the theory of Hamiltonian and Lagrangian systems. Many examples are presented.
Course Outline	<a href="#">English</a>

**Course 8**

<b>SP166 Ocean Science</b>	
Number of Credits	2
Offering School	School of Naval Architecture, Ocean and Civil Engineering
Course Instructor	<a href="#">John Z. Shi</a>
Course Level	Undergraduate
Language of Instruction	English
First Day of Class	11-Oct-2021
Last Day of Class	20-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous
Meeting Time	Mondays, 18:00-20:30 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	-
Course Description	To allow the young students to gain an oceanic perspective, i.e. being able to view things in terms of their importance or relationship to one another; an oceanic perspective lets you see this misnamed planet in a new light, and helps you plan for its future; you will see that water, continents, seafloors, sunlight, storms, seaweeds, and society are connected in subtle and beautiful ways.
Course Outline	<a href="#">English</a>



**Course 9**

<b>VM211 Introduction to Solid Mechanics</b>	
Number of Credits	4
Offering School	UM-SJTU Joint Institute
Course Instructor	<a href="#">Yanfeng Shen</a>
Course Level	Undergraduate
Language of Instruction	English
First Day of Class	13-Sept-2021
Last Day of Class	17-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous
Meeting Time	Tuesdays+Thursdays+Fridays, 14:00 p.m.-15:40 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	-
Course Description	Develop an understanding of the physical behavior of materials under load. The course emphasizes equilibrium, compatibility of deformation, and material behavior. Weekly lectures are given on theory and applications in statics, mechanics and structural engineering. Applications include axial loads, thermal stresses, bending, shear, and torsion, combined loadings, stress and strain transformations.
Course Outline	<a href="#">English</a>

**Course 10**

<b>VE/VM504 Solid State Physics</b>	
Number of Credits	3
Offering Department	UM-SJTU Joint Institute
Course Instructor	<a href="#">Hua Bao</a>
Course Level	Postgraduate
Language of Instruction	English
First Day of Class	13-Sept-2021
Last Day of Class	17-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous
Meeting Time	Mondays+Wednesdays, 10:00 a.m.-11:40 a.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	General Physics (previous exposure to quantum mechanics is beneficial)
Course Description	This course serves as an introductory solid state physics course for graduate students or seniors with an engineering background to conduct research in the area of electronics, material science, optics, nanoscience and technology.
Course Outline	<a href="#">English</a>

**Course 11**

<b>MS331 Quantum Information Technologies and a practical module</b>	
Number of Credits	4
Offering School	Zhiyuan College ( School of Physics and Astronomy)
Course Instructor	<a href="#">Prof. Xian-Min Jin</a> and <a href="#">Dr. Hao Tang</a>
Course Level	Undergraduate
Language of Instruction	English
First Day of Class	16-Sep-2021
Last Day of Class	25-Nov-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Thursdays 18:00 p.m.-21:30 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Second or Third year undergraduate with a background on physics , mathematics, computer sciences or other engineering subjects. Preliminary knowledge on quantum mechanics is not a must.
Course Description	<p>This course would cover the fundamental principles, algorithm designs and frontier progresses on quantum information and quantum computing, with an emphasis on the practical skills and visions for application-oriented quantum information technologies.</p> <p>Through this course, the students are expected to:</p> <ul style="list-style-type: none"> <li>🌐 Understand fundamental concepts for computational complexity, and the essential difference between classical and quantum computing;</li> <li>🌐 Learn different physical platforms for quantum computing including photonics, superconductors, ion traps, etc; Understand the physical realization and matrix expressions for qubits and quantum gates.</li> <li>🌐 Master common universal quantum algorithms including Deutch's algorithm, Grover's algorithm, Shor's algorithm, Quantum Fourier transform, and know how to implement quantum circuits on the online quantum cloud platform to demonstrate these algorithms.</li> <li>🌐 Learn analog quantum algorithms such as boson sampling and quantum walks, and understand the common analog quantum computing approaches including analog photonic quantum computing, Ising machine, and quantum annealer, etc.</li> <li>🌐 Know the hybrid quantum-classical algorithms such as VQE and QAOA that are being widely investigated as the Noisy Intermediate-Scale Quantum technologies.</li> </ul>

	🌐 Learn the frontier progresses for the emerging field including quantum machine learning, quantum optimization, quantum chemistry and quantum finance, and how to design suitable quantum algorithms to address different applications.
Course Outline	<a href="#">English</a>

**Course 12**

<b>BUSS8030 Introduction to Banking Industry in China</b>	
Number of Credits	1
Offering School	Antai College of Economics and Management
Course Instructor	<a href="#">Nan Li</a>
Course Level	Senior Undergraduate and Postgraduate
Language of Instruction	English
First Day of Class	16-Sept-2021
Last Day of Class	21-Oct-2021
Course Component	Lecture
Mode of Teaching	Asynchronous +Synchronous MOOC: <a href="http://www.icourse163.org/course/SJTU1-1457912173">http://www.icourse163.org/course/SJTU1-1457912173</a>
Meeting Time	Tutorial: Thursdays 18:00 p.m.–20:40 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Master in International Buisness/3-4 year undergraduate student Students should have some background in basic macroeconomics, microeconomics, finance, algebra, differential calculus, statistics, and a disposition to keep themselves informed of current developments in the area of banking and finance in China as well as in the world.
Course Description	This course builds on basic financial theory and the principles courses in economics to address topics that are important for managing banks in China. Upon successful completion of the course, students are expected to understand recent development in the Chinese banking industry and how banking reforms change the banking industry landscape in China. More importantly, students are expected to understand the special role of financial institutions in the Chinese economy and how to manage the risks faced by the banks in China in a rapidly changing international environment.
Course Outline	<a href="#">English</a>

**Course 13**

<b>ECON9004 Advanced Econometrics—Time Series Analysis</b>	
Number of Credits	3
Offering Department	Antai College of Economics and Management
Course Instructor	<a href="#">Nan Li</a>
Course Level	Senior Undergraduate and Postgraduate
Language of Instruction	English
First Day of Class	17-Sept-2021
Last Day of Class	31-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Fridays 12:55 p.m.-15:40 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Ph.D in finance, economics, and management/Master or 4-year undergraduate student in finance, economics, and management with strong background in math, finance, and economics Prerequisite: finance, macroeconomics, microeconomics, econometrics
Course Description	<p>This course focuses on the advanced methods and tools to analyze time series in finance and macroeconomics. The first part of the course introduces the foundation and building blocks for time series analysis, such as stationarity, nonstationarity, cointegration, impulse responses and shock identification etc.</p> <p>The students are expected to understand ARMA, VAR, and other models as well as methods such as Spectral Analysis, GMM and Kalman Filter that are important tools in the time series analysis of macroeconomics and financial economics. More importantly, students are expected to be able to apply the methods and tools learned to set up appropriate empirical models to analyze the problem in macroeconomics and financial economics, and to estimate and test these models. In the second part of the course, various macro-asset pricing models are introduced and the students are expected to understand the empirical tests of implication of these asset pricing model, both time-series and cross-section tests.</p>
Course Outline	<a href="#">English</a>

**Course 14**

<b>LAW6828 Chinese Foreign Trade Law</b>	
Number of Credits	2
Offering School	KoGuan School of Law
Course Instructor	<a href="#">JiaXiang Hu</a>
Course Level	Senior Undergraduate and Postgraduate
Language of Instruction	English
First Day of Class	16-Sept-2021
Last Day of Class	30-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online)
Meeting Time	Thursdays 18:00 p.m.-20:20 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	-
Course Description	This course provides a focused treatment and analysis of the major legal, policy and business aspects of foreign trade in China. With respect to China's regulation of foreign trade, areas covered include: trade in goods, trade in services, protection of intellectual property rights in trading, China's participation in the WTO and China's commitments under the multilateral trading system, WTO dispute settlement mechanism and the relevant disputes concerning China. Specifically, China's regulations on foreign trade include tariff regulation and non-tariff regulation, trade remedies including antidumping measures, countervailing measures, safeguard measures.
Course Outline	<a href="#">English</a>

**Course 15**

<b>LAW6419</b> <b>Entrepreneurship, Corporate Governance and Shareholder Remedies in China</b>	
Number of Credits	2
Offering School	KoGuan School of Law
Course Instructor	<a href="#">Wei Shen</a>
Course Level	Postgraduate
Language of Instruction	English
First Day of Class	13-Sept-2021
Last Day of Class	29-Nov-2021
Course Component	Lecture
Mode of Teaching	Asynchronous MOOC: <a href="https://www.icourse163.org/course/SJTU-1003537004?tid=1461627474#/info">https://www.icourse163.org/course/SJTU-1003537004?tid=1461627474#/info</a>
Meeting Time	Monday Evening 18:00 p.m.-20:20 p.m. every week Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Just a reminder, please do not take it for granted that this is a practice or training course. Put the other way, this is a core course on corporate law and corporate governance theories. <b>Students needs to write an essay. The due date is December 30, 2021.</b>
Course Description	<p>This course aims to help students to correctly appreciate the differences between various business vehicles available in China and to comprehend the rights and duties of different stakeholders in a company. This course also aims to teach students company law and regulations in China in a comparative setting by reference to company law in other jurisdictions, in particular, common law jurisdictions such as England, Hong Kong, and the United States. Furthermore, this course will help students to master the basic norms, doctrines and principles in relation to companies, and to be able to apply them to relevant issues in a more practical manner.</p> <p>Here are some topics this course may cover: business vehicles and classification of companies; incorporation and formation; corporate personality; promoters and pre-incorporation contracts; corporate charter and constitution; corporate governance; division of corporate powers; fiduciary duties; protection of minority shareholders; bankruptcy and restructuring; corporate social responsibility. This course may arrange small training</p>



	sessions so that students will have the opportunities to “practice” company law in hypothetical corporate transactions.
Course Outline	<a href="#">English</a>

**Course 16**

<b>CHN8701 Cutting Edge Issues in Comparative Literature Studies</b>	
Number of Credits	2
Offering School	School of Humanities
Course Instructor	<a href="#">Ning Wang</a>
Course Level	Postgraduate
Language of Instruction	English
First Day of Class	14-Sept-2021
Last Day of Class	28-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Tuesdays 16:00 p.m.-17:40 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	The exam is divided into two parts: <b>class presentation and participation in discussions; an essay of either 3000 words in English</b> or 8000 Chinese characters, which could be recommended for publication if well written.
Course Description	The present course is a high-level lecture course exclusively for graduate students of comparative and world literature and its relevant areas. It is aimed to enable students, through attending lectures and class discussions, have a grasp of the cutting edge theoretical topics in international comparative literature and express their original ideas. It will also enable students to do comparative literature studies with its major methodologies and write academic papers. Those who will attend the course should have taken courses on the introduction to comparative literature and literary theory in Chinese, and have a general picture of Western literature.
Course Outline	<a href="#">English</a>

**Course 17**

<b>CHN6208 The Linguistic Landscape of China</b>	
Number of Credits	3
Offering School	School of Humanities
Course Instructor	<a href="#">Matthias GERNER</a>
Course Level	Postgraduate
Language of Instruction	English
First Day of Class	14-Sept-2021
Last Day of Class	28-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online)
Meeting Time	Tuesdays 08:15 a.m.-11:40 a.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Basic knowledge of linguistic notions
Course Description	<p>This module presents an overview of the more than 600 languages spoken in China, including their sociolinguistic settings and structural features in terms of sound, morphology and syntax. Students acquire systematic knowledge of the existing language families in China: the Sinitic (“Chinese Dialects”), Altaic, Tibeto-Burman, Tai-Kadai, Miao-Yao and Austronesian languages. They get to understand the Chinese and Western definitions of language and appreciate differences in language diversity of both China and Europe. Students will comprehend the events that shaped the linguistic landscape of Modern China: the adoption of the speech of Beijing as lingua franca in 1913 and the spread of this lingua franca due to internal migration after the 1980s.</p>
Course Outline	<a href="#">English</a>

**Course 18**

<b>EN908 Academic communications in English: Writing and presentation</b>	
Number of Credits	2
Offering School	School of Foreign Languages
Course Instructor	<a href="#">Li Zhang</a>
Course Level	Undergraduate
Language of Instruction	English
First Day of Class	16-Sept-2021
Last Day of Class	30-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Thursdays 16:00-17:40 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	Students should have intermediate level of English and above. There is no limitation to the majors and years of undergraduate studies. Students are able to write in English and want to improve academic writing and presentation ability.
Course Description	<p>Academic communications in English: Writing and presentation is a course focusing on task-based academic writing and oral presentation. The course is designed for developing students' skills of researching in their academic discipline, and skills of academic writing and presentation. Students are required to collaborate and finish series of tasks for a research project and present their work to the class. The course is designed to provide students with the methods to plan, research, organize, write, edit, and evaluate various forms of academic writing. It is also intended for improving their ability of presentation for seminars and conferences in the academic world.</p> <p>The process of writing and editing academic research paper on the basis of literature review and research work will be presented. Strategies and skills for oral presentations will be introduced, with a number of examples to illustrate how to start, organize, conclude and deliver a speech most effectively. Cooperation in academics will be manifested and highlighted all through the course. The coursework will include discussions on ethics and writing styles and techniques, evaluation of information resources, a group research paper, and group oral presentations based on the research paper, etc.</p>
Course Outline	<a href="#">English</a>

**Course 19**

<b>ENVR8163 The Sustainable Development Goals of the United Nations</b>	
Number of Credits	2
Offering School	China-UK Low Carbon College
Course Instructor	<a href="#">Yuquan Zhang</a>
Course Level	Postgraduate
Language of Instruction	English
First Day of Class	13-Sept-2021
Last Day of Class	27-Dec-2021
Course Component	Lecture
Mode of Teaching	Synchronous (Online + On-campus)
Meeting Time	Mondays, 15:00 p.m.-17:00 p.m. Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	-
Course Description	<p>Aiming to spread the knowledge of the Sustainable Development Goals (SDG) of the United Nations and to evoke the interest in international governance that promotes exchanges between different cultural backgrounds, this course provides the international audience a China perspective on SDGs. For each SDG, this course will introduce the basics, review the development status of China's relevant work, elaborate on case studies of China or other countries and regions, and discuss the potential challenges.</p> <p>The participants are expected to master the definitions of SDGs, gain an understanding of China's work in the arena of sustainable development, and develop analytical skills under a multi-faceted SDG framework. Also, the participants are encouraged to brainstorm solutions that will help realize the SDGs with their own expertise. The UN SDGs were adopted in 2015, consisting of 17 SDGs that cover the societal, economic, and environmental challenges. Specifically, the SDGs include 1) no poverty, 2) no hunger, 3) good health and well-being, 4) quality education, 5) gender equality, 6) clean water and sanitation, 7) affordable and clean energy, 8) decent work and economic growth, 9) industry, innovation and infrastructure, 10) reduced inequalities, 11) sustainable cities and communities, 12) responsible consumption and production, 13) climate action, 14) life below water, 15) life on land, 16) peace, justice and strong institutions, and 17) partnerships for the goals.</p>
Course Outline	<a href="#">English</a>

**Course 20**

<b>Theory and Practice on Improving Immunity Based on Traditional Eastern Exercises</b>	
Number of Credits	2
Offering Department	Department of Physical Education
Course Instructors	<p><a href="#">Huiru Wang</a>, <a href="#">Feng Wang</a>, <a href="#">Gang Xu</a>, <a href="#">Tao Huang</a>, <a href="#">Xiaoling Yuan</a>, <a href="#">Yong Zhao</a></p> <p><b>Mr. Feng Wang</b> obtained his PhD from National Institute of Biological Sciences, Beijing (NIBS), and postdoc trainings at Stanford University with Prof. Mark M Davis (A member of the National Academy of Science) .</p> <p><b>Mr. Xu Gang</b>, associate professor, SJTU, PhD. in epidemiology and health statistics.</p> <p><b>Mr. Huang Tao</b>, PhD, associated professor SJTU. He obtained his PhD degree, in the field of Public health, from the University of Southern Denmark.</p> <p><b>Mrs Xiaoling Yuan</b>, Ph.D, lecturer of SJTU, School of Nursing, BLS and ACLS Instructor of American Heart Association, Instructor of International Trauma Life Support (ITLS)</p>
Course Level	Undergraduate and Postgraduate
Language of Instruction	English
First Day of Class	23-Sept-2021
Last Day of Class	30-Dec-2021
Course Component	Lecture
Mode of Teaching	Asynchronous
Meeting Time	Tutorial Time TBD Course recordings available for students.
Time Zone	Beijing Time (UTC+8)
Restrictions	A general understanding of traditional Chinese medicine and Indian Ayurveda.
Course Description	Exercise is medicine. Regular and moderate exercise can effectively strengthen immune system so as to reduce the risk of virus infection and also improve or assist in the treatment of dysthymic disorders like anxiety and depression. This course provides suggestions for the general public about how to actively respond to the outbreak of novel coronavirus. It also explains: how the immune system reacts when viruses invade into the body; why exercises can enhance immunity and what is the mechanism; what the difference is between western sports and traditional eastern exercises. Besides, the course includes training lessons on

	<p>Ba Duan Jin, Wu Qin Xi and other exercises conducive to immunity improvement.</p> <p>This course is characteristic for its combination of physical education and medicine, so the course will be taught by experts in either sports or medicine. The teaching content covers both disciplinary theory and specific training method, showcasing the unique culture and charm of the East while conducting cross-cultural communication as well as sharing the wisdom of traditional exercises and modern research and application in this regard.</p>
Course Outline	<a href="#">English</a>