# Bulletin of Duke Kunshan University

Undergraduate Instruction 2019-2020

## **June 2019**

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The information in this bulletin applies to the academic year 2019-2020 and is accurate and current, to the fullest extent possible, as of June 2019. The university reserves the right to change programs of study, academic requirements, teaching staff, the calendar, and other matters described herein without prior notice, in accordance with established procedures.

Duke Kunshan University is committed to maintaining a learning and working environment that is fair and humane, responsible for all students, faculty, and staff, and that supports, nurtures, and rewards career and educational advancement based on ability and performance. The University will not tolerate any form of harassment, bullying, sexual assault, or other forms of sexual misconduct. Definitions: Harassment is defined as conduct so severe and/or pervasive and objectively offensive that it substantially impairs a person's access to University programs or activities such that the person is effectively denied equal access to campus resources and opportunities on the basis of their race, color, national or ethnic origin, alienage, sex, religion, age, sexual orientation, gender identity, marital status, veteran status, physical or mental disability, or perceived membership in any of these categories. For more detailed definitions of harassment and the Duke Kunshan University Student Policy on Sexual Harassment and Misconduct please refer to the Student Handbook.

Duke Kunshan University is accredited by the Ministry of Education (MOE) of the People's Republic of China. Duke Kunshan University students successfully completing the course of study required by Duke Kunshan University will be conferred both a Duke Kunshan University graduation certificate and diploma officially approved by the MOE as well as a diploma from Duke University.

Duke University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) in the United States to award baccalaureate, master's and doctorate degrees. Duke Kunshan University is not accredited by SACSCOC and the accreditation of Duke University does not extend to or include Duke Kunshan University or its students. Further, although Duke University agrees to accept certain course work from Duke Kunshan University to be applied toward an award from Duke University, that course work may not be accepted by other colleges or universities in transfer, even if it appears on a transcript from Duke University. The decision to accept course work in transfer from any institution is made by the institution considering the acceptance of credits or course work.

Duke Kunshan University recognizes and utilizes electronic mail as a medium for official communications. The university provides all students with email accounts. All students are expected to access their email accounts on a regular basis to check for and respond as necessary to such communications.

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# **Part 1: General Information**

Welcome to the exciting world of Duke Kunshan University. The founders and leadership have set some ambitious goals for this university. Our aim is to educate the next generations of leaders, who will drive the cutting edge of new knowledge creation and will remain undaunted at the prospect of taking on the world's most pressing problems and challenges. Our intent is to have both global reach and global impact; our faculty, staff and students remain committed to making the world a better place—whether it be by bringing clean drinking water to a rural village or by developing a cure for one of the world's most vexing diseases. We welcome you to use this bulletin as a tool for understanding who we are and what we do as educators and students. By sharing our world with you, we hope you will venture into our community and become part of our mission to make higher education relevant and impactful for improving life and promoting greater understanding across our planet in the 21st century.

- --Dr. Youmei Feng, Chancellor
- -- Dr. Denis Simon, Executive Vice Chancellor

## **Mission Statement**

Duke Kunshan University is a highly selective research-oriented, liberal arts and sciences university located in China, whose primary mission is to enable students from around the world to lead purposeful and productive lives. By delivering the highest quality undergraduate and graduate education that is truly interdisciplinary, we prepare students for professional, intellectual and societal leadership roles across the globe. The core of our educational offering is a four-year undergraduate degree program featuring an integrated and multi-disciplinary curriculum, with an effective blend of Chinese, American, and global techniques and values and a culture of academic excellence and freedom. Our world-class faculty pursue knowledge in service to society, involving students in innovative scholarship and research programs. As a premier Sino-US joint-venture university, we embrace the integration of global, national, and local traditions of thought and experience and promote cross-cultural understanding and cross-border collaborations.

#### Who We Are

Duke Kunshan University is a Sino-American partnership of Duke University, Wuhan University and Kunshan city in Jiangsu province to create a world-class liberal arts and research university offering a range of academic programs for students from China and throughout the world. A nonprofit, joint-venture institution, Duke Kunshan University was granted the accreditation approval by China's Ministry of Education in September 2013. Duke Kunshan welcomed its first group of students in August 2014, initially offering graduate degrees as well as semester-long programs for undergraduate students enrolled at Duke and

other universities. In August 2018, Duke Kunshan welcomed its inaugural undergraduate class. The four-year bachelor's degree program is based in the liberal arts and sciences tradition, which emphasizes critical thinking, creativity, collaboration and exploration.

With the goal of spearheading the future of higher education, Duke Kunshan is influenced and informed by both Chinese and American traditions of higher education. The shared vision of Duke and Wuhan universities is that Duke Kunshan will help address the changing needs of global higher education. Their rich heritage inspires Duke Kunshan to pursue academic excellence and integrity and apply classroom knowledge in service to society. Duke Kunshan delivers academic programs designed to address society's future needs through a curriculum based in the liberal arts tradition and a commitment to problem-based learning that challenges students to apply their knowledge during the learning process.

As an international, intellectual community that encourages diversity, openness and creative learning, Duke Kunshan University welcomes outstanding students and faculty from around the world who contribute diverse perspectives and experiences to this global learning environment. The university's innovative programs inspire students to master academically rigorous course work, generate new ideas and develop creative solutions to the world's challenges, preparing them not just for careers in specific fields but to become globally sophisticated leaders and citizens.

Duke Kunshan is governed by an independent Board of Trustees and operates under a set of guiding principles that are consistent with those of world-leading universities. Administrative operations are in the charge of the university leadership team, headed by the Chancellor and the Executive Vice Chancellor. Feng Youmei, Duke Kunshan University Chancellor, is a professor, the former Executive Vice President of Wuhan University and the Vice Chairwoman for the Medical Education Committee of the China Association of Higher Education. She has profound expertise in medical education as well as abundant experience in university administration. Executive Vice Chancellor Denis Simon is a long-time expert on U.S.-China bilateral science and technology relations and a member of the U.S. Experts Group within the U.S.-China Innovation Dialogue.

Duke Kunshan University is a place for learning, living and self-discovery, in a setting that encourages the pursuit of knowledge within and beyond the classroom. Kunshan is located in close proximity to both Shanghai and Suzhou, two of the most developed metropolitan areas in China. Connected to both by high-speed rail and highways, the city of Kunshan is a center for business and high-tech research and manufacturing, and it has one of the fastest-growing economies in China. The 200-acre campus is in the Yangcheng Lake Science Park and features state-of-the-art classroom and meeting facilities, library resources, student and faculty housing and dining space, and recreational facilities. Multipurpose meeting spaces, breakout rooms and study areas allow students to work individually or in groups to review course materials, complete assignments and participate in the vibrant, intellectual life of the campus.

# **Partners**

# **Duke University**

A private comprehensive teaching and research university, Duke traces its roots to 1838, and officially became Duke University in 1924. In addition to liberal arts and engineering education at the undergraduate level, Duke offers graduate and professional study in arts and sciences, business, divinity, engineering, the environment, law, public policy, medicine and nursing. Duke enrolls more than 15,000 students in its undergraduate, graduate, and professional programs.

Duke's home campus is situated on nearly 9,000 acres in Durham, North Carolina, USA, a city of more than 200,000 people. Duke also is active internationally through the Duke-NUS Graduate Medical School in Singapore, Duke Kunshan University in China and numerous research and education programs across the globe. More than 75 percent of Duke students pursue service-learning opportunities in Durham and around the world through DukeEngage and other programs that advance the university's mission of "knowledge in service to society."

# **Wuhan University**

Located in Central China's Hubei province, Wuhan University consistently ranks among the country's top 10 universities and is a key comprehensive national university under the direct administration of the Ministry of Education.

The college's history can be traced back to the Ziqiang Institute founded in 1893 by Zhang Zhidong, governor-general of Hubei and Hunan provinces in the late Qing dynasty (1644-1911). In 1928, the institute was renamed as Wuhan National University.

Its campus is regarded as one of the most beautiful in the country, boasting palatial buildings that blend Eastern and Western architectural styles.

The university enjoys partnerships with more than 400 universities and research institutes in over 45 countries and regions, while its more than 300,000 alumni includes at least 100 members of the Chinese Academy of Science and the Chinese Academy of Engineering.

#### Kunshan

Kunshan is located in the southeastern part of Jiangsu province, a satellite city in the greater Suzhou region and adjacent to Shanghai, two of the most developed metropolitan areas in China. Kunshan is regarded as one of the country's most economically successful county-level administrations. It ranked No 1 in the 25 Best County-level Cities in China study by Forbes China for the ninth year running in 2009. With an immigrant population larger than the number of its permanent residents, Kunshan was winner of the 2010 UN-Habitat Scroll of Honor Award, the most prestigious award given by the United Nations, along with Singapore and Vienna in recognition of work carried out in the field of human settlements development,

for the city's innovative approach to granting migrants the right to essential services. It also has received titles and awards such as a National Hygiene City, Excellent Tourism City of China and National Garden City, as well as National Model City of Environment Protection and National Model Zone of Ecology.

Kunshan is culturally significant as the origin of Kunshan *diao*, the melody that ultimately evolved into Kunqu Opera, one of China's oldest extant theatre arts, which has been listed as UNESCO as World Intangible Culture Heritage. It has also been home to famous figures including Zu Chongzhi, Gu Yanwu, Gui Youguang, Gong Xian and Zhu Bailu.

# **Duke Kunshan University Community Standard**

Duke Kunshan University expects students to hold themselves to the highest standards for honesty, integrity, fairness, and responsibility in their academic and co-curricular endeavors. Duke Kunshan University is a community comprised of individuals from diverse cultures and backgrounds. We are dedicated to scholarship, leadership, and service and to the principles of honesty, fairness, respect, and accountability. Members of this community commit to reflecting upon and upholding these principles in all academic and non-academic endeavors, and to protecting and promoting a culture of integrity and trust. To uphold the Community Standard, each student is expected to pledge to hold him/herself to the highest standards for honesty, integrity, fairness, and responsibility in his/her academic and non-academic endeavors, to respect other cultures and embrace all forms of diversity, and to uphold the standards if they are compromised.

# Part 2: A Liberal Arts Education at Duke Kunshan University

# A 21st Century Curriculum

The Duke Kunshan University curriculum begins from liberal arts principles and is imbued with the hallmarks of a Duke education blended with Chinese tradition: interdisciplinary approaches, engagement with research questions, problem-based and team-based learning, and opportunities for students to craft individual pathways and deepen their intellectual engagement over time. It is a kind of education that builds critical and problem-solving skills, simultaneously conferring a broad base of knowledge and fostering the ability to interrogate that knowledge and apply it flexibly. It is also deeply cross-cultural in its orientation: Duke Kunshan University gives all participants the continual experience of learning to see from multiple points of view and to work together across cultural boundaries—a crucial skill for the future.

# A Liberal Arts College Experience

The small-scale residential setting at Duke Kunshan University offers significant opportunities for innovative and integrated forms of learning, an especially close connection between faculty and students, and the intermixing of students with different interests. In addition, Duke Kunshan University offers creative alignments between its undergraduate curriculum and selected areas of research strength at Duke Kunshan University and at Duke. Liberal arts colleges provide direct access to research opportunities for undergraduates – they leverage their small size, commitment to teaching to provide opportunities for one-on-one and small team-based scholarly mentoring. In the United States, liberal arts colleges disproportionately produce students who go on to earn PhD's. Duke Kunshan University offers the same kinds of focus on discovery and the co-creation of knowledge as at liberal arts colleges with the added dimension of research centers on site and connections to a major research university in the United States and to Wuhan University in China.

# **Dual Degrees**

Students who complete Duke Kunshan University's 4-year undergraduate curriculum will receive two degrees, one from Duke University (accredited by the Southern Association of Colleges and Schools Commission of Colleges), and one from Duke Kunshan University (approved by the Ministry of Education of China), and will be alumni of both institutions. All students must fulfill the requirements for both the Duke University and the Duke Kunshan University degrees.

# **Animating Principles**

Duke Kunshan University aspires to provide a 21st century liberal arts education that helps student develop a sense of social responsibility and global citizenship, as well as strong and transferable intellectual and practical skills such as communication, analytical and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings.

The overarching goals are imbedded in the seven animating principles that are expressed throughout the curriculum:

- **Rooted Globalism:** To cultivate informed and engaged citizens who are knowledgeable about each other's histories, traditions of thought and affiliations; and skilled in navigating among local, national and global identities and commitments.
- **Collaborative Problem-Solving:** To instill the habits of collaboration and the ability to synthesize disparate insights in solving complex challenges.
- **Research and Practice**: To enhance the ability to forge links between theory and practice in the many-sided and rapidly changing world of human need.
- **Lucid Communication:** To develop the ability to communicate effectively, both orally and in writing, and to listen attentively to different viewpoints in coming to mature judgments.
- **Independence and Creativity:** *To nurture free inquiry, deep reflection and a drive to ask interesting questions and find compelling answers.*
- **Wise Leadership**: To shape thinkers and doers who possess the moral compass to guide communities and institutions toward a common good and who have the wisdom and technical competence to deal effectively with complexity.
- A Purposeful Life: To form reflective scholars who test their core beliefs, connect their course of study to big questions of meaning, and who build the capacity for lifelong learning and exploration.

# **Part 3: The Curriculum**

#### **Overview**

The Duke Kunshan University undergraduate curriculum can be described as a "research-inflected liberal arts experience" that builds on the unique DNA of Duke as a major research university but with a strong liberal arts philosophy, structure and orientation. The curriculum does not rely on traditional majors housed in departments, but rather is built on interdisciplinary and disciplinary components in and across three thematic areas: (1) natural and applied sciences, (2) social sciences, and (3) arts and humanities. Flexibility and interdisciplinarity are hallmarks of this curriculum, along with signature work that enables students to engage scholarship both individually and within a community of learners. This curriculum is designed to be compatible with the quality and depth of a Duke undergraduate degree but is unique and distinct from the current Duke undergraduate experience, which is aligned more with a traditional major's structure.

The curriculum fosters learning communities of students and faculty whose intellectual interactions revolve around two groups: (1) The interdisciplinary community, which spans laterally a variety of disciplines. To the big questions at the core of each interdisciplinary community will be deployed a variety of disciplines, voices, viewpoints and expertise, usually also from a variety of divisions. The deep expertise brought to bear on discussion will be provided by both faculty and advanced students. (2) The disciplinary specialization, which is akin to, or even entirely aligned to, a traditional vertical discipline. From this community comes the training in the methods, knowledge, and skills of a specific discipline. Individual courses that belong to an interdisciplinary community or disciplinary specialization may be taken at various stages of a students' career. But the interdisciplinary community comes first in a students' overall development – it provides a broad intellectual home and is followed by or is in parallel to more specialized work.

The dual structure is also flexible, to accommodate a variety of student goals and outcomes. Some students might choose to pursue a less deep path in the disciplinary specialization while focusing more on developing broad expertise in the questions underlying the interdisciplinary community — and in that case the outcome can be a powerful kind of integrative education for students whose goal is not graduate school or specialized study, which is where a great many careers and life paths lie. This approach allows for a highly integrative, team-based approach to problem solving and knowledge acquisition. For students oriented towards graduate study, the integrative and out-looking approach in the interdisciplinary community broadens and enriches their deeper specialist expertise. Our strong expectation is that a student with deep expertise who also has interacted in a significant, deep way with an interdisciplinary group focused on big questions will be more, not less, appealing to graduate schools or other specialty pursuits. For certain disciplines, students oriented towards graduate school may also need to use some electives, guided independent studies, online courses and Study Abroad courses to deepen expertise beyond the number of courses required for the disciplinary specialization.

To ensure that Duke Kunshan University students develop the ability to communicate effectively, guided practice in writing and speaking are built into the fabric of the curriculum. All three Divisional Foundations sequences provide opportunities for students to practice the specialized discourse of their chosen field, while Common Core courses help students learn to communicate as scholars and professionals to broader audiences. Toward the end of their undergraduate studies, all students take on more advanced writing and speaking challenges as part of their signature work and capstone projects.

# **Key Components**

The Duke Kunshan University undergraduate curriculum emphasizes shared knowledge and experience, integrated learning and deep learning, and flexible pathways. The key components are:

#### **Structures**

- Divisional areas of knowledge organize the faculty and the curriculum Natural Sciences; Social Sciences; and Arts and Humanities – rather than traditional majors or departments.
- **Intensive 7-week terms** enable students to take two in-depth courses with the flexibility to take some courses in 14-week blocks.
- **Fridays** are designed for practica, field trips, internships, co-curricular activities, and civic engagement.
- Mini-term courses provide a focused exposure to a single topic while enabling students to move outside of their comfort zones. There are no pre-requisites or grades for these non-credit courses.
- Seminars of fewer than 20 students are the primary mechanism for instruction and the means by which excellence in writing, speaking and listening are nurtured, supplemented by courses in English for Academic Purposes.

# **Core Components**

- **Common Core courses** required of all students focus on big questions and critical challenges and students take one per year for three years.
- Language courses required in English, Chinese or potentially a third language.
- Majors that have interdisciplinary and disciplinary components, with the former serving as the entry point and primary definition of a students' academic community and the latter providing specialized training, as well as divisional foundation courses that prepare students for advanced study and signature work that focuses on a question, problem or issue and includes independent research, a senior thesis or creative production.
- **Electives** that broaden students' educational experience via simple distributional requirements and additionally enable them either to develop greater specialized knowledge or to further increase the breadth of their study.
- **Experiential opportunities** that align the formal curriculum with practica, internships

and other hands-on offerings are required and available as electives.

These components are reflected in specific requirements:

- **General Education**: 3 common core courses (12 credits), 2-4 language courses (8-16 credits) depending on proficiency, 3 electives (12 credits) as distributional requirements, and one Quantitative Reasoning course (4 credits)
- **Major**: 16-19 courses (64 to 76 credits) (foundation, interdisciplinary, disciplinary, and signature product)
- **Electives**: 8-13 courses (32 to 52 credits) depending on division and language proficiency, which include the three electives as distributional requirements and one Quantitative Reasoning course in General Education
- Other requirements: 1 non-credit mini-term course and 1 practice oriented educational experience (internships, civic engagement, etc.)

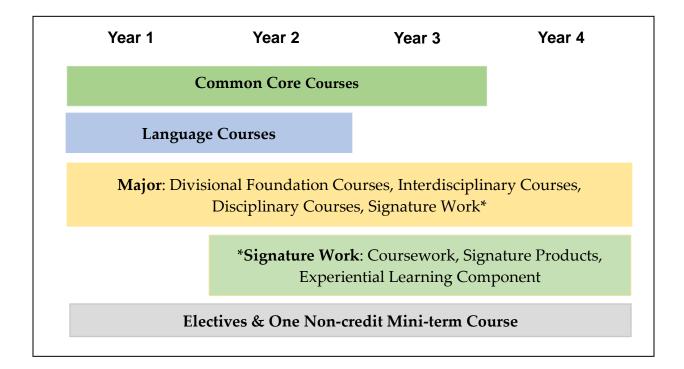
Students who complete Duke Kunshan University's 4-year undergraduate curriculum will receive two degrees, one from Duke University and one from Duke Kunshan University. A total of 136 Duke Kunshan University credits is required for graduation with a Duke Kunshan University bachelor's degree, which is equivalent to 34 Duke University course credits (1 Duke course credit is equivalent to 4 Duke Kunshan University credits). A total of 34 Duke University course credits is required for graduation with a Duke bachelor's degree. More details on the course credit requirement are explained below in Degree Requirement section.

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 $<sup>^1</sup>$  There are additional MOE requirements for the Chinese mainland and Hong Kong, Taiwan, Macau students to obtain a Duke Kunshan University bachelor's degree. See section on Credits Required for Degrees.

**Figure 1. Course Distribution** 



# Degree requirements

## **General Education Requirements**

## Common Core (3 courses, 12 credits)

Common Core courses provide opportunities for students to develop a degree of common knowledge and shared experiences. One dimension of this commonality is a set of core courses that focus on big questions and critical challenges with which every student should be prepared to engage. Engagement will draw from and integrate humanistic and scientific knowledge, including its historical context and cultural traditions of thought about value, the nature of reality, and what it is to be human. Such knowledge is both a means for addressing challenges and a pre-requisite for identifying what our challenges are and how we might address them. Common Core courses also provide regular instruction and guided practice in writing and speaking for non-specialist audiences. Students take these courses one per year, in sequence, so that the common experience and development of communication skills extend across time.

The three common core courses are China in the World (Year 1), Global Challenges in Science, Technology and Health (Year 2), and Ethics, Citizenship and the Examined Life (Year 3). In order to promote the common experience among the same class of students, these three common core courses must be taken during the Fall or Spring semester in the designated year of study.

## Distribution Requirement (3 courses, 12 credits)

The distributional requirement is intended to broaden students' educational experience and ensure that all graduates have an acquaintance with a broad variety of fields of inquiry and approaches to knowledge. Students are required to take at least one four-credit elective course² in each of the three divisional areas: arts and humanities, natural and applied sciences, and social sciences. Courses that fulfill the distribution requirement are designated by divisional area attributes.

- 1. Courses with two divisional area attributes can be only counted as one area attribute;
- 2. Courses with both a Quantitative Reasoning (QR) attribute and a divisional area attribute can only be counted as one of these attributes;
- 3. Transfer credit from Duke or other academic institutions through study abroad or summer programs will need the review and approval from the division chair to fulfil the distributional requirement.

## Quantitative Reasoning Course Requirement (1 course, 4 credits)

The Quantitative Reasoning (QR) requirement aims to ensure that all students graduate with critical skills in quantitative analysis and deductive reasoning.

The QR requirement can be fulfilled by AP or IPC credits or by taking a course with the Quantitative Reasoning (QR) attribute<sup>3</sup> or by approved transfer credit from study abroad or summer programs for computer science, mathematics, or statistics courses. Transfer credit requires the review and approval from the appropriate division chair to fulfil the distributional requirement.

## Satisfying the Quantitative Reasoning by AP or IPC credits

| AP/IPC Exam                                   | Minimum Score Required to<br>Satisfy Quantitative Reasoning |
|---|---|
| Advanced Placement Exams in Calculus AB       | 5   |
| Advanced Placement Exams in Calculus BC       | 4   |
| Advanced Placement Exam in Computer Science A | 4   |

<sup>&</sup>lt;sup>2</sup> A student may fulfil the distribution requirement in a divisional area by taking two two-credit courses (four credits in total) with that divisional area attribute.

<sup>&</sup>lt;sup>3</sup> Courses with more than one attribute can only be counted as one of these attributes.

| Advanced Placement Exam in Computer<br>Science Principles                        | 5 |
|--|---|
| Advanced Placement Exam in Statistics  | 5 |
| International Baccalaureate Higher Level Exam in Mathematics or Computer Science | 6 |
| A-level Mathematics Exam   | В |

# Language Courses (2-4 courses, 8-16 credits)

One of Duke Kunshan University's goals is for students to graduate with strong skills in multiple languages, especially English and Chinese. To this end, all students are required to take 8-16 credits of foreign language courses appropriate to their needs.

Duke Kunshan University's medium of instruction is English, so it is imperative that all students have a strong command of English. Further, the ability to produce effective academic papers and presentations in English is especially important. Students whose secondary education was not in English medium schools will generally benefit from instruction in academic English skills, and will therefore be assigned to the English for Academic Purposes (EAP) track at Duke Kunshan University and be required to take two course sequences, EAP 101A and 101B and EAP 102A and 102B. Students can further develop their academic English skills by taking elective EAP courses and/or written and oral communication (WOC) courses.

Students at Duke Kunshan University should also attain a high level in Chinese, not only because Duke Kunshan University is located in China, but also because Chinese is already one of the world's most important global languages. For this reason, students who are not required to be in the EAP track and who do not yet have a strong academic and professional command of Chinese will be assigned to a Chinese as Second Language (CSL) track, and assigned to a course appropriate to their Chinese level based on the results of a Duke Kunshan University placement examination process. All CSL-track students are required to meet two criteria: they must take at least eight credits of Chinese language courses (normally four 2-credit courses), and they must successfully complete CHINESE 202B or a higher level course. That is to say, students who begin their Chinese study in CHINESE 101A are required to take Chinese courses until they complete CHINESE 202B; students who begin studying Chinese in CHINESE 201A or a higher level course are required to take 8 credits, starting with and including whatever level course they are placed into. After satisfying their foreign language requirement, CSL-track students are encouraged to continue developing their Chinese language skills by taking higher level elective courses in Chinese, and also by designing and carrying out Chinese learning plans either on their own or with guidance and support from the Writing and Language Studio.

Students who enter Duke Kunshan University with such a strong command of both English and Chinese that they can readily do academic work in both languages - and that no

appropriate EAP and CSL courses are offered for them - will not be assigned to either the EAP track or the CSL track. These students can satisfy their foreign language requirement in several ways. One option is to take independent study courses in a third language (TLANG) through the Writing and Language Studio. Another option is to take advanced written and oral communication (WOC) courses. Because the content of different sections of some WOC courses differ considerably, in some cases students are allowed to take more than one WOC course of the same course number if the course content of the two courses is different.

More information on language placement is in the Entrance Credit and Placement sections of Part 6.

## Major Requirements (16-19 courses, 64-76 credits)

Majors have interdisciplinary and disciplinary components, with the former serving as the entry point and primary definition of a students' academic community and the latter providing specialized training, as well as divisional foundation courses that prepare students for advanced study and **signature work** that focuses on a question, problem or issue and includes independent research, a senior thesis or creative production.

Requirements for each major include Divisional Foundation Courses, Interdisciplinary Studies Courses, Disciplinary Studies Courses, Signature Work and Experiential Education. The detailed course requirements for each major are listed in Part 10: Majors and Courses.

Students are responsible for meeting the requirements of a major as stated in the bulletin for the year in which they matriculated;<sup>4</sup> however, they also have the option of meeting the new requirements of a major implemented subsequent to the students' matriculation.

## Divisional Foundation Courses (2 to 5 courses, 8 to 20 credits, depending on major)

Divisional Foundation courses provide opportunities to develop knowledge and skills essential to advanced work in each division.

# Interdisciplinary Studies (4 to 7 courses, 16 to 28 credits, depending on major)

Interdisciplinary courses are characterized by distinct curricular pathways spanning several traditional disciplines. These are broad but defined areas of study that encourage integrative and multidisciplinary habits of inquiry and knowledge acquisition. The interdisciplinary component of a major serves as a primary definition of the student's academic community. It requires 4 to 7 courses and might be problem-focused, comparative and cross-cultural, or innovative fusions within or across divisions. In the social sciences and the arts and humanities communities, students in their 3rd and/or 4th years will undertake advanced seminars that enable them to integrate their studies from more specialized areas.

<sup>&</sup>lt;sup>4</sup> Students in the Class of 2022 should follow the AY 2019-20 Undergraduate Bulletin because some of the courses in the original requirements may no longer exist.

## Disciplinary Studies (4 to 7 courses, 16 to 28 credits, depending on major)

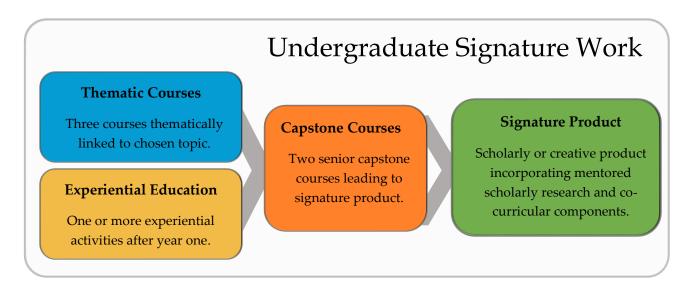
Students will also develop a disciplinary study, which often will map to the tools and methods of a traditional discipline and further enable students to be competitive for graduate school or other advanced work.

## Signature Work and Experiential Education (8 credits and one non-credit experience)

Duke Kunshan University graduates will have experience addressing complex problems outside the classroom as well as within, developing these skills through "Signature Work". Signature Work encourages students to seek creative alignments between curricular pathways and to engage in experiential learning that leads to the creation of knowledge and products for scholarly, private sector and public audiences.

Signature Work calls for each student to identify one or more questions, problems, or issues that are of particular importance to him or herself and to society, and to investigate these through a combination of curricular and related co-curricular experiences. Students develop guided pathways, identify questions, and undertake projects early in their academic career. During the sophomore year students work with their advisors and faculty mentors to begin identifying the major questions, problems, or issues on which they would like to work, and to develop a pathway that includes three thematically linked courses drawn from students' interdisciplinary studies, disciplinary studies or electives, one or more co-curricular experiences, and two capstone courses in which a student creates a substantial scholarly or creative signature product. The co-curricular experiential learning component (e.g. internships, practica, community-based fieldwork or other civic projects) must comprise no fewer than 150 hours of work, and will be reflected on the transcript as non-credit, Practice-Oriented Education (POE). The signature product will vary across fields and disciplines, but will always include substantial writing, reflection on learning, and publicly visible results. A student's pathway will be developed by the end of the sophomore, or beginning of the junior year, at the latest. In the junior and senior years, a student will create an e-portfolio that captures both the signature product a student has produced and a narrative explaining the larger inquiry informing their pathway.

Figure 2: Undergraduate Signature Work



# **Credits Required for Degrees**

Duke Kunshan University adheres to the academic standards upheld by Duke University and the relevant requirements for graduation and degree awarding by the education administration authorities of China. All undergraduate students must meet the requirements of both Duke University and Duke Kunshan University before they can graduate and be awarded a graduation certificate and a bachelor's degree from Duke Kunshan University, as well as a bachelor's degree from Duke University.

A total of 136 Duke Kunshan University credits is required for international students to graduate and obtain the degrees, inclusive of 34 Duke Kunshan University credits earned through courses taught or co-taught by Duke faculty (i.e. 8.5 courses; 1 course credit at Duke is equivalent to 4 Duke Kunshan University credits). The specific Chinese Society and Culture courses required by the Ministry of Education of China for Chinese students are optional for international students. Students should note that the Chinese Society and Culture courses are taught in Chinese and do not count toward the 136 credits for the Duke degree.

A total of 148 (Class of 2022) or 150 (Class of 2023 and beyond) Duke Kunshan University credits is required for Chinese students to graduate and obtain the degrees, including: (1) 136 Duke Kunshan University credits required for graduation with a Duke University bachelor's degree, inclusive of 34 Duke Kunshan University credits earned through courses taught or co-taught by Duke faculty (i.e. 8.5 courses; 1 course credit at Duke is equivalent to 4 Duke Kunshan University credits); and (2) 12 (Class of 2022) or 14 (Class of 2023 and beyond) Duke Kunshan University credits required by the education administration authorities of China. The aforementioned graduation requirements apply to all Chinese students, including those from Hong Kong, Macau, and Taiwan. The detailed explanations are as follows:

#### Class of 2022:

For students from the Chinese mainland, the credit-bearing requirements specified by the education administration authorities of China are: (1) Two Chinese Society and Culture courses (CHSC 101 and CHSC 102, 4 credits each, 8 credits in total); (2) Military training (2 credits); (3) Eight half-credit physical education courses (4 credits in total, 2 of which can count toward the 136 credits for the Duke degree), and passing the physical proficiency test set by Ministry of Education of China. The total required credits is 148, inclusive of the 136 credits required for all students.

Students from Hong Kong, Macau, and Taiwan must meet the same requirements as those from the Chinese mainland. However, they may substitute the military training credits with credits from designated Chinese studies courses other than CHSC 101 and 102, or they can voluntarily take military training to get the corresponding credits.

#### Class of 2023 and Beyond:

For students from the Chinese mainland, the credit-bearing requirements specified by the education administration authorities of China are: (1) Two Chinese Society and Culture courses (CHSC 101 and CHSC 102, 4 credits each, 8 credits in total); (2) Military training (4 credits); (3) Eight half-credit physical education courses (4 credits in total, 2 of which can count toward the 136 credits for the Duke degree), and passing the physical proficiency test set by Ministry of Education of China. The total required credits is 150, inclusive of the 136 credits required for all students.

Students from Hong Kong, Macau, and Taiwan must meet the same requirements as those from the Chinese mainland. However, they may substitute the military training credits with credits from designated Chinese studies courses other than CHSC 101 and 102, or they can voluntarily take military training to get the corresponding credits.

#### **Course Credits**

Course credit at Duke Kunshan University follows the same standard as Duke University in terms of instruction hours and off class study hours. Of the 136 credits required for a Duke University degree, a maximum of 8 credits passed with a D grade (D, D+, D-) can be used toward the 136 credits requirement. The 136 credits may include (1) no more than 2 credits in physical education activity courses (i.e., four half-credit activity courses); (2) no more than eight elected credits taken on a Credit/No Credit grading basis (not including courses offered only on that basis); (3) no more than 40 credits combining any allowable transfer credits including AP/IPC, transfer credits for study abroad, etc.; and (4) no more than Duke Kunshan University equivalent of 24 credits in graduate and professional school courses not listed in the Duke Kunshan University Undergraduate Programs Bulletin. These courses include all courses offered by Duke Kunshan University graduate programs, Duke schools of business, law, divinity, nursing, and all graduate courses numbered 700 and above. These courses are generally not open to undergraduates and require special permission to enroll. For limitations on transfer credit and Advanced Placement credit, see the sections on "Advanced Placement" and "Transfer of Work Taken Elsewhere" in Part 6: "Academic Procedures and Information".

To meet the 136-credit requirement, students need to complete additional elective courses in addition to completing the General Education and Major Requirements. The curriculum is designed to enable a wide range of flexibility for students. Some may elect to use their full range of electives to go wide and broad while others may elect to dive deep into their areas of disciplinary study.

#### **Non-Credit Mini-Term Courses**

Mini-term courses are intensive, non-credit, non-graded, one-week short courses that provide a focused exposure to a single topic while enabling students to move outside of their comfort zones. These courses, which are offered between the two sessions of the spring semester, are intended for the generalist with minimal or no pre-requisites and could be academically or experientially oriented. Students need to take one mini-term course in order to fulfill their degree requirement. Students may enroll in additional mini-courses as space permits. Students can take these courses any time during their four-year study at Duke Kunshan University. This requirement encourages students to explore their intellectual interests and unfamiliar academic fields and locate their passions by offering short seminar-style courses in a risk-free setting.

# Part 4: Admission, Scholarships and Financial Aid

# **Principles of Selection**

Duke Kunshan University seeks high-caliber, diverse, and talented students with 60-70% of the student population from China, and 30-40% of students from the rest of the world. Like Duke University, academic excellence and accomplishments are important factors for admissions. In line with our own unique institutional identity, we also place a very high value on qualities such as perseverance, global-mindedness, entrepreneurialism and ability to make an impact.

Applicants may be invited to attend an interview either in-person, by phone or via video-conference. Strong candidates from the Chinese mainland will be invited to Duke Kunshan University for a one-day campus visit including an interview. All interviews are conducted in English.

# How to Apply

All students applying to Duke Kunshan University must complete the Common Application. International students will need to select a decision plan (Early Decision or Regular Decision), which determines the admissions timeline. Students may select only one decision plan and those who have selected Early Decision will not be reconsidered during the Regular Decision cycle if an admissions decision is made during the Early Decision round. All Chinese students, including students from Hong Kong, Macau and Taiwan, should choose the Regular Decision plan for application.

#### Early Decision (International Students only)

- Application Deadline: November 1
- Decision Notification Date: On or before December 15
- Acceptance of Offer: By January 5

#### Regular Decision (All students)

- Application Deadline: January 3
- Decision Notification Date: On or before March 31
- Acceptance of Offer: By May 1

# **Application Requirements and Timelines**

## <u>U.S. and International Applicants</u> need to submit the following:

- The Common Application form
- Personal essay

- High School Transcript<sup>5</sup>
- Two Teacher Recommendation Letters
- Counselor Recommendation Letter (if available)
- SAT or ACT (with Writing) exams
- Early Decision Agreement (if applicable)
- OPTIONAL:
  - SAT Subject Tests
  - o TOEFL/IELTS for Non-Native English speakers



# Applicants from the Chinese mainland need to submit the following:

- The Common Application form
- Personal essay
- Mid-term and Final Grades in each year of Senior High School
- Score of High School Academic Proficiency Test (高中学业水平考试)
- School Recommendation Form
- Scanned copies of main honors and awards
- TOEFL or IELTS (optional)
- Gaokao Score (upon completion)



#### Applicants from China (Hong Kong, Macau and Taiwan) need to submit the following:

- The Common Application form
- Personal essay
- Mid-term and Final Grades in each year of Senior High School
- Two Teacher Recommendations
- TOEFL or IELTS (optional)
- Test Scores
  - o Joint Entrance Exam (JEE); or
  - o GSAT (Taiwan applicants only)

<sup>&</sup>lt;sup>5</sup> A final high school transcript will be due upon high school graduation and before enrolling at DKU.



After a preliminary review, qualified Chinese mainland applicants will be invited to attend one of the Campus Days on the weekends in March. On the Campus Day, applicants will be invited to attend a series of activities, including interviews, mock classes and writing assessment.

# Scholarships and Financial Aid

To support a globally diverse cohort of students from a variety of backgrounds, Duke Kunshan offers both need-based and merit-based awards up to and including the cost of full-tuition.

All applicants for admission are automatically considered for merit scholarships. A separate application is not required.

Need-based financial aid is reserved for applicants with a strong academic record who lack the financial ability to attend the university. When completing the Common Application, all applicants must indicate a "yes" in the financial aid interest box in order to be considered for need-based financial aid. International applicants must also submit the CSS Profile with their admissions application. The CSS code for Duke Kunshan University is 7059. Financial aid applicants will need to provide documentation to demonstrate that their current financial situation is a direct barrier to affording the tuition fees.

# **Notification and Responses**

Under normal circumstances, applicants will receive the scholarship/financial aid decisions together with the admissions decisions.

# **Part 5: Financial Information**

## **Tuition and Fees**

College is an expensive investment. Fees paid by students do not cover the full cost of an education at the University. The income from endowment and contributions from alumni and other concerned individuals help meet the balance and assure each student the opportunity to pursue an education of unusually high quality.

Students are urged to give their attention first to the selection of institutions that meet their intellectual and personal needs, and then to the devising of a sound plan for meeting the cost of their education. This process will require an in-depth knowledge of both the university's financial aid program and the resources of the student's family. Information describing in detail the various forms of financial aid may be obtained from the Financial Aid Office.

# **Estimated Expenses**

The figures in this section are projections and are subject to change. Certain basic expenditures, such as tuition and room and board are considered in preparing a student's budget. These necessary expenditures, with a reasonable amount allotted for miscellaneous items, are shown below:

| UG 2019-2020 Cost of Attendance for Internationa |                        |                          |  |
|--|------------------------|--------------------------|--|
| Figures are in USD                               | 1st Year Students      |                          |  |
|  | Fall 2019<br>(Kunshan) | Spring 2020<br>(Kunshan) |  |
| Tuition  | \$27,940               | \$27,940                 |  |
| Health Insurance                                 | \$1,104                |                          |  |
| Student Fees (Health Fee, Recreation Fee, etc.)  | -                      | -                        |  |
| Books & Supplies                                 | \$650                  | \$650                    |  |
| Housing  | \$1,343                | \$1,343                  |  |
| Board  | \$1,505                | \$1,505                  |  |
| International Travel                             | \$2,250                | -                        |  |
| Local Transportation                             | -                      | -                        |  |
| Miscellaneous/Personal Expenses                  | \$896                  | \$896                    |  |
| Total Cost of Attendance                         | \$35,689               | \$32,334                 |  |

| UG 2019-2020 Cost of Attendance for Chinese Stu | den               | ts                    |   |                        |   |                      |
|---|-------------------|-----------------------|---|------------------------|---|----------------------|
| Figures are in RMB                              | 1st Year Students |                       |   |                        |   |                      |
|   |                   | Fall 2019<br>Kunshan) |   | pring 2020<br>Kunshan) |   | mer 2020<br>nshan) * |
| Tuition   | ¥                 | 85,000                | ¥ | 85,000                 |   | -                    |
| Social Insurance                                | ¥                 | 220                   |   | -                      |   | -                    |
| Student Fees (Health Fee, Recreation Fee, etc.) |                   | -                     |   | -                      |   | -                    |
| Books & Supplies                                | ¥                 | 4,355                 | ¥ | 4,355                  | ¥ | 200                  |
| Housing   | ¥                 | 9,000                 | ¥ | 9,000                  |   | -                    |
| Board   | ¥                 | 10,080                | ¥ | 10,080                 | ¥ | 4,410                |
| Domestic Travel                                 | ¥                 | 1,000                 | ¥ | 1,000                  |   | -                    |
| Local Transportation                            |                   | -                     |   | -                      |   | -                    |
| Miscellaneous/Personal Expenses                 | ¥                 | 6,000                 | ¥ | 6,000                  | ¥ | 2,625                |
| <b>Total Cost of Attendance</b>                 | ¥                 | 115,655               | ¥ | 115,435                | ¥ | 7,235                |

<sup>\*</sup> For students who will take 2 Chinese Society and Cultural courses in the summer of 2020.

It should be realized that additional expenses incurred will depend to a large extent upon the tastes and habits of the individual. The average undergraduate student, however, can plan on a budget of approximately \$68,023 for international students and ¥231,090 for Chinese students for one academic year (¥238,325 for students who take the 2 Chinese Society and Cultural courses in the summer of 2020). These budgets represent most student living expenses except for cable, telephone, parking, travel costs, loan fees, and major clothing purchases.

## **Enrollment Deposit**

International students are required to pay an enrollment deposit of USD 1,000 if they accept the admissions offer from the University. The deposit is non-refundable, but can then be used to pay tuition and fees.

## **Campus Deposit**

Students shall pay a campus deposit of ¥2,000 (or USD 300) before they arrive on campus. The deposit would be used to pay for the costs of replacement or repairs of residence damages, excessive cleaning, refrigerator rental, library overdue fines, damaged or lost books, replacement processing fees and other similar losses and damages caused to university properties. When the deposit is not sufficient to cover the charges, you will be responsible for settling all outstanding amounts and replenishing your campus deposit balance to RMB 2,000 (or USD 300). If the full amount of the campus deposit drops below RMB 2,000 (or USD 300), access to the student residence and library collections may be restricted. The campus deposit will be rolled over from year to year, and the balance will be refunded to you after your

graduation or withdrawal from the university.

#### **Student Bills**

Tuition and fees are due before the start of each semester. It is the responsibility of students to pay the entire billed amount by the due date listed on the bill. Students applying for financial aid should complete that process by the assigned due date.

Bills are available electronically on the Student Information System, and students will also receive bills via e-mail. Students may view bills and up-to-date student account history on the Student Information System.

#### **Payment**

Students who receive the RMB invoice should pay in RMB; while students who receive USD invoice should pay in USD. For detail payment instructions, please refer to the student bill. Service charges are normally assessed by both the sending bank and intermediary bank involved in completing the wire transfer. Please make sure you include or pay for the service charge before initiating your wire transfer. Your student account will be credited for the actual amount received (net of fees assessed by the sending banks).

#### **Restriction on Past Due Accounts**

Tuition and fees are due before the start of each semester. If your account remains unpaid, you will not be allowed to register for future semesters and may be administratively withdrawn from the University. As long as your account is past due, you may not have access to academic transcripts, be able to have academic credits certified, or receive a diploma at graduation. If your account remains outstanding after your departure from the University, it may be referred to a collection agency and reported to a credit bureau.

#### **Fees for Courses**

Additional fees could be charged for certain physical education activity, optional study trips, lab work and applied music courses.

## Housing

In residence halls for undergraduate students, the housing fee for a single room is  $\pm 9,000$  for People's Republic of China students and \$1,343 for International students per semester; for a double room, the fee is  $\pm 7,000$  for People's Republic of China students and \$1,025 for International students per semester.

## Refund

When students take a leave of absence, withdraw from the University, or are withdrawn by the University, an adjustment to tuition may occur, depending on the date and the reason for the withdrawal or leave of absence.

If the tuition adjustment results in a credit balance, the student or parent may elect to have the balance refunded or carried forward for future terms.

The University Tuition Withdrawal Adjustment policy is compliant with Jiangsu Education Department's regulations. The tuition withdrawal adjustment is calculated on a semester basis as the tuition charging and will be processed with all the other refundable charges.

The tuition withdrawal adjustments of students who take a leave of absence, withdraw or are withdrawn from the University shall follow the following guidelines:

| Withdraw Date  | Refund % ** |  |  |  |
|--|-------------|--|--|--|
| Before the class begins  | 100%        |  |  |  |
| Weeks 1-2*   | 80%         |  |  |  |
| Weeks 3-5  | 60%         |  |  |  |
| Weeks 6-12   | 50%         |  |  |  |
| After Week 12  | 0%          |  |  |  |
| *From the class begin date and calculated in the Student Information System.   |             |  |  |  |
| ** The refund percentage here refers to the percentage that will be refunded out of the net tuition of the semester students shall withdraw. |             |  |  |  |

- a. For students who cannot pass the physical examination within three months after the program begins, the University will refund full tuition to students.
- b. For students who voluntarily withdraw or take a leave of absence from the University, the University will refund according to the above schedule.
- c. For students who are suspended or dismissed from the University due to violation of University policies and regulations, no refund will be granted to students.
- d. For students who are suspended or take a leave of absence from the University due to a medical condition, the University will refund according to the above schedule. The University will not charge the students during the suspension or leave period. Students need to pay for the tuition of the semester when they return to the University.
- e. Students who voluntarily withdraw or take a leave of absence from the University will received a pro-rated refund of their housing fee, calculated based on the nightly rates.
- f. In the event of death, a full tuition refund is granted regardless of the program.

# Part 6: Academic Procedures and Information

# **Academic Integrity**

All DKU students are responsible for adhering to the Duke Kunshan University Community Standard (see section on Community Standard, Part 1). Each student admitted to DKU is required to sign the Community Standard before classes begin. The DKU Community Standard stresses the commitment that students share with all members of the community to enhance the climate for honesty, fairness, respect, and accountability at DKU. Students affirm their commitment to foster this climate by signing a pledge that includes taking constructive action if they witness or know about behavior they perceive to be inconsistent with the DKU Community Standard, which may include violation of university policies. Students are responsible for maintaining high standards of academic honesty and personal integrity in all matters, including reporting the results of their studies and research, completing assignments, and taking quizzes, tests, and examinations. When confronted with a possible violation of academic integrity, it is important that faculty members deal fairly and consistently with students.

The University's disciplinary process is independent of, and in addition to, an instructor's decision on how to grade academically dishonest work. Instructors are expected to communicate with students their policy regarding grading of an academically dishonest assignment (e.g., zero on the assignment, reduced/failing grade for the course, or other approach). An instructor may only implement this penalty if the student has accepted responsibility for academic dishonesty (by accepting the penalty) or has been found responsible for such through the proceedings of the Undergraduate Academic Review Board (UARB).

Any case reviewed by the UARB shall be kept strictly confidential and only those parties involved in investigating and resolving the case should know the details of the case and its resolution.

Violations of academic integrity that occur while the student is residing at Duke University or other institution (for example, during a study-abroad program) will be handled by the host institution according to the host institution's policies, although DKU reserves the option to investigate the case and impose additional penalties if such action is deemed warranted.

# **Academic Integrity: Undergraduate Program Policies**

Members of the faculty teaching undergraduates are expected to consult with the Dean of Undergraduate Studies regarding cases of possible academic misconduct. Minor, first-time infractions (those that would not be grounds for suspension or more severe censure if proven true) may be resolved between the faculty member and the student. The faculty member should submit a written record of the violation and how it was resolved to the Dean of Undergraduate Studies who maintains a record and determines if there have been previous

violations. If the student is dissatisfied with the resolution, he or she may appeal to the Dean of Undergraduate Studies. Cases that are more serious, second-time offenses or student appeals must be handled more formally through the Undergraduate Academic Review Board (UARB).

## **Entrance Credit and Placement**

Duke Kunshan University recognizes three types of college-level work you may have completed prior to matriculation at Duke Kunshan University:

- Advanced Placement Credit (AP)
- International Placement Credit (IPC)
- Prematriculation College Credit

Scores on the tests listed below, documented previous educational experience, and DKU placement tests are the criteria that can be used to determine a student's qualifications for certain advanced courses. In addition, a limited amount of elective course credit may be awarded on the basis of precollege examination and/or credits earned of the three types listed above. Duke Kunshan University will record on students' permanent Duke Kunshan University records courses of these three types completed prior to their matriculation at Duke Kunshan University. The three types of precollege work are regarded as equivalent and may be used for placement into higher-level coursework and to satisfy major requirements at Duke Kunshan University to the extent allowed by each major. Additionally, students may be granted up to 8 elective credits toward the degree requirement of 136 credits for any combination of AP, IPC or prematriculation credit. AP, IPC and prematriculation credits may be used to satisfy the quantitative reasoning requirement but not other general education requirements. Enrollment in a course for which AP, IPC or prematriculation credit has been given will cause the AP, IPC or prematriculation credit to be forfeited.

All AP, IPC and prematriculation credits that Duke Kunshan University recognizes, along with the equivalent course, will appear on the DKU transcript. The University does not recognize any AP or IPC exams that are taken after a student begins at DKU nor does it recognize equivalent exams granting degree credit (CLEP, locally administered placement tests, etc.).

## Forfeiture of Precollege Credit Awarded

Students who successfully complete a course at Duke Kunshan University for which they received precollege credit may not use that precollege credit or any higher precollege credit in that subject to satisfy degree requirements, but the precollege work will remain on the Duke Kunshan University transcript. A student who enrolls in a course for which precollege credit was awarded and who subsequently fails or withdraws from the course after the Drop/Add

deadline will be allowed to apply the pre-college credit toward graduation requirements according to the policy governing use of such credits (see above).

## College Board Advanced Placement Program (AP) Examinations

Duke Kunshan University recognizes the Advanced Placement program of the College Board. A score of four or five on College Board Advanced Placement Program Examinations, taken prior to matriculation at Duke Kunshan, is the basis for consideration of placement in advanced courses. Approval of the faculty and the corresponding division chair or the Director of the LCC is required before final placement is made. Scores must be submitted directly from the appropriate testing service to the Office of the University Registrar. The expectation is that they will be sent prior to matriculation.

## **International Placement Credit (IPC)**

Duke Kunshan University recognizes the International Baccalaureate Program; the French Baccalaureate; the British, Hong Kong, or Singapore A Level Examinations; the Cambridge pre-U; the Caribbean Advance Proficiency Examination; the German Abitur; the Swiss Federal Maturity Certificate; the All India Senior School Certificate Examination; the Indian School Certificate examination; and the Israeli Matriculation Certificate. Scores acceptable for consideration are determined by the faculty and evaluated by the Office of the Registrar. Course equivalents for these programs may be recorded on a student's permanent Duke Kunshan University record for placement and credit according to the same policy governing use of AP (see above). These credits may be used to satisfy the quantitative reasoning requirement but not other general education requirements; any combination of two IPC or AP courses may be used toward the required 136 credits for graduation.

#### **Prematriculation Credit**

First-year Duke Kunshan students may submit for evaluation college courses taken at another accredited college or university after commencement of the student's junior year of high school. (For details concerning transferring this work, see the section "Work Taken During High School.") Prematriculation credits awarded for such work may be used as electives and, thus, may not be used to satisfy the general education requirements. Any combination of eight prematriculation, IPC, or AP credits may be used toward the 136 credits required for graduation (credits do not have to be designated by the student). No prematriculation credit will be awarded for college coursework completed on a study abroad program undertaken prior to matriculation at Duke.

#### **Placement in Languages**

Entering students who attended high schools where English was not the medium of instruction will typically be assigned to the English for Academic Purposes (EAP) track. The

written and oral English skills of EAP track applicants will be assessed during the application process, and applicants will need to demonstrate strong written and oral English skills in order to be admitted to Duke Kunshan University.

In cases where students assigned to the EAP track feel they should be assigned to another track, they may make a request in writing to the Director of the Language and Culture Center. Standardized test scores such as TOEFL, IELTS, SAT, and ACT can be included as supporting evidence in the request. However, the key question is whether or not students have had substantial training in academic English, especially training in writing papers in English, and so the request should provide evidence of such training. (Passing scores on tests such as TOEFL and IELTS are not, in and of themselves, sufficient evidence of adequate academic English skills such as the ability to write course papers in English, give effective presentations in English, and so forth.)

Entering students who attended high schools where English was the medium of instruction will normally be assigned to the Chinese as a Second Language (CSL) track. During orientation at Duke Kunshan University, the Chinese skills of CSL track students will be assessed through a placement process that includes an interview, and they will be assigned to appropriate Chinese courses based on the results. In cases where students assigned to the CSL track feel they should be assigned to another track, they may make a request in writing to the Director of the Language and Culture Center.

Some entering students who attended English-medium high schools may also have very advanced levels in oral and written Chinese. During orientation at Duke Kunshan University, the Chinese skills of these students will be assessed, and if it is determined that they do not need to take CSL courses, they will be assigned to the Third Language track. They can then satisfy their foreign language requirement by taking 8 credits of written and oral communication (WOC) courses or Third Language (TLANG) independent study courses through the Writing and Language Studio.

#### **Other Placement Tests**

Duke Kunshan University offers additional placement tests in selected subjects. Such tests will generally be offered during orientation, although some might be available online during the summer preceding matriculation. Students may be allowed to register for designated advanced courses based upon their scores on these tests. However, placement test results do not carry any academic credit.

## Transfer of Work Taken Elsewhere

A Duke Kunshan University student may receive credit for a maximum of 40 credits taken elsewhere, through a combination of AP/IPC credit or approved transfer or study away credit. Of those 40 credits, a maximum of 8 may be from AP/IPC/prematriculation credits (see section on Entrance Credit and Placement) prior to matriculation, and a maximum of 8 may be from coursework undertaken while on voluntary leave of absence for personal or medical reasons. No credit will be accepted for coursework taken while a Duke Kunshan University student is withdrawn, suspended, or on involuntary leave of absence.

# Work Taken During High School

College-level courses taken elsewhere prior to matriculation at Duke Kunshan may be considered for prematriculation credit provided they meet each of the following criteria: were taken after the commencement of the junior year of high school and yielded a grade of B- or better, not used to meet high school diploma requirements, taken on the college campus, taken in competition with degree candidates of the college, taught by a regular member of the college faculty, offered as part of the regular curriculum of the college, and not taken on a study abroad program completed prior to matriculation at Duke Kunshan. Formal review of courses meeting these criteria will proceed after an official transcript of all college courses taken and documentation pertaining to these criteria are received by the university registrar. (See also the section on entrance credit in this chapter for a discussion of the number of prematriculation credits that can transfer and how they may be used at Duke.)

## Work Taken After Matriculation at Duke Kunshan University

All coursework undertaken after matriculation as a full-time degree-seeking student at Duke Kunshan University must be at another accredited four-year institution in the United States or similarly accredited institution abroad and with a liberal arts and general education curriculum.

Duke Kunshan University students may study away for a fall or spring semester and/or during the summer, either at Duke University or on a Duke Kunshan University-approved program sponsored by another university. In no instance may a student transfer more than 40 credits when combining study abroad, the allowable number of independent transfer courses, and AP/IPC credit. Courses taken at other institutions could count toward the major if approved by the relevant academic unit. However, specific majors may place limits on the types of courses taken at Duke or other universities that can be counted toward the major. Only those courses taken in which grades of C- or better have been earned are acceptable for transfer credit; courses taken at other institutions with CR/NC grading or the equivalent are not accepted for transfer credit. Credit equivalency is determined by the Office of the Registrar. Courses for which there is no equivalent at Duke Kunshan University may be given a 100 to 300 number, lower to upper level. Grades earned at Duke University are entered on the official

record and used in determining the grade point average. All other courses approved for transfer are listed on the student's permanent record at Duke Kunshan University, but grades earned are not recorded or used in determining the grade point average. Once the limit of transferred credit has been reached, no additional transferred work will be displayed on the record or used as a substitute for a previously transferred course. Further information is available from the university registrar.

Approval forms for Duke Kunshan University students taking courses at institutions other than Duke Kunshan University and Duke University may be obtained online or from the Office of Study Abroad. Students wishing to transfer credit for study at another accredited college or university while on leave, on a DKU-approved study abroad program, or during the summer must present a catalog of that college or university to the Director of Study Abroad and the corresponding division chair and obtain their approval prior to taking the courses.

#### **Transfer Credit for Foreign Language**

The same rules that apply to the transferring of courses to meet other curriculum requirements apply to foreign language courses. Foreign language courses taken elsewhere and approved for transfer as credit to Duke Kunshan University may be considered in language placement, but students will still be asked to go through Duke Kunshan University's Chinese language placement process in order to ensure that they are placed in the most appropriate Duke Kunshan University course for their proficiency level.

## Time Limit for Completing Undergraduate Degree

Undergraduates at Duke Kunshan University are expected to complete the bachelor's degree in eight semesters of enrollment. This period may be extended with approval from the Office of Undergraduate Studies for legitimate reasons, but the maximum length should not exceed six years, including the time taken for leave of absence. For students who are taking a leave of absence for military service reasons, the maximum length could be further extended by two years.

# Registration

Students are expected to register at specified times for each successive term. Prior to registration each student receives instructions via e-mail. Students prepare a course plan via Student Information System, and should discuss it at an appointed time with their advisor prior to registration.

Students who fail to register for the fall or spring semester are placed on involuntary administrative leave of absence and must apply for reinstatement if they wish to return. Those students who have not paid any fees owed to or fines imposed by the university (such as student residence fines, library fines, and other possible fines) by the date specified for registration for the following term will not be permitted to register for the following term until

such fees and fines have been paid in full, notwithstanding the fact that the student may have paid in full the tuition for the following term.

#### Course Changes after Classes Begin in the Fall and Spring Terms (Class Drop/Add)

Students may drop and add courses during the Drop/Add period at their own discretion. Courses dropped during this period do not appear on the official Duke Kunshan transcript. After the Drop/Add period, no course may be added; also, a course may not be changed to or from the audit basis. A student may elect to change the grading basis to Credit/No Credit at any time up until the end of the Drop/Add period of the subsequent semester in which the student is enrolled (see more details in the section on Credit/No Credit Grading System).

#### Withdrawal from a Course

Withdrawing from a course differs from dropping a course. Students drop the course themselves during the Drop/Add period, and the course does not appear on their official transcript. To withdraw from a course after the Drop/Add period, the student must obtain permission from his or her advisor. After the Drop/Add period, students permitted to withdraw from a course receive a designation of W for that course on their academic record. The deadline for requesting withdrawal from a course in a fall/spring semester is four weeks prior to the last day of classes for fourteen-week courses and two weeks prior to the last day of classes for seven-week courses. The deadline applies to course withdrawals for any reason other than medical. Coursework discontinued without the advisor's permission will result in a grade of F.

Withdrawing from a course is permitted in multiple fall/spring semesters, as long as a student maintains a course load of at least 16 credits. Withdrawing from a course to an underload (fewer than 16 credits) is generally permitted only once in a fall or spring semester. However, a student may begin another semester in an underload with certain restrictions (see below). A student may also be permitted to withdraw to an underload more than once if there are significant medical reasons (see below).

If a student notes errors in his/her course schedule, he/she should immediately consult with his/her advisor during the one-week schedule correction period that occurs immediately after Drop/Add ends.

## **Course Changes for the Summer Terms**

Summer Terms are structured for first-year Chinese students to take courses to meet the MOE requirements and for junior or senior students to take certain courses to meet requirements towards graduation. First-year students who wish to delay taking the required Chinese courses must submit a petition form to the Office of the Registrar. All course changes need to be approved by the student's advisor and processed by the Office of the Registrar. The deadlines for requesting withdrawals from a course also apply to the seven-week long summer term.

## **Undergraduate Course Load**

Students are reminded that it is their responsibility to be certain that their course load conforms with academic requirements. In fall and spring terms, the normal course load is 16 credits (8 credits in each 7-week session). In addition, students may enroll in 4-credits of language courses and one credit of PE courses without special permission from their advisor, up to a total of 20 credits plus PE. In the first 7-week session of their first semester, first-year students are restricted to a maximum of 8 credits (one four-credit course, one two-credit language course, and one additional two-credit course), plus one PE course. The maximum number of credits a student can take in any subsequent 7-week session without special permission is 10 (two 4-credit courses and one 2-credit course) plus one credit of PE courses. Students should note that in order to reach the 136 credits required for graduation, they will need 8 additional credits beyond the minimum course load of 16 credits per semester for eight semesters. These additional credits can be earned by any combination of semesters in which a student registers for greater than the 16-credit minimum, AP and IPC credits, or transfer credits.

Students studying abroad at other institutions may be subject to that institution's policies.

#### **Students on Academic Probation**

Students on academic probation may register for no more than 16 credits plus one PE course. The Dean of Undergraduate Studies may also limit the course load for a student who has previously received an academic warning. Students on academic probation are expected to remain in a full course load during the semester of probation and will be permitted to withdraw to an underload only in extenuating circumstances.

#### Overload

Only in exceptional cases and with special permission of both the academic advisor and the Dean of Undergraduate Studies, could a student enroll in an overload (defined as more than 10 credits in a 7-week session or more than 20 credits in a semester, exclusive of PE), up to a maximum of 24 credits. In determining whether to approve an overload, the academic advisor and the Dean of Undergraduate Studies will carefully consider the student's academic history, including grades and the number of courses taken in the past.

#### Underload

Two categories of underloads (defined as a course load between 12 and 15 credits) may be authorized: withdrawal to underload and enrollment to underload. With the exception of medical, the maximum number of underloads under any circumstances (withdrawal or enrollment to an underload) is two semesters. Students may make a request to their advisors to enroll in an underload up to twice during their time at Duke Kunshan University. A student may withdraw to an underload only once during their undergraduate career, although

medical withdrawals are not counted in this number. Thus, there are only two possible enrollment patterns involving two underloads:

- One withdrawal to an underload plus one enrollment in an underload, or
- Two enrollments in an underload

Students should take note that an underload may affect a student's scholarship or ability to graduate on time; 8 additional credits above the minimum of 16 per semester are needed in order to meet the 136 credits requirement for graduation. Students taking an underload will be ineligible for the Dean's list and the Dean's List with Distinction during that semester. Each semester, the Dean of Undergraduate Studies will review all students with an enrollment under 16 credits. After the review, the Dean of Undergraduate Studies will make a determination regarding any adjustments to the overall course load.

Seniors needing only 3 courses to graduate may request an underload for their last semester only in accordance with one or the other of these two patterns. Seniors who anticipate that they will need fewer than 3 courses to graduate must apply before the first day of classes in the last semester for part-time degree status (11 or fewer credits), which is not affected by or a part of the underload enrollment policy described here.

#### Withdrawal to an Underload

During the semester, upon recommendation from the academic advisor, the Dean of Undergraduate Studies may permit a student "for compelling reasons" to withdraw from a normal course load to an underload. Such a withdrawal to an underload is possible only prior to the final four weeks of classes for 14-week long courses and the final two weeks of classes for 7-week long courses. Students are permitted to withdraw to an underload only once in their academic career. The only exception to this policy is when a student is granted special permission to withdraw from a course to an underload for medical reasons (See Medical Withdrawal from a Course)

Withdrawal from a course in the summer is not subject to the underload policy.

#### Medical Withdrawal from a Course

A student who experiences medical problems that seriously interfere with their ability to meet their academic responsibilities should schedule an appointment with their advisor as soon as possible to discuss all of their options. Depending on how debilitating the medical situation is, and when in the semester the health concerns emerge, it may be the case that other types of relief, such as an incomplete or a medical leave of absence, are more appropriate than medical withdrawal from a course.

The decision whether to approve a course withdrawal for medical reasons is an administrative one to be made by the Dean of Undergraduate Studies, informed by the opinion of the student's attending health care provider but not driven by it. Beyond information provided by the health care professional, the DUS will take into account all that is known about the

student's situation at Duke Kunshan, including such factors as medical history, use of resources in the past, compliance with medical expectations, how the student has conducted their academic responsibilities in courses to date, and other such indicators that the student has been managing their condition and academic affairs in responsible ways.

Medical withdrawals are subject to the same deadline as all other course withdrawals. Likewise, such courses receive a designation of W on the student's academic record. Students eligible to withdraw from a course for medical reasons or to take a medical Leave of Absence after the regular course withdrawal deadline will have the option, upon obtaining the appropriate approvals from the instructor, to choose to receive the grade of I in one or more courses instead of the W grade. The student may then complete the course as described in the section on Incomplete Coursework.

#### **Enrollment in an Underload**

Under certain specific circumstances, students with a strong academic record may start a semester enrolled in an underload of between 12 and 15 credits (exclusive of PE). This is permitted a maximum of two times in a student's academic career and requires approval of both the academic advisor and the Dean of Undergraduate Studies. To enroll in an underload, a student must meet the following criteria for eligibility:

- Have a declared major
- Have a GPA of at least 3.0 and not be on academic probation
- Be enrolled on campus at Duke Kunshan enrolling in an underload is not permitted when you are studying abroad or otherwise away from Duke Kunshan
- For a first underload semester: have already passed at least 64 credits
- For a second underload semester, have passed at least 80 credits prior to the 6<sup>th</sup> semester or 96 credits prior to the 7<sup>th</sup> semester (excluding AP and IPC but including transfer credits) or 124 prior to the 8<sup>th</sup> semester (including AP, IPC, and transfer credits)

When considering whether to enroll in an underload, students should note that they:

- will be ineligible for the Dean's list and the Dean's List with Distinction during that semester:
- may not withdraw from a course during the underload semester;
- must pass at least 12 course credits in order to meet semester continuation requirements; and
- may need to make up credits (e.g., in summer or in future semesters) to stay on track for graduation.

Students should also consider whether enrollment in an underload might affect their:

- scholarship or financial aid check the conditions of your award;
- subsequent application to graduate or professional school consult a graduate or professional school advisor.

# **Eligibility for Courses**

Students are responsible for ensuring that they have the stated prerequisites for a course. Students must check the course description to determine if they have taken the necessary prerequisites before enrolling in the course.

In certain subjects, such as the sciences, mathematics, and the foreign languages (particularly at the introductory and intermediate levels), some lower level courses must be taken in sequence because the content presented at one level is necessary for successful work at the next level. Given this circumstance, it follows that students who complete a higher level course in a sequence may not subsequently enroll in a lower one that is a prerequisite for the higher course in that sequence. For example, a student cannot take Chinese 101 after having successfully completed Chinese 102. Students earning a C- or below in a course that is a prerequisite for another course should consult with their academic advisor and/or the course instructor before enrolling in the subsequent course in the sequence.

Information about course eligibility is often contained in the official description of the course on the latest course catalog. Students may direct additional questions about course sequencing to their advisors.

Students may not register for two courses officially listed as meeting at the same time.

Juniors and seniors may enroll in 500- to 600-level (graduate-level, open to advanced undergraduates) courses. Sophomores wishing to enroll in a 500- to 600-level course must secure permission of the instructor of the course and of their advisors. Undergraduates are normally not allowed to enroll in 700-900-level courses. Under exceptional circumstances, however, permission to do so may be granted to a junior or senior, provided the instructor, the Director of Graduate Studies in the corresponding program and their advisors give their signed permission. Seniors who, at the beginning of the final term, lack no more than 12 credits toward the fulfillment of the requirements for the bachelor's degree may enroll in graduate courses, for a maximum course load of 20 credits.

# **Course Repeat**

Students are permitted to repeat courses they've taken at Duke Kunshan University in which they have received a grade of C- or below. A course may be repeated only at Duke Kunshan University. If the student failed the course, (s)he needs permission from his/her advisor before registering for the same course a second time. Students who received a passing grade (C-, D+, D, D-) for a course but who wish to repeat it to improve that grade and their GPA may do so with permission from their advisor and the Dean of Undergraduate Studies. The student should appeal in writing to their academic advisor who will make a recommendation to the Dean of Undergraduate Studies, whose decision is final.

The grade received for both the first attempt and the second attempt will be published on the transcript, but only the grade received for the second attempt will be used to calculate the final

GPA, regardless of whether it is better or worse than the first grade. In all cases where a course is repeated, only the credits accrued from the final attempt count toward the required number of courses for year-to-year continuation and the 136 credits required for graduation<sup>6</sup>.

A student may not repeat a course after having passed another course for which the original course is a specific prerequisite. A student may not substitute a different course or a course taken at another institution for a repeat of a course taken at Duke Kunshan University. If a student repeats a course at another institution, the credits will not transfer; the previous DKU grade will not change and will remain in the student's GPA calculation. A course taken at another institution with a grade of C- or above and not transferred to Duke Kunshan University may not be repeated at Duke Kunshan University. If it is determined such a course has been taken elsewhere and repeated at Duke Kunshan University, the Duke Kunshan University course will be removed from the academic record. A course previously passed at another educational institution, however, may be audited at Duke Kunshan University.

If the student wishes to repeat a course for a second time, that individual must submit an appeal in writing to their assigned academic advisor explaining the purpose of repeating the course and outlining a plan of study, including a plan to seek help from either the professor and/or the Academic Resource Center to demonstrate intention to improve their chance of passing the course. The advisor will make a recommendation to the Dean of Undergraduate Studies, whose decision whether or not to grant permission is final. The course will count only once towards the 136 credits required for graduation and for fulfillment of annual continuation requirements.

Certain courses as designated in the course description (such as Research Independent Study, certain WOC courses, and applied music courses) may be repeated for credit without special permission. Physical education activity courses may be repeated, but only two full credits of these courses count toward graduation.

#### **Course Audit**

With the written consent of the instructor and permission of the academic advisor, a full-time degree student is allowed to audit one or more courses in addition to the normal program. An audited course counts as part of the course load (see section on Undergraduate Course Load). Students who audit a course submit no daily work and take no examinations, but are expected to attend class sessions. They do not receive credit for the course, but the audited course will appear on the transcript. Students must register for audited courses by submitting a signed course audit form to the Office of the University Registrar. The prohibition against registering for two courses meeting at the same time applies. After the Drop/Add period in any term, no student classified as an auditor in a particular course may take the course for credit, and no student taking a course for credit may be reclassified as an auditor. Physical education activity,

<sup>6</sup> Exception might be made only when the final attempt takes place in the semester when a student is expected to graduate.

studio art, applied music, and dance technique/performance courses may not be audited. A student may not repeat for credit any course previously audited. Undergraduates who have been dismissed, suspended, or placed on leave of absence may not audit or enroll in a course for credit at Duke Kunshan University.

## **Independent Studies**

Independent study enables a student to pursue for course credit individual interests under the supervision of a faculty member. Independent study is of two types: Independent Study (non-research) and Research Independent Study. Both require approval of the instructor involved as well as the advisors and the Dean of Undergraduate Studies; student-faculty meetings at least once a week for a 7-week course and during the summer or once every two weeks for a 14-week course; completion of a final product during the semester for which a student is registered for the course; and evaluation by the instructor of the work, including the final product, associated with the independent study.

Courses entitled Independent Study are individual non-research directed study in a field of special interest on a previously approved topic taken under the supervision of a faculty member and resulting in an academic and/or artistic product. Courses entitled Research Independent Study are individual research in a field of special interest under the supervision of a faculty member, the central goal of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Research Independent Study courses may be repeated for credit.

# **Submission of Term Paper**

Students who wish (under unusual circumstances) to submit a single paper for credit in more than one course must receive prior written permission from each course instructor. The student must indicate the multiple submission on the title page of the paper.

## **Declaration of Major**

All undergraduate students enter Duke Kunshan University without a major and are assigned an academic advisor. When preparing to declare a major in the sophomore year, students work with their advisors, and potentially others who have advised them, to develop a long-range academic plan. This plan lays out the courses they anticipate taking in their remaining semesters and is reviewed by their advisor to confirm that it will meet established requirements for graduation. Although students may declare a major as early as the beginning of fall term of the sophomore year, all students must secure formal approval of their long-range plans and declare a major no later than the last teaching day of the first seven-week session in their fourth semester. Until then, students should be exploring different options of majors to ensure that they are making the best choice for themselves. Students who do not

declare their major may be prevented from registering for classes for their fifth undergraduate semester and from participating in a semester or study abroad program.

Students who have declared a major and wish to change it may do so by submitting a form to the Office of the University Registrar. No changes in majors can be made after the end of the Drop/Add period of the first session of the spring term in the senior year. Students receive three confirmations of their graduation: a Duke University diploma (issued by Duke University), a Duke Kunshan University diploma (from the Ministry of Education of the PRC), and a Duke Kunshan University graduation certificate (from the Ministry of Education of the PRC).

#### Class Attendance and Missed Work

Responsibility for class attendance rests with individual students, and since regular and punctual class attendance is expected, students must accept the consequences of failure to attend. Instructors who are concerned about a student's attendance should first reach out to the student. Instructors may refer to their advisors and the Office of Undergraduate Advising students who are, in their opinion, absent excessively. Students are expected to contact their instructors directly, in advance if possible, of any absence.

Missed work associated with absence from class is accommodated in two circumstances: 1) illness or other extraordinary personal circumstance, and 2) religious observance. Missed work associated with any other absence is not covered by this policy. In courses where a defined number of absences is permitted, students should make judicious use of them and save them for unavoidable circumstances. Students are encouraged to discuss any absence, planned or unexpected, with their instructor to determine whether accommodation is possible. The nature of the accommodation, if any, is to be determined by the faculty member in accordance with their attendance policy as outlined in the course syllabus.

## **Class Scheduling**

Class times are officially scheduled at registration unless designated "to be arranged" (TBA). After registration begins, no class time may be changed without prior permission of the Registrar's Office. Within-class tests (except for the final) are to be given during the regular class meeting times.

# **Incomplete Coursework and Excused Absence from Final Exam**

If, because of illness, emergency, or circumstances outside a student's reasonable control, a student cannot complete work for a course or cannot attend the final examination, the student may request in writing to the instructor the assignment of an I (incomplete) for the course. If the request is approved by the instructor in the course then the student must satisfactorily complete the work by the last class day of the fifth week of the subsequent regular session except when an earlier deadline has been established by the instructor. An earlier deadline will be established when there is a question of the student's ability to meet continuation requirements, or the professor decides an earlier deadline date is appropriate. An I assigned

in the fall or spring must be resolved in the succeeding spring or fall term, respectively. An I assigned in the summer must be resolved in the succeeding fall term. If the I is not completed by the deadline, it will convert to an F and be reported to the Office of the Registrar. A student who is not enrolled in the university or who is studying away during the semester following receipt of an I must still clear the I by the designated deadline. Students may not complete work in a course after graduation.

Once recorded, a notation of the I will remain permanently on the student's record, even after the final grade is assigned for the course. In addition, an I cancels eligibility for Dean's List and Dean's List with Distinction. Students who receive an I during a semester in which they experience a voluntarily or involuntarily separation from Duke Kunshan, may, at the discretion of their instructor and/or advisor, be required to complete the outstanding work prior to returning to school.

#### **Final Examinations**

The times and places of final examinations for each session are officially scheduled by the Registrar Office, generally according to the day and hour of the regular course meeting; changes may not be made in the schedule without the approval of the registrar. If a final examination is to be given in a course, it will be given during the official final exam period. Take-home examinations are due at the regularly scheduled hour of an examination, based on the time period of the class. In courses in which final examinations are not scheduled, an exam that substitutes for a final examination may not be given in the last week of classes. Hourly tests may be given in the last week of classes, whether or not a final examination is administered during the exam period. In the summer session, final examinations are held on the last two days of the term.

No later than the end of the first week of classes each session, the instructor is required to announce plans for the final examination exercise. The form of the final exercise is determined by the instructor. However, a final written examination may not exceed three hours in length and a final take-home examination may not require more than three hours in the actual writing.

Any student late for an examination may not expect time beyond the end of the scheduled period. A student who fails to take any scheduled final examination shall receive a grade of F in the course, unless they are excused for reasons deemed sufficient by the instructor. If they are excused they shall receive an I (Incomplete). (See section on Incomplete Grades). Students must take final exams at the officially scheduled times. Because end-of-the-semester travel arrangements are not the basis for changing a final examination date, students are advised to consult the final examination schedule when making such arrangements. Deferral of a final examination will not be authorized if the student has a history of excessive absences or failure to complete coursework in a timely fashion in the course in question.

# **Grading and Grade Requirements**

Final grades on academic work are provided to students via the Student Information System after the examinations at the end of each session. While there are no formal midterm grades, at the middle of each session faculty are asked to notify the Advising Office of first-year students whose academic performance at that point in the session is C- or below. Such students will be contacted by their academic advisors.

#### **Passing Grades**

Passing grades are A, exceptional; B, superior; C, satisfactory; CR, pass (See Credit/No Credit grading system below); and D, low pass. These grades (except CR) may be modified by a plus or minus.

Although the D grade represents low pass, not more than 8 credits passed with D grades (D+, D, D-) may be counted among those required for year-to-year continuation or among the 136 credits required for graduation. Courses for which a D grade is earned, however, may satisfy other requirements. For information on repeating a course with a D grade, see the section on Course Repeat.

#### **Failing Grades**

A grade of F or NC (See section Credit/No Credit grading system below) indicates that the student has failed to meet the requirements for the course. The grade is recorded on the student's record. The course must be repeated and a passing grade earned in order for credit to be awarded. If the student registers for the course again, the second entry of the course and the new grade earned are made on the record, but the first entry is not removed. In such cases, only the new grade is included in the calculation of the cumulative grade point average.

#### **Grade Point Average**

The grade point average is based on grades earned in courses offering credit at Duke Kunshan University and Duke University and may be calculated based on the following numerical equivalencies to the grading system:

| A+            | 4.0        | C+ | 2.3 |
|---------------|------------|----|-----|
| A             | 4.0<br>4.0 | С  | 2.0 |
| A-            | 3.7        | C- | 1.7 |
| B+            | 3.3        | D+ | 1.3 |
| A-<br>B+<br>B | 3.0        | D  | 1.0 |
| В-            | 2.7        | D- | 1.0 |
|               |            | F  | 0   |

All grades that appear on the record, with the exception of CR and NC, repeated courses, military training, and the two summer Chinese society and culture courses, are included in the calculation of the cumulative grade point average. The semester and cumulative grade

point averages are determined at the end of each semester and displayed for students on the academic history reports made available to them via Student Information System.

## Credit/No Credit (CR/NC) Grading System

In order to encourage students to explore the richness and variety of Duke Kunshan University's curricular offerings without worrying unduly about grades, students may elect to take up to four credits each semester and summer session on a Credit/No Credit basis. No more than sixteen credits (in either two-credit or four-credit courses) towards the 136 credits requirement may be taken on a Credit/No Credit basis. The limit of sixteen credits does not apply to courses that are only offered on the Credit/No Credit basis.

All students will register for regular graded courses on a graded basis, and faculty will assign regular grades throughout the semester, as well as a final grade for the course. However, a student may elect to change the grading basis to Credit/No Credit at any time up until the end of the Drop/Add period of the first session of the subsequent semester in which the student is enrolled.

In the fall or spring semester, a student must be enrolled in no less than a normal course load of 16 credits to be approved to change the grading basis of a course to CR/NC. In order to receive a CR (Credit), a student must have received a grade of C- or better in the course. A grade of D+ or below will be reflected on the transcript as NC (No Credit). Neither CR nor NC will be factored into the grade point average. Students who receive NC will receive no credit for the course and will be ineligible for Dean's List in that semester. Students who receive CR may still be eligible for the dean's list if they have completed at least 16 credits for a regularly assigned grade (see section on Dean's List).

In their first year (two semesters), students may use up to eight of the sixteen CR/NC credits for any course, up to a maximum of 4 credits per semester. For students in their 3<sup>rd</sup> semester and beyond, only elective courses may be taken on a CR/NC basis. Courses taken on a CR/NC basis from the 3<sup>rd</sup> semester onward (except those courses offered only on this basis) do not count toward general education requirements or any other degree requirements (major, including prerequisites), unless by special permission from the Office of Undergraduate Studies. For students in any year, courses in which a CR is earned do count toward the requirement for 136 credits and continuation requirements.

A course for which a grade of NC is assigned cannot be used to satisfy the prerequisite for another course, even if the original grade was a passing grade (D+, D, or D-). Students studying abroad may not receive credit for courses taken on a CR/NC (or Pass/Fail or Satisfactory/Unsatisfactory) basis. A student who has taken a course on a CR/NC basis and earned a CR may not retake the course.

The change of grading basis to CR/NC can be done through filing a form with the registrar, but students need to get approval from their advisors. Students who receive a NC (by changing a grade of D+ or below) should be mindful of continuation requirements, e.g. that they may be subject to academic suspension (see section on Continuation), or that they may have to take an extra course the following semester or during the summer in order to ensure that they graduate on time. Once a student has notified the registrar to change the grading

basis to CR/NC, it may not be changed back to a regular grade. Students are especially encouraged to make use of the CR/NC option in their first year to take courses they feel might lie outside of their areas of perceived interest, strength, or expertise.

#### **Effects of Incomplete Work**

For purposes of determining satisfactory progress each term and toward graduation, incomplete work in a course indicated by a grade of I is not presumed to be satisfactory performance in that course. Furthermore, an incomplete (I grade) during the academic year cancels eligibility for semester honors in the term the I grade was issued; i.e., Dean's List and Dean's List with Distinction. See the section on Incomplete Coursework.

#### The W and WA Designations

The designation W is recorded when a student officially withdraws from a course after the Drop/Add period. (See the sections on course changes in the section on Registration.) WA indicates withdrawal from an audited course.

#### Continuation

Students must achieve a satisfactory record of academic performance each term and make satisfactory progress toward graduation each year to continue at Duke Kunshan University. Students on academic probation must clear their probationary status as described below (see section on Academic Warning and Probation) in order to continue at Duke Kunshan University. Students who fail to meet the minimum requirements to continue are subject to academic suspension for a period of at least two semesters (excluding summer semester). Those desiring to return after the suspension period may apply for Return to the University. Please contact the Dean of Undergraduate Studies for more information. Deadlines for filing this application are 5:00 p.m. China time May 1 for Fall Term and October 15 for Spring Term. If after return the student fails again to meet minimum requirements, the student will be ineligible to enroll again in the future.

### Satisfactory Performance Each Term (Semester Continuation Requirements)

A student who does not receive a passing grade in all courses must meet the following minimum requirements each fall and spring semester or be withdrawn from the university: (1) In the first semester of enrollment at Duke Kunshan University, a student must pass at least 8 credits; (2) after the first semester at Duke Kunshan University, a student must pass at least 12 credits in each semester; (3) a student taking an authorized underload after the first semester at Duke Kunshan University must pass at least 12 credits. Students may not carry an underload without the permission of their advisors and the Dean of Undergraduate Studies. For the purposes of semester continuation, incomplete work in any course is considered a failure to achieve satisfactory performance in that course. Therefore, where semester continuation is in question, incomplete work in any course must be completed with a passing grade in time for final grades to be submitted to the Office of the University Registrar no later than the weekday preceding the first day of classes of the subsequent fall or spring semester.

#### **Satisfactory Progress toward Graduation (Annual Continuation Requirements)**

In addition to the semester continuation requirements, each year prior to the beginning of fall term classes, a student must have made satisfactory progress toward fulfillment of curricular requirements to be eligible to continue in the university; i.e., a certain number of courses must have been passed at Duke Kunshan University. For students who have interrupted their university studies, the continuation requirement must still be satisfied before the beginning of each fall term. For all students, the number of courses needed to satisfy the continuation requirement is determined from the table below, based upon which semester they will enter in the fall term.

| To be eligible to continue to the | A student must have passed <sup>7</sup>                                  |
|-----------------------------------|--|
| 2nd semester at Duke Kunshan      | 8 credits at Duke Kunshan  |
| 3rd semester at Duke Kunshan      | 24 credits at Duke Kunshan   |
| 4th semester at Duke Kunshan      | 40 credits at Duke Kunshan   |
| 5th semester at Duke Kunshan      | 56 credits at Duke Kunshan   |
| 6th semester at Duke Kunshan      | 64 credits at Duke Kunshan, plus twelve additional credits <sup>8</sup>  |
| 7th semester at Duke Kunshan      | 84 credits at Duke Kunshan, plus twelve additional credits <sup>8</sup>  |
| 8th semester at Duke Kunshan      | 100 credits at Duke Kunshan, plus twelve additional credits <sup>8</sup> |

Neither the Military Training nor Chinese Society and Culture courses count toward the annual continuation requirement. Except as noted, advanced placement may not be used to satisfy this requirement. AP and IPC credits are not counted when determining annual continuation. No more than two courses completed with D grades, two credits of PE, and 24 credits of professional or graduate school courses may be counted toward fulfilling this annual continuation requirement.

# **Academic Warning and Probation**

A student whose academic performance satisfies continuation requirements (see above), but whose record indicates marginal scholarship, will be subject either to academic warning or academic probation. Failure to clear probationary status in the semester of probation will result in a student's suspension for academic reasons. (See also the section on Continuation for information concerning academic suspension.)

In determining whether a student should be placed on academic warning, probation or suspended for academic reasons, a grade of NC earned in a course, whether that course is offered only on the CR/NC basis or the student elects to take it on the CR/NC basis, is

 $<sup>^{7}</sup>$  Students who are under 64 credits by the end of sophomore year will not be eligible for studying abroad in junior year

<sup>&</sup>lt;sup>8</sup> The additional courses may be earned through transferred courses, study abroad, and AP/IPC credit.

considered equivalent to a grade of F. Grades in PE courses are not considered in determining academic warning, probation, or suspension.

## **Academic Warning**

During the first semester of the freshman year, a student who receives a single grade of F while enrolled in 16 or more credits will receive an academic warning. In subsequent semesters, a student who receives a single grade of F while enrolled in 16 or more credits or a second or more D over their tenure at DKU will be issued an academic warning by the Office of Undergraduate Studies.

#### **Academic Probation**

For a student enrolled in 16 or more credits, the following grades will result in academic probation for the succeeding semester: during the first semester of the freshman year, grades including DD, DF, or FF; during any subsequent semester, grades including DDD, DF or FF (as long as the student has passed at least 12 credits); and during two consecutive semesters, grades including DDDD, DDDF, or DDFF. For a student enrolled in an authorized underload (i.e., fewer than 16 credits), the following academic performance will result in academic probation: during the first semester of the freshman year, grades of DD or F; during any subsequent semester, grades including DDD or DF (as long as 12 credits have been passed in that semester); and during two consecutive semesters, grades including DDDD, DDDF, or DDFF. In a case where probation may be in question because of an incomplete grade, the student will be notified by the Office of Undergraduate Studies of the need to have the incomplete replaced by a satisfactory grade in order to avoid academic probation. That is, the satisfactory final grade must be sufficient to avoid the combination of D and F grades that would result in academic probation, as described above.

The probation status will be reflected on those academic records used for internal purposes only. Students placed on academic probation must acknowledge their probationary status in writing to the Office of Undergraduate Studies in order to continue at the University. They are also expected to meet with the Associate Dean for Academic Advising, seek assistance from campus resources, have their course selection approved by their advisors and meet periodically with them. They may not study abroad during the probation period. Students are expected to clear their probationary status during the semester of probation. In order to do so, they must enroll in 16-17 credits, of which no more than 4 credits may be taken on a Credit/No Credit basis. Grades of C, CR, or better must be earned in each course, or a C average must be achieved in that semester.

Probationary status cannot be cleared in a semester in which students seek permission and are allowed to withdraw to an underload. In such cases, the probationary status continues through the next semester of enrollment. Students on probation, whether in a normal load or an underload, are required to meet continuation requirements. Students whose probationary status for reason of an underload continues to a second semester must adhere to the conditions

and standards previously outlined for clearing probation. Failure to do so will result in academic suspension.

## **Changes in Status**

#### **Voluntary Withdrawal**

Students who wish to withdraw from the university must give official notification to the Office of Undergraduate Studies. Notification must be received prior to the beginning of classes in any term, or tuition and housing fee will be refunded only partially (See section on Refund in Part 5). For students withdrawing on their own initiative after the beginning of classes and up to the first day of the last two weeks of 7-week classes or of the last four weeks of 14-week classes in the fall or spring terms, a W is assigned in lieu of a regular grade for each course. After these dates, an F grade is recorded unless withdrawal is caused by an emergency beyond the control of the student, in which case a W is assigned by the University Registrar. Alternatively, students withdrawing for medical reasons during this period will have the option, upon obtaining the appropriate approvals from the instructor, to choose to receive the grade of I in one or more courses instead of the W grade. The student may then complete the course as described in the section on Incomplete Coursework.

Withdrawals from the university during a semester or session will not be approved after the last day of classes. This also applies to those 7-week courses offered in Summer terms. Students who withdraw from the University may have to apply through the Admissions Office if they wish to return. Students who intend to return to Duke Kunshan University are advised to take a Leave of Absence if possible.

#### **Involuntary Withdrawal**

Students may be involuntarily withdrawn for academic reasons or disciplinary reasons, as well as administratively. Refunding will follow that of voluntary withdrawal except under circumstances where students are withdrawn for disciplinary reasons. For students who are withdrawn for disciplinary reasons, no tuition or housing fee will be refunded. Students' withdrawal will be noted accordingly on the official academic record. Students who are dismissed are ineligible to undertake any coursework scheduled at Duke Kunshan University and may not enroll again in the future.

#### Leave of Absence

Students who wish to take time away from their studies but intend to return to Duke Kunshan University are advised to take a Leave of Absence if possible. Most leaves of absence are granted for two reasons: personal or medical. After finishing the first semester of the first year, students in good standing may request a personal leave of absence for one or two semesters

by completing a leave of absence request form and submitting it to the Office of Undergraduate Studies prior to the first day of classes of the term in which the leave is granted. A personal leave of absence starts after one semester ends and before the next semester begins. A personal leave of absence is not granted for a term in which classes have begun, except in extreme cases such as family death or recent diagnosis of terminal illness.

A medical leave of absence with proper documentation may be granted at any time but with one restriction. Students requesting a medical leave of absence during a current term must file the leave of absence forms with the Office of Undergraduate Studies prior to the end of the last day of classes of that term. Students who request a medical leave of absence for a current term and submit their leave request prior to the last day of classes will be assigned W in lieu of a regular grade for each course. Students taking a medical leave of absence during the final four weeks of classes for 14-week long courses and the final two weeks of classes for 7-week long courses will have the option, upon obtaining the appropriate approvals from the instructor, to choose to receive the grade of I in one or more courses instead of the W grade. The student may then complete the course as described in the section on Incomplete Coursework. Refunding will follow that of voluntary withdrawal.

A medical leave of absence will not be retroactively granted for a term for which the last day of classes has already occurred. Students returning from a medical leave of absence, at the discretion of university officials, may not be allowed to participate in university programs such as, but not limited to, study abroad for the term immediately following their return to active status.

Students called to military service can request a leave of absence as early as the first semester in the freshmen year. If the leave of absence starts from the first semester in their freshmen year, students should first complete all the new student registration procedures before applying for a leave of absence.

A student may receive transfer credit for no more than two courses taken at another accredited four-year institution in the US or similarly accredited institution abroad and with a liberal arts and general education curriculum while on leave of absence for personal or medical reasons.

Return from any type of leave of absence is contingent upon approval of a *Return from Leave of Absence* application. The University reserves the right to request appropriate documentation, determined on a case-by-case basis, to confirm that the student is qualified and/or ready for return. Registration information will be provided by the university registrar to all students who are approved to return from a leave of absence. All returning students must register prior to the first day of classes for the term of intended enrollment. Students who fail to return as expected will be withdrawn from the university and will have to apply for readmission.

Students who undertake independent study under Duke Kunshan University supervision and for Duke Kunshan University credit are not on leave of absence even if studying elsewhere.

#### Full-time and Part-time Degree Status

Candidates for degrees must enroll in a normal course load (i.e., at least 16 credits) each semester unless they are eligible and have received permission from their academic advisor and the Dean of Undergraduate Studies to be enrolled in fewer than 16 credits. Students who intend to change from full-time to part-time status must request permission from the Office of Undergraduate Studies. Except for extraordinary circumstances, such permission is given only to students for the final semester of their senior year. Students must register their intention to be part-time prior to the first day of class of the semester in which the part-time status is requested. Part-time students may register for no less than 4 credits and no more than 11 credits. Part-time students may be denied university housing.

#### **Undergraduate Status**

An undergraduate student admitted to Duke Kunshan University Undergraduate degree programs officially becomes a Duke Kunshan University undergraduate student at the point of matriculation and is accorded all the rights, privileges, and responsibilities of a Duke Kunshan University student at that time. When an undergraduate has completed all of the requirements of the bachelor's degree and is no longer enrolled in coursework toward the degree, the student ceases to be a Duke Kunshan University undergraduate student in the strict sense of the word.

## **Academic Recognition and Honors**

In determining a student's eligibility for academic recognition and honors, only grades earned in Duke Kunshan University courses and Duke University courses are considered.

#### Dean's List

Dean's List accords recognition to academic excellence achieved during each semester. To be eligible for this honor, undergraduates must earn a grade point average for a semester that places them in the highest third of undergraduates in their class year and in addition must (1) complete at least 16 credits for a regularly assigned grade (i.e., no Credit/No Credit courses); and (2) receive no incomplete or failing (F, NC) grades (including PE courses). Undergraduates who in addition earn semester grade point averages that place them in the highest ten percent of undergraduates in their class year will receive the Dean's List with Distinction honor, while the remainder of those placing in the highest one third will receive the Dean's List honor as noted above.

#### Graduation with Distinction

Graduation with Distinction accords recognition to students who achieve excellence in their signature products as determined by the appropriate divisional faculty. Each major has

eligibility requirements and procedures leading to Graduation with Distinction. Each student's overall achievement in the major, including the signature work, is assessed by a faculty committee. Graduation with Distinction is separate and distinct from Latin Honors (see below).

#### **Latin Honors**

Latin Honors by Overall Academic Achievement accords recognition for academic excellence achieved over the duration of an entire undergraduate career. Unlike the Dean's List honor, which recognizes academic excellence achieved over the short term (one semester), eligibility for the three categories of Latin Honors (summa cum laude, magna cum laude, and cum laude) is based on the cumulative grade point average for all work at Duke Kunshan University. Recipients are determined by the following procedure: The grade point average included within the highest five percent of the graduating class is used to specify the grade point average needed by those students of the current graduating class to be awarded the summa cum laude honor. The grade point average included within the next highest ten percent of the graduating class is used to determine the grade point average needed by those students who will graduate with the magna cum laude honor. Finally, the grade point average included within the next ten percent of the graduating class will be used to determine those students eligible for graduating with the cum laude honor. Thus, about 25 percent of each graduating class will receive Latin Honors.

#### **Notification of Intention to Graduate**

The Diploma Form submitted by students is official notification that they expect to have completed all requirements for the degree and to receive the diploma on a particular graduation date. They will be confirmed for that specific graduation if basic requirements, i.e., general education, one major, number of credits earned through courses taught or co-taught by Duke faculty, and any additional requirements for students from the Chinese mainland, Hong Kong, Macau and Taiwan have been completed. It is the responsibility of students to submit the form on or before established deadlines. Information regarding the location and date of availability of the online diploma form is sent to prospective graduates at their Duke Kunshan University e-mail address.

#### Graduation and Commencement

Commencement exercises are held once a year in May when degrees are conferred upon and diplomas are issued to those who have completed degree requirements by the end of the spring term.

#### **Education Records**

Duke Kunshan University adheres to a policy permitting students access to their education records, health record and their confidential financial information while at Duke Kunshan University. Students may request to review any information that is contained in their Duke Kunshan University education, health and financial records and may, using appropriate procedures, challenge the content of these records. An explanation of the complete policy on education records may be obtained from the Office of the Registrar.

No information, except directory information (see below) contained in any student records is released to unauthorized persons outside the university or to unauthorized persons on the campus, without the written consent of the student. It is the responsibility of the student to provide the University's registrar and other university offices, as appropriate, with the necessary specific authorization and consent.

Directory information includes name, addresses, Duke Kunshan University student ID, e-mail addresses, telephone listing, photograph, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and most recent previous educational institution attended. This information, except addresses and telephone listing, may be released to appear in public documents and may otherwise be disclosed without student consent unless a written request not to release this information is filed in the Office of the Registrar.

## The Provision of Academic Information to Parents and Guardians

It is primarily the responsibility of students to keep parents and guardians informed of their academic standing and progress as well as any difficulties that may affect their performance. The University's registrar does not release end of term or midterm grade information to parents and guardians without students' written permission. If a student's academic standing at the university changes, the Office of Undergraduate Studies may notify parents and guardians in writing. Parents and guardians may also be alerted to emergency and extraordinary situations that may impinge upon a student's well-being.

#### Procedure for Resolution of Students' Academic Concerns

Duke Kunshan University (DKU) is committed to providing a learning environment in which concerns related to academic matters (issues pertaining to a course, academic instruction or other activities that receive academic credit) are resolved promptly and with support to all parties. Because DKU is committed to its students and the implementation of consistent and nondiscriminatory academic policies and processes, the university has created procedures for resolving academic complaints. This policy refers to academic complaints that are not related to grading. Grade complaints are covered by the separate Undergraduate Student Grade Appeal Resolution Process.

Students are encouraged to resolve academic complaints informally directly with the course instructor(s) or appropriate staff member (e.g., tutors, teaching assistants, advisors, etc.) involved in the matter. If the complaint is not resolved between the student and the course instructor(s)/ appropriate staff member, or if the student is uncomfortable about approaching the instructor(s)/staff member, he or she can attempt to resolve the complaint with the Division Chair, or the Director of the Language and Culture Center for language related courses, or the Associate Dean for Advising for complaints regarding tutoring or advising staff.

If the student is dissatisfied with the informal resolution outcome, the student may choose to file a formal complaint with the Dean of Undergraduate Studies. The Dean of Undergraduate Studies will consider complaints based on an alleged violation of an academic rule, policy, or established practice. If the student is dissatisfied with the outcome of the formal resolution process, the student may choose to file an appeal with the Vice Chancellor for Academic Affairs. The Vice Chancellor for Academic Affairs makes the final decision regarding appeal outcomes.

Students have the right to make any informal or formal complaint they deem important without fear of retaliation or any other adverse consequences because of doing so. If a student has questions or concerns about the policies and procedures related to the academic complaint resolution process, the student may consult their academic advisor or the Director of Academic Initiatives at any point during the process or before initiating a formal or informal complaint.

Issues related to academic integrity will be resolved according to the Undergraduate Academic Integrity Policy<sup>9</sup>. Issues related to non-academic behaviors as described in the student handbook will be resolved according to the student complaint and conduct processes<sup>10</sup>. Issues related to harassment and discrimination will be resolved according to the Sexual Harassment and Misconduct Policy<sup>11</sup>. Issues related to grading will be resolved according to the Undergraduate Student Grade Appeal Resolution Process.

#### **Grade Review Procedure**

A student who questions a final grade received in a course should first discuss the matter with the instructor(s) within thirty days of the grade being released. After meeting with the instructor(s), if the student still believes the instructor(s) has assigned an inaccurate or unjustified grade, the student may make a formal complaint to the appropriate Division Chair, or to the Director of the Language and Culture Center for language related courses. The formal complaint must be submitted prior to the first day of classes for the semester immediately following the recording of the grade.

<sup>&</sup>lt;sup>9</sup> Refer to Duke Kunshan University Academic Policies, Approved by the Faculty August 29, 2018

<sup>&</sup>lt;sup>10</sup> Refer to Duke Kunshan University Student Handbook

 $<sup>^{\</sup>rm 11}$  Refer to the Bulletin of Duke Kunshan University Undergraduate Instruction, Part 1, or the Student Handbook

The Division Chair will review the case with the Instructor(s) involved. If the Division Chair agrees with the Instructor(s) that there are no legitimate grounds on which to change the grade, the grade stands as recorded. If the Division Chair believes there are grounds to consider a change and the Instructor(s) is unwilling to change the grade, the Division Chair will notify the student that he or she may request a review of the case in writing to the Dean of Undergraduate Studies. A written request must be submitted before the end of the Drop/Add period of the semester following that in which the Instructor(s) recorded the grade.

The Dean will review the case and decide whether there are grounds to convene a faculty committee to review the grade. If the Dean decides there are no grounds, then the grade is not changed. If the Dean decides that there are grounds to proceed, the case will be referred to a committee consisting of the faculty members of the Undergraduate Academic Review Board. This committee will then evaluate and review the case, and the Dean may initiate a grade change if that is the recommendation of the committee. The decision of the committee is final.

## **Exclusion of Disruptive Students from a Course**

The successful conduct of a course depends upon a spirit of mutual respect and cooperation among its participants. If a student disrupts a class in such a way that it seriously compromises the educational experience of the course for other students and/or prevents the instructor from accomplishing the goals of the course as outlined in the syllabus, the instructor may require the student to leave the class meeting.

The instructor and the student are then expected to meet to discuss and prepare in writing the conditions under which the student may return to the course. If the disruptive behavior continues, the instructor may report the matter to the Office of Undergraduate Studies for further resolution.

## **Compliance with Academic Regulations**

Under no circumstances may students ignore official rules and requirements, as this is a breach of the Duke Kunshan University Community Standard. Students who ignore official rules and requirements will at the least have their registration for the next academic semester blocked by the Dean of Undergraduate Studies until after the close of the last window of that registration period. They could also be subject to involuntary withdrawal for a period of two semesters and/or other possible disciplinary action.

# **Religious Holidays**

In recognition that observances of religious holidays may affect classroom attendance and the submission of graded work, members of the various religious affiliations should inform their instructor of major religious holidays that occur when classes are being held at or before the beginning of each semester. In the event of a conflict, students wishing to observe a specific

religious holiday should request that their instructors arrange for a postponement or makeup of work. Duke Kunshan University encourages all faculty to make reasonable accommodations necessary for students' religious observances. If an instructor is unable or unwilling to grant the request, students should consult the Office of Undergraduate Studies.

# Part 7: Academic Advising, Support, and Assessment

The Office of Undergraduate Advising is committed to providing a signature advising experience that promotes student-centered holistic learning and understanding of the integrated and interdisciplinary curriculum and prepares the next generation of scholars and leaders. Further, academic advising provides undergraduates with academic strategies that reinforce a research-oriented liberal arts and sciences education that is inclusive of how students learn and develop in pursuit of their academic and career endeavors.

## **Advising and Mentoring**

Academic advising is salient to undergraduate education at Duke Kunshan University. The goal of all academic advising is to provide a network of support across the university that is student-centered and responsive to the needs of students. Advisors teach students about the undergraduate curriculum and co-curriculum by providing insight on how to navigate their college experience. This process includes teaching students how each course contributes to their knowledge and innovative thinking. Additionally, advisors teach students practical skills related to decision-making and how to take responsibility for developing meaningful educational plans compatible with their academic potential, career, and life goals.

Advising is more than the imparting of specialized information; it includes helping students explore and discover the role of education in society and teaching students the skills for active learning and perseverance to reach long-term goals. Moreover, students will learn how to formulate important questions about the nature and direction of their education through effective questioning. Advisors will confer with students about course schedules and educational experiences, but students themselves are responsible for their academic program, social activities, and for making progress toward an academic degree. As students progress through their academic programs, their advising needs change requiring an advising partnership that provides guidance from campus faculty and administrators.

The Associate Dean for Academic Advising oversees the academic advisor/mentor team, who understand the terrain of broad areas such as arts and humanities, global and civic opportunities, and natural and quantitative sciences, and pre-professional advisors with expertise in areas such as health, entrepreneurship, law and business. This network of advisors/mentors ensures that students have varied sources of information and build close relationships with campus faculty and staff who provide guidance about future plans and act as references.

At Duke Kunshan University, advisors are key to understanding the nature of the academic programs and how they can address student interests, goals and purposes. They advise students on navigating both academic and social life and help students determine appropriate learning strategies, including tutoring. They advise students in the selection of courses, majors, signature pathways, and experiential activities. Professional advisors and academic success tutors work in concert with faculty advisors to maintain up-to-date information on university

requirements, academic policies, procedures, and deadlines; they also provide guidance for students who desire to enhance their learning through tutoring and academic skill building programs and workshops.

Support offices such as the Academic Resource Center, Counseling and Psychological Services (CAPS), Campus Health Services (Academic Accomodations), the Writing and Language Studio, the Office of Study Abroad, and the Office of Career Services can help students identify academic strategies and refine their interests and goals. Students should refer to selected majors for specific curriculum requirements required for degree completion.

# Seven principles of Duke Kunshan University Curriculum and Academic Advising

- Academic advising cultivates academic citizens who are knowledgeable about how their curricular and career interests influence their local, national, and international communities (Rooted Globalism).
- Academic advising is a collaborative experience between Advisor and Advisee that teaches problem solving skills to successfully navigate college and life circumstances (Collaborative Problem Solving).
- Academic advising leverages curricular teachings with practical experience to assist with critical thinking and career readiness (Research and Practice).
- Academic advising promotes effective discourse between Advisee and Advisor that nurtures good decision-making practices (Lucid Communication).
- Academic advising is an environment where Advisees are responsible for charting their academic, social, and career pathways through inquiry, reflection, personal choice and consultation with Advisors (Independence and Creativity).
- Academic advising teaches ethical principles that promote holistic student development, authentic academic workmanship, innovative thinking, and research (Wise Leadership).
- Academic advising teaches and encourages Advisees to grow, discover, and enhance academic grit to persevere through academic and life challenges (A Purposeful Life).

# Part 8: Career Services, Study Abroad, and Research Opportunities

#### **Career Services**

The Career Services Office at Duke Kunshan University is committed to assisting graduate and undergraduate students as well as alumni with discovering and refining their career pathways and ultimately realizing their future career goals.

The Office will provide both guidance and resources to students and alumni that will help them to explore different job and career opportunities as well as help them to gain important skills, knowledge, and experience in order to be competitive and successful in achieving their long-term career goals. The Career Services Office encourages students to make the most of their Duke Kunshan University experience by accessing relevant campus resources, developing career interests and values, and establishing and maintaining relationships with their peers as well as faculty, staff and alumni.

The Career Services Office will also follow the seven principles of Duke Kunshan University when creating programs and providing services. The services and support will be done with the aid of a network that engages offices such as Academic Advising and Student Affairs, students, faculty, staff, alumni, external partners and other stakeholders to support students' career development needs.

Key services that the Career Services Office offers include:

- Resources & Tools: including online platform, assessment tools, online and offline
  resources for information research, and other career development tools to help students
  with goal identification and career path planning.
- Coaching & Advising: career development coaching (one-on-one coaching appointments with career coaches) and graduate school advising (group sessions and one-on-one meeting with coaches and advisors).
- Workshops and Events: including skill workshops, specialized seminars and conferences, guest speakers, case competitions, internship fairs and on campus recruitment events etc.
- Specialized Career Programs: including engagement programs with corporate partners, engagement programs with alumni, and development programs with other external partners such as government and research institutions.
- Opportunities Development: the Career Services Office works to build and maintain relationships with alumni and employers who can provide internships, learning opportunities, and full-time opportunities.
- Internship Facilitation & Processing: works with student mobility, keeps all records of
  foreign student internships in China on record, advises on legal requirements, keeps upto-date on relevant changes and opportunities. Summer and short term internship
  opportunities are collected and shared with students, and individual consultation allows
  for focused guidance on how to secure summer internships.

## Student research opportunities

Research experience is an important component of the Duke Kunshan University undergraduate program. Students can do research with Duke Kunshan faculty for credit during the academic year. In limited cases, research for pay in an option. Depending on a student's particular interests, research may also play a role in their signature work project. In addition to various research centers and research programs at Duke Kunshan University and research experience during a student's study abroad period at Duke or elsewhere, establishing close connections with research institutions outside of Duke Kunshan University, with international corporations, organizations, and NGOs in Kunshan, Suzhou and Shanghai areas will further enhance research and internship opportunities for Duke Kunshan University students.

## Study Abroad

The Office of Study Abroad is responsible for vetting and approving all academic study programs undertaken for credit abroad or off campus. The Office also handles course credit transfer requests for students studying in such programs. Students may study away and transfer credits for one regular semester in their junior year, as well as during summers. Students and their families are responsible for covering all costs relating to summer programs, including Duke University's summer program. Students may transfer up to a maximum of 40 credits taken outside of the Duke Kunshan University campus, including advanced placement credits. (See Transfer of Work Taken Elsewhere, Part 6.)

#### Study Abroad at Duke University

Students who are in good standing with Duke Kunshan University will have the opportunity to attend Duke University in Durham, North Carolina, in either the fall or the spring semester of junior year. To the extent possible, the Office of Study Abroad will take into account individual timing preferences. Students will be able to choose from a wide range of course options. In addition to spending one semester at Duke University in their junior year, students may also opt to study at Duke University for one six-week summer term.

While at Duke, in addition to a wider range of courses, Duke Kunshan University students will also have access to Duke student activities and clubs and to other student services on the Duke campus. Please see the Duke Kunshan University Study Abroad Office website and the Duke University website (<a href="https://dukekunshanprograms.duke.edu/welcome">https://dukekunshanprograms.duke.edu/welcome</a>) for more details. While students will pay the same tuition at Duke that they would have paid at Duke Kunshan, students should keep in mind that housing and other costs are more expensive at Duke. The Office of Study Abroad will provide students with detailed cost breakdowns for the Duke summer and semester programs.

#### **Other Study Abroad Opportunities**

Students also have the opportunity to study abroad at locations other than Duke University for a regular semester and/or during the summer. Students should consult with their

academic advisors and with the Office of Study Abroad. Students are required to have all courses pre-approved through the Office of Study Abroad.

# Part 9: Student Affairs and Campus Life

#### **Student Affairs**

The Office of Student Affairs promotes Duke Kunshan University's primary mission to enable students from around the world to lead purposeful and productive lives in ways that are physically, mentally and emotionally liberating. We promote an inclusive and holistic community by challenging and supporting students with opportunities that foster self-awareness, cross-cultural competency and leadership skills while encouraging a sustained commitment to learning, integrity, and mutual respect.

We provide programs and services that enhance the DKU academic experience and contribute to student success by cultivating an atmosphere that embraces pluralism and intellectual curiosity. We empower students to think globally while acting locally as engaged and ethical citizens to prepare them for a life of leadership and service.

# **Student Affairs Approach and Professionalism**

In-keeping with the joint-venture nature of Duke Kunshan University, Student Affairs is a member of NASPA (Student Affairs Administrators in Higher Education) and ACPA (College Student Educators International), based in the United States, and also a member of APSSA (Asia Pacific Student Services Association) and IASAS (International Association of Student Affairs and Services). Student Affairs staff access professional development journals and training materials consistently to update themselves so that they may provide programs and services that meet the diverse needs of students from China and countries across the globe.

#### **Residence Life**

Residence Life, in collaboration with University Operations, creates a safe, healthy, comfortable, and supportive living environment for all students. Living in residential facilities is an important component of students' life on campus and through sharing the living space, students bond with one another and develop a community. Student leadership and internship opportunities are created to facilitate student learning outside the classroom and contribute to students' whole-person development. These leadership positions vary from Resident Assistants (RAs) and Graduate Resident Fellows (GRFs) to Residence Life Interns. Resident Assistants (RAs) and Graduate Resident Fellows (GRFs) are recruited and trained to be peer mentors, serve as the primary resources for students, facilitate students with personal, interpersonal, and academic issues and develop floor and hall programs to promote community building. Additionally, Residence Life organizes various residential education programs based upon five core values, aka community building, diversity awareness, ethical citizenship, wellness, and personal and professional development.

#### Accommodations

All first-year, sophomore and junior students are required to live in housing provided by the University. Several different accommodations are currently and will be available to students:

- On-Campus Residence Hall: The Residence Hall will primarily house graduate students, including students from the MMS program, and some first-year students. Students are assigned to a four-person apartment suite. A typical suite has a living room, four private single bedrooms (or one two-bed bedroom and two single bedrooms) and two bathrooms with showers.
- On-Campus Conference Center: The Conference Center will be the primary housing unit for first-year students until Phase II Undergraduate Housing is constructed. All rooms are double rooms with a bathroom.
- Off-Campus Scholars Hotel: This off-campus hotel will house sophomores until the Phase II Undergraduate Housing is constructed. All rooms are double rooms with a bathroom. The hotel is newly constructed and based on the international 4-star hotel standard. 2.2 kilometers away from campus, it will be accessible by a regular campus shuttle bus, public transportation buses 31 and 32, and public bikes.
- Off-Campus Kunshan Science and Technology Park Talent Apartments: Graduate students will be housed in either the On-Campus Residence Hall or this off-campus apartment complex.
- **Phase II Student Housing:** Part of Phase II new housing complex will consist 10 undergraduate halls, and 2 apartment style buildings for graduate students.

For first-year students, Residence Life staff matches students with roommates and/or suitemates of the same gander sharing similar living habits and interests based on information provided by the students. Sophomores and juniors have the opportunity to choose their own roommates (of the same gender) based upon mutual agreement. To promote intercultural exchange, Residence Life strives to mingle students from different backgrounds together on the same floor and hall.

## **Residential Education Programs**

Integrating academics and residential experiences, residential education programs are designed for undergraduate students. Through these unique living-learning communities, residents receive special administrative support and opportunities to connect with university, faculty, staff and resources from within the campus and beyond. Focusing on enhancing students' self-awareness, ability to understand and value others, and skills to foster diversity and equity, the Cultural Mosaics Program is established for first-year students. Programs include sharing circles, cultural talks and cultural discovery tours. Residents as part of this living-learning community also have the opportunity to serve as student leaders in the community, leading sharing sessions, facilitating workshops, and assisting with event planning.

## **Student Engagement & Involvement**

#### **Student Activities**

Learning occurs both inside the classroom as well as outside the classroom. At Duke Kunshan University, we believe that students who are involved in campus life through student leadership and participation in co-curricular activities such as sports, group excursions, service learning, voluntary community work, paid or un-paid internships, and cultural, social, and inter-cultural events will not only build self-confidence in their personal development, they will also do work that benefits the campus community and the local community at large. Ultimately, students engaged in student involvement personally benefit from these experiences and community building opportunities. Check out the campus event calendar and opportunities at <a href="https://dukekunshan.campuslabs.com/engage/">https://dukekunshan.campuslabs.com/engage/</a>

A sample of some of our key student activities for students to engage and cross-culturally connect include weekly programs such as our DKU Cinema and DKU Spotlight programs which showcase movie showings and put on student performances respectively. Activities also include campus wide dances, arts & culture workshops and excursions, boardgame nights, and karaoke to name a few. To help students learn more about China, students can partake in a student excursion program called DKU Quest - Exploring China's Beauty and Mystery where students are taken across China to excursions to places like Nanjing, Beijing and the Great Wall, Zhang Jia Jie National Park (Avatar Mountains), and Huangshan (Yellow) Mountains.

These activities constitute an exciting and important part of the Duke Kunshan University experience in serving the diverse needs and interests of our students and promoting connections outside the classroom. These opportunities also provide leadership skills, development opportunities and serve to empower students culturally, socially, and intellectually.

#### **Student Clubs and Organizations**

Duke Kunshan University offers clubs in various categories to meet the diverse cross-cultural and academic interests of the student body. Club categories include Academic and University Department(s), Arts & Culture, Community Building & Social, Environmental, Science, & Technology, Recreation & Sports, Service, & Philanthropy, Special Interest, and Wellness. As clubs, opportunities are created for leadership development and personal growth. To assist in this, all student clubs and organizations must have an advisor who is a faculty member or a full-time staff. All must go through an online and electronic process to be approved which includes a club/organizational constitution with a description of the organization, mission statement, membership details, and structure of its leadership and overall organization. DKU has over 35 active student clubs and organizations. Some examples of those include:

DKU Philosophy Organization Drama Queens Mathematical Modeling Club DKU Model United Nations
Student Health Exchange
Student Research Club
Chinese Calligraphy & Painting Club
Duke Kunshan Music
Glee Choir Club
DKU Badminton Club
DKU Football Club
Showtime DKU Basketball Club
DKU Street Dancing Club
Key Club

#### Leadership Development

The Student Leadership Development Program is designed for undergraduate students throughout the four years, providing an opportunity for students to explore self-identity, values, purpose, and their own definition of "leadership". The program helps students translate knowledge and skills to real-life situations, build their own "character", and learn to be adaptable while collaborating with others from diverse backgrounds and in different contexts. When engaged in the leadership journey, students will learn to lead oneself, lead others in a team and make a positive influence and impact on the community. The five key skill areas that students will develop include self-management (self-awareness, goal setting, time-and stress-management), social and civic responsibility (commitment to social issues, community service, service learning), leadership (decision-making, problem-solving, communication, collaboration), diversity and global consciousness (intercultural competence), and professionalism (team spirit, integrity, ethics). The various components of the program include workshops, discussions, experiential learning, group project and mentorship. Upperclass students from the program will have the opportunity to serve as peer mentors for first-year students and practice different sets/levels of skills in the future.

# **Athletics & University Sports**

#### **Athletics**

Sport is a common language everyone understands and thus a powerful tool that can bring our culturally diverse student body together. Our sports and physical activity program is designed to promote diversity in physical activity, reflect on students' interests, and provide an opportunity for intra-varsity competition.

Types of Varsity Sports and sport clubs will depend solely on student interest. In that regard, our incoming students will have a significant impact on the sports program at Duke Kunshan University. Currently our program will offer over 20 different activities on a rolling basis including, but not limited to basketball, volleyball, badminton, soccer, tennis, table tennis,

softball, Tai Chi, Yoga, weight training, golf, TRX training, archery, swimming, martial arts and fencing to name a few. As our program grows, so will the number of activities.

**Athletics** will offer Varsity Sports that will compete with other joint-venture universities. The Varsity competition is unique as it involves competition in a traditional league competition format and a multi-event competition between several universities, a "mini Olympics".

**Duke Kunshan University sport clubs and intramural competition** are great opportunities to bring our staff, students, and even members of the local community together to compete, stay fit, but more importantly make friends and have fun! Students are encouraged to organize sports clubs of their interest.

For those not necessarily interested in sport activities, as part of the Duke Kunshan University community, you will have an opportunity to join various wellness programs and initiatives throughout the year.

## Counseling and Psychological Services (CAPS)

Counseling is an important part of the Duke Kunshan University community and it supports both group and individual needs. We provide assistance to individuals to handle mental health issues such as anxiety, depression and adjustment disorders. More importantly, CAPS provides services to help student grow in a more confident and mature manner, and aims to create a healthy community through various workshops on time-management, and mindfulness-based stress reduction techniques. CAPS also focuses on outreach programming through various learning series on topics such as self-identity, self-confidence, how to form healthy intimate relationship, and how to "Live a Happy College Life."

# Campus Health Clinic

The clinic provides basic medical services and first aid to students, and to faculty and staff on an emergency basis. It also provides workshops that educate the campus community on public health issues, and ways to prevent communicable diseases. Protocols are set up to handle medical emergencies on campus. The clinic aims to promote and enhance individual's personal health and well-being by staying fit, resulting in a healthy campus. All clinical staff members are expected to maintain the strictest confidentiality when handling Personal Health Information (PHI). Student Affairs staff members are trained to maintain confidentiality of student information, student data and records, and disciplinary records (with limited exceptions such as when there is a crisis or crime being committed). The Clinic provides health education workshops to educate the campus community on handling emergency incidents, how to use an Automated External Defibrillator (AED), perform Cardiopulmonary Resuscitation (CPR), and apply First Aid. The clinic also provides seasonal flu immunizations.

# **International Student Services and Student Mobility**

This office works in conjunction with the University Registrar to provide visa information to international students, and work with local Public Security Bureau (Police) and Entry-Exit

Inspection and Quarantine Bureau (Immigration) to ensure the smooth processing of student visas, temporary residence permits, and residence registration for all students, both domestic Chinese and international students.

In addition to helping students with their legal onboarding requirements, International Student Services provides an array of university programs aimed at helping international students' integration with DKU, Kunshan and surrounding areas. Programs offered through this area allow for cross-cultural interaction between the very diverse student body at DKU.

## Host Family program

The Host Family program partners international students with local Kunshan families. It provides participants precious opportunities to be a part of the local community during their stay at Duke Kunshan. The program creates intercultural experiences and language exchange opportunities and helps students build local networks.

## **Dining Services**

Chartwells is the Compass Group specialist for education, providing food services to independent, international and private schools and universities. Offering students, faculty and staff the unique benefits in outsourcing services, combined with our history of service excellence, we are able to offer a range of services from technical consultancy to catering. Some of the featured dining experiences include Roots & Seeds where diners personalize salads based on 20 different selections. Taste of Asia offers a la carte & set meals with at least one "spicy" main course daily. The Trattoria offers daily pizzas with panache. Al Forno re-creates the amazing dishes from all over Italy from as far north as Milan and as far south as Sicily. The B+B "Taco Tuesdays" have been a hit among the diners. Our "Revolution Noodle" provides not only traditional Chinese noodles but also, from time to time, offer noodles from all regions of China and SE Asia! Finally, the Delimarche Café, located at the Academic Building, offers fresh coffee, fresh fruit cups, pastries and sandwiches.

## The Dining Customer Relations Team (CDCRT)

The Dining Customer Relations Team (CDCRT) aims at improving campus dining services to meet the diverse needs of Duke Kunshan University customers, including students, staff and faculty, and building a positive dialogue between the customers and the service provider. The team meets monthly to provide constructive input on issues of food services and collectively prioritize and propose solutions to help improve the situation.

#### **Student Conduct**

Duke Kunshan University expects students to hold themselves to the highest standards for honesty, integrity, fairness, and responsibility in their academic and co-curricular endeavors. All students are expected to follow all university rules, policies, procedures, and processes. While there are various avenues for this, student need to familiarize themselves with the

Student Code of Conduct, which can be found at: <a href="https://dukekunshan.edu.cn/en/student-life/student-handbook">https://dukekunshan.edu.cn/en/student-life/student-handbook</a>.

Students living in on-campus housing are expected to abide by University rules on group living expectations and standards (Residence Life Policies), Health and Safety Policies, plus Residence Life Student Conduct processes and sanctions.

The Office of Student Conduct views student conduct as an educational process, when possible. While some violations can be so severe that separation from the community is required, when possible, we take into account the violation, nature of the offense, personal circumstances of the student and what lessons can be learned. The intent is that the student will learn and grow from the experience to become a more productive and engaged citizens of the community.

# Part 10: Majors and Courses

# **Requirements for All Majors**

All students regardless of their choice of major will be required to take the following courses. Other specific major requirements are listed under each major.

#### **Common Core (12 Credits)**

| Course Code  | Course Name  | Course<br>Credit |
|--------------|--|------------------|
| GCHINA 101   | China in the World                                   | 4                |
| GLOCHALL 201 | Global Challenges in Science, Technology, and Health | 4                |
| ETHLDR 201   | Ethics, Citizenship & the Examined Life              | 4                |

### Distributional Requirement and Quantitative Reasoning Course Requirement (16 Credits)

Please see details in Part 3: The Curriculum.

| Requirements                                   | Course<br>Credit |
|--|------------------|
| Arts and Humanities Distributional Requirement | 4                |
| Social Sciences Distributional Requirement     | 4                |
| Natural Sciences Distributional Requirement    | 4                |
| Quantitative Reasoning Course Requirement      | 4                |

#### **Language Courses (8-16 Credits)**

Students in the English for academic purposes (EAP) track are required to take eight credits of EAP courses - EAP 101A to EAP 102B; they can also take 200+ level EAP elective courses or WOC courses to further develop their academic English skills.

Students in the Chinese as Second Language (CSL) track need to take 8-16 credits of CHINESE courses appropriate to their Chinese skill level.

Students in the Third Language track can satisfy their foreign language requirement by taking 8 credits of written and oral communication (WOC) courses or Third Language (TLANG) independent study courses through the Language Learning Studio.

# Two Signature Work Capstone Courses (8 credits)

| Course Code  | Course Name                | Course<br>Credit |
|--------------|----------------------------|------------------|
| CAPSTONE 495 | Signature Work Capstone I  | 4                |
| CAPSTONE 496 | Signature Work Capstone II | 4                |

# **Required Experiential Learning**

| 1 N T         | 1        | A 4      | TP     | $\sim$  |
|---------------|----------|----------|--------|---------|
| 1 1/1/10      | n crodit | 1/11111  | Lorm   | 0111100 |
| 1 1 1 1 1 1 1 | n-credit | 1011111- | 161111 | Course  |

<sup>1</sup> Signature Educational Experience: Research, Internships, Community-Based Field Work, Civic Engagement

### **Natural Sciences Majors**

### Applied Mathematics and Computational Sciences / Math

The field of applied mathematics and computational sciences deals with the use of mathematical concepts and computational techniques in various fields of science and engineering. It is utilized in almost every discipline of science, engineering, industry, and technology, and has become an indispensable component. The computational science approach aims at understanding and solving problems mainly through the analysis of mathematical models combined with numerical simulations on computer.

Applied mathematics and computational sciences is a highly interdisciplinary field. The numerical simulation techniques are mostly developed and analyzed in the field of numerical analysis in mathematics. The modeling of and applications to specific scientific problems require disciplinary knowledge and expertise. The need of massive amounts of calculations and data processing calls for development in computer and information sciences. This is a time of opportunity as traditional boundaries between disciplines are breaking down, especially around data and computations.

The expertise of mathematics and computational sciences is in dire need, as access to unprecedented amounts of information and computing resources is creating new opportunities, working together in multidisciplinary teams, to actively engage with and to change the world around them. Mathematics and computing sciences are extensively applied in economics, biology, medical science as well as quantitative social science including global health, environmental science and humanities (for example, digital media). New application areas are constantly being discovered and established techniques are being applied in new ways and in emerging fields. Consequently, a wide variety of career opportunities are open to people with mathematical and computational talent and training.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101 & 102

| Course         | Course Name   | Course |
|----------------|---|--------|
| Code           |   | Credit |
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4      |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4      |
| INTGSCI<br>101 | Integrated Science 1                                    | 4      |

| INTGSCI | Integrated Science 2 | 4 |
|---------|----------------------|---|
| 102     |                      |   |
|         |                      |   |

# Option 2: only applicable to Class of 2022 who have taken INTGSCI 101

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)                | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2)  | 4                |
| INTGSCI<br>101 | Integrated Science 1                                     | 4                |
| And choose tw  | vo from the following courses                            | •                |
| BIOL 110       | Integrated Science - Biology                             | 4                |
| CHEM 110<br>*  | Integrated Science - Chemistry                           | 4                |
| CHEM 120<br>*  | Core Concepts in Chemistry: An Environmental Perspective | 4                |
| PHYS 121       | Integrated Science - Physics                             | 4                |
| * Students can | choose one from CHEM 110 and CHEM 120 but not both.      | 1                |

# Option 3: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| BIOL 110       | Integrated Science - Biology                            | 4                |
| CHEM 110       | Integrated Science - Chemistry                          | 4                |
| PHYS 121       | Integrated Science - Physics                            | 4                |

### **Interdisciplinary Courses**

| Course<br>Code   | Course Name                     | Course<br>Credit |
|--|---------------------------------|------------------|
|  |                                 |                  |
| MATH 302   | Numerical Analysis              | 4                |
| MATH 303   | ODE and Dynamical Systems       | 4                |
| And choose two courses from the following four courses |                                 |                  |
| MATH 403   | Partial Differential Equations  | 4                |
| MATH 404   | Stochastic Modeling & Computing | 4                |
| MATH 405   | Methods for Data Analysis       | 4                |
| MATH 406   | Mathematical Modeling           | 4                |

### **Disciplinary Courses**

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 202       | Linear Algebra  | 4                |
| MATH 205       | Probability and Statistics (was Mathematical Foundations 3) | 4                |
| MATH 307       | Complex Variable  | 4                |
| MATH 308       | Real Analysis   | 4                |
| MATH 401       | Abstract Algebra  | 4                |

### **Electives**

Courses listed in the table below are recommended electives for the major and the course list will be updated periodically. Students can also select other courses in different divisions as electives.

| Course<br>Code | Course Name                          | Course<br>Credit |
|----------------|--------------------------------------|------------------|
| MATH<br>301    | Advanced Introduction to Probability | 4                |
| MATH<br>306    | Number Theory                        | 4                |
| MATH<br>408    | Differential Geometry                | 4                |

| MATH<br>409 | Topology                | 4 |
|-------------|-------------------------|---|
| MATH<br>450 | Measure and Integration | 4 |
| MATH<br>301 | Statistics              | 4 |

#### **Data Science**

The field of Interdisciplinary Data Science (IDS) deals with the theories, methodologies and tools of applying statistical concepts and computational techniques to various data analysis problems related to science, engineering, medicine, business, etc. The objective is to inspect, clean, transform and model data in order to discover useful information, suggest conclusions and support decision-making. It is an emerging topic that plays a critical role in almost every discipline of today's science and technology and has become an indispensable component.

Interdisciplinary data science is a highly interdisciplinary field. Its methodologies are mostly derived from statistics theories. The computational algorithms for implementing these statistical methodologies are based upon numerical computation and optimization, and are often executed on a large-scale hardware platform composed of massive computing units and storage devices. When applying data analysis to a specific application problem, it further requires disciplinary knowledge and expertise. To accomplish these ambitious goals, there is an immediate need to "invent" a radically new degree program that can break down the traditional boundaries between disciplines and, consequently, facilitate fundamental breakthroughs and innovations.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101 & 102

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| INTGSCI<br>101 | Integrated Science 1                                    | 4                |
| INTGSCI<br>102 | Integrated Science 2                                    | 4                |

#### Option 2: only applicable to Class of 2022 who have taken INTGSCI 101

| Course<br>Code | Course Name                               | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1) | 4                |

| MATH 201   | Multivariable Calculus (was Mathematical Foundations 2)  | 4 |
|--|--|---|
| INTGSCI  | Integrated Science 1                                     | 4 |
| 101  |  |   |
| And choose tw  | vo from the following courses                            |   |
| BIOL 110   | Integrated Science - Biology                             | 4 |
| CHEM 110<br>*  | Integrated Science - Chemistry                           | 4 |
| CHEM 120<br>*  | Core Concepts in Chemistry: An Environmental Perspective | 4 |
| PHYS 121   | Integrated Science - Physics                             | 4 |
| * Students can choose one from CHEM 110 and CHEM 120 but not both. |  |   |

Option 3: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| BIOL 110       | Integrated Science - Biology                            | 4                |
| CHEM 110       | Integrated Science - Chemistry                          | 4                |
| PHYS 121       | Integrated Science - Physics                            | 4                |

# **Interdisciplinary Courses**

| Course Code    | Course Name                                     | Course<br>Credit |
|----------------|---|------------------|
| COMPSCI<br>201 | Introduction to Programming and Data Structures | 4                |
| STATS 302      | Principles of Machine Learning                  | 4                |
| STATS 303      | Statistical Machine Learning                    | 4                |
| STATS 401      | Data Acquisition and Visualization              | 4                |
| STATS 402      | Interdisciplinary Data Analysis                 | 4                |

### **Disciplinary Courses**

| Course Code    | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 202       | Linear Algebra  | 4                |
| MATH 205       | Probability and Statistics (was Mathematical Foundations 3) | 4                |
| STATS 210      | Probability, Random Variables and Stochastic Processes      | 4                |
| COMPSCI<br>301 | Algorithms and Databases                                    | 4                |
| MATH 304       | Numerical Analysis and Optimization                         | 4                |
| MATH 305       | Advanced Linear Algebra                                     | 4                |

### **Electives**

Courses listed in the table below are recommended electives for the major and the course list will be updated periodically. Students can also select other courses in different divisions as electives.

| Course Code    | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| STATS 102      | Introduction to Data Science   | 4                |
| COMPSCI<br>207 | Image Data Science             | 4                |
| STATS 304      | Bayesian and Modern Statistics | 4                |
| COMPSCI<br>302 | Computer Vision                | 4                |
| COMPSCI<br>303 | Search Engines                 | 4                |
| COMPSCI<br>304 | Speech Recognition             | 4                |
| COMPSCI<br>401 | Cloud Computing                | 4                |
| STATS 403      | Deep Learning                  | 4                |
| STATS 404      | Probabilistic Graphical Models | 4                |
| COMPSCI<br>402 | Artificial Intelligence        | 4                |

### **Environmental Science / Chemistry**

The pressing needs for sustainable development and acceptable environmental quality are placing increasing demands upon governments and industries locally, nationally, and worldwide. To help meet those demands, the Environmental Science major is designed to provide training for students intending to enter environmental professions or to pursue graduate study in environmental science and related fields such as chemistry, public health, law, and policy. The Environmental Science major offers an interdisciplinary course of study that combines elements of the natural and social sciences relevant to understanding the biosphere and its interaction with human society. In order to appreciate and explore more deeply the effects of natural and human-induced processes, and the interactions of the physical components of the planet on the environment, students will take courses that lay the foundations for them to engage in careers that will allow them to influence environmental science and policy and to improve human and environmental health.

The Environmental Science major includes both coursework and experiential learning about the underlying science, and the social, political, legal and economic factors that both encourage and hinder environmental cooperation and competition around the world. All students pursuing this major must complete a set required Divisional Foundational courses that provide the required background and fundamentals in the discipline essential to advanced work in the major. The major includes a set of five required interdisciplinary courses (four set courses plus one to choose from a list of two courses) which provide a well-rounded, in-depth examination of environmental science and policy issues. In addition to the foundational and interdisciplinary and disciplinary requirements, students also have the choice of a number of elective courses that provide flexibility to add depth in their specific field of study, and/or explore other subject matters as they see fit.

The <u>Chemistry track</u> within the Environmental Science major is designed for students interested in a scientific perspective on environmental issues, in particular chemistry, toxicology, and pollutant fate and transport. The track is designed to encourage breadth in the physical and life sciences but also allows students to acquire depth in a chosen area of scientific concentration through the choice of electives, as is encouraged for students who desire to pursue graduate studies or intend to pursue a career in research.

This major also has a track in Public Policy. Please see details on the public policy track under Environmental Science/Public Policy.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

### **Divisional Foundation Courses**

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101 & 102

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| INTGSCI<br>101 | Integrated Science 1                                    | 4                |
| INTGSCI<br>102 | Integrated Science 2                                    | 4                |

### Option 2: only applicable to Class of 2022 who have taken INTGSCI 101

| Course<br>Code  | Course Name  | Course<br>Credit |
|---|--|------------------|
| MATH 101  | Calculus (was Mathematical Foundations 1)                | 4                |
| MATH 201  | Multivariable Calculus (was Mathematical Foundations 2)  | 4                |
| INTGSCI<br>101  | Integrated Science 1                                     | 4                |
| CHEM 110<br>*   | Integrated Science - Chemistry                           | 4                |
| CHEM 120<br>*   | Core Concepts in Chemistry: An Environmental Perspective | 4                |
| PHYS 121  | Integrated Science - Physics                             | 4                |
| * Students can take either CHEM 110 or CHEM 120 but not both. |  |                  |

### Option 3: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| BIOL 110       | Integrated Science - Biology                            | 4                |

| CHEM 110 | Integrated Science - Chemistry | 4 |
|----------|--------------------------------|---|
| PHYS 121 | Integrated Science - Physics   | 4 |

# **Interdisciplinary Courses**

| Course Code              | Course Name  | Course<br>Credit |
|--------------------------|--|------------------|
| ENVIR 101                | Introduction to Environmental Sciences   | 4                |
| ENVIR 102                | Dynamic Earth and Oceans: Physical and Biological Sciences for the Environment | 4                |
| ENVIR 201                | Applied Environmental Science and Policy                                       | 4                |
| ENVIR 301                | International Environmental Policy   | 4                |
| And choose one           | course from the following three courses  |                  |
| ENVIR 202                | Biodiversity and Conservation  | 4                |
| ENVIR<br>302/ECON<br>302 | Environmental Economics  | 4                |
| ENVIR<br>404/ECON<br>404 | Environmental Justice: The Economics of Race, Place and Pollution              | 4                |

# **Disciplinary Courses**

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| PHYS 122       | General Physics II             | 4                |
| CHEM 201       | Organic Chemistry I            | 4                |
| CHEM 202       | Organic Chemistry II           | 4                |
| CHEM 210       | General Chemistry II           | 4                |
| CHEM 301       | Elements of Physical Chemistry | 4                |
| CHEM 401       | Analytical Chemistry           | 4                |
| CHEM 402       | Inorganic Chemistry            | 4                |

# **Electives**

Courses listed in the table below are recommended electives for the major and the course list will be updated periodically. The course list will be updated periodically.

| Course<br>Code           | Course Name   | Course<br>Credit |
|--------------------------|---|------------------|
| CHEM 130                 | Science of Cooking                                    | 4                |
| ENVIR 203                | The Theory and Practice of Sustainability             | 4                |
| ENVIR 303                | Climate Change and Society in China                   | 4                |
| ENVIR 304                | Environmental Chemistry and Toxicology                | 4                |
| ENVIR<br>311/BIOL<br>311 | Biogeochemistry                                       | 4                |
| ENVIR<br>313/BIOL<br>313 | Ecosystem Service                                     | 4                |
| ENVIR<br>315/CHEM<br>315 | Aqueous Geochemistry                                  | 4                |
| ENVIR 402                | Chemical Transformation of Environmental Contaminants | 4                |
| CHEM 403                 | Advanced Topics in Physical Chemistry                 | 4                |

### Material Sciences with tracks in Physics and Chemistry

Many of tomorrow's innovations in fields such as fast computing, renewable energy generation, batteries, and transportation will rely on the unique and novel properties of materials. The development of such materials requires integrated knowledge in physics, chemistry, and biology, along with advanced mathematics and computation. Material Science/Physics and Material Science/Chemistry majors introduce students to the interdisciplinary study in material science which includes atomic structure, macroscopic elastic and thermodynamic properties, electric and magnetic properties, and fabrication methods and applications, together with disciplinary training in either physics or chemistry.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101 & 102

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| INTGSCI<br>101 | Integrated Science 1                                    | 4                |
| INTGSCI<br>102 | Integrated Science 2                                    | 4                |

Option 2: only applicable to Class of 2022 who have taken INTGSCI 101

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| INTGSCI<br>101 | Integrated Science 1                                    | 4                |
| CHEM 110<br>*  | Integrated Science - Chemistry                          | 4                |

| * Students need | d to take either CHEM 110 or CHEM 120 but not both.         |   |
|-----------------|---|---|
| PHYS 121        | Integrated Science - Physics                                | 4 |
| *               | core correspond an enemanaly vian zaro account a crop court | - |
| CHEM 120        | Core Concepts in Chemistry: An Environmental Perspective    | 4 |

Option 3: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| BIOL 110       | Integrated Science - Biology                            | 4                |
| CHEM 110       | Integrated Science - Chemistry                          | 4                |
| PHYS 121       | Integrated Science - Physics                            | 4                |

# **Interdisciplinary Courses**

# For Physics Track

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| CHEM 201       | Organic Chemistry 1                                      | 4                |
| MATSCI<br>201  | Fundamentals of Material Sciences                        | 4                |
| MATSCI<br>301  | Materials Synthesis and Characterization (Lab)           | 4                |
| MATSCI<br>302  | Electronic, Optical and Magnetic Properties of Materials | 4                |
| MATSCI<br>401  | Mechanical Properties of Materials                       | 4                |

# For Chemistry Track

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| MATSCI<br>201  | Fundamentals of Material Sciences                        | 4                |
| MATSCI<br>301  | Materials Synthesis and Characterization (Lab)           | 4                |
| MATSCI<br>302  | Electronic, Optical and Magnetic Properties of Materials | 4                |
| MATSCI<br>401  | Mechanical Properties of Materials                       | 4                |

# **Disciplinary Courses**

# For Physics Track

| Course<br>Code | Course Name                             | Course<br>Credit |
|----------------|---|------------------|
| PHYS 122       | General Physics II                      | 4                |
| MATH 202       | Linear Algebra                          | 4                |
| PHYS 201       | Optics and Modern Physics               | 4                |
| PHYS 302       | Thermal and Statistical Physics         | 4                |
| PHYS 405       | Advanced Physics Laboratory and Seminar | 4                |
| And choose two | o from the following courses            |                  |
| PHYS 301       | Classical Mechanics                     | 4                |
| PHYS 304       | Electricity and Magnetism               | 4                |
| PHYS 401       | Quantum Mechanics                       | 4                |

## For Chemistry Track

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| PHYS 122       | General Physics II             | 4                |
| CHEM 201       | Organic Chemistry I            | 4                |
| CHEM 202       | Organic Chemistry II           | 4                |
| CHEM 210       | General Chemistry II           | 4                |
| CHEM 301       | Elements of Physical Chemistry | 4                |
| CHEM 401       | Analytical Chemistry           | 4                |
| CHEM 402       | Inorganic Chemistry            | 4                |

### **Electives**

Courses listed in the table below are recommended electives for the major and the course list will be updated periodically. Students can also select other courses in different divisions as electives.

# For Physics Track

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| PHYS 101       | Frontiers of 21st Century Physics                           | 4                |
| PHYS 134       | Introductory Astronomy                                      | 4                |
| COMPSCI<br>201 | Introduction to Programming and Data Structures             | 4                |
| MATSCI<br>202  | Mathematical Methods for Materials Science                  | 4                |
| MATH 205       | Probability and Statistics (was Mathematical Foundations 3) | 4                |
| MATH 303       | ODE and Dynamical Systems                                   | 4                |
| PHYS 402       | Solid State and Soft Matter Physics                         | 4                |
| PHYS 403       | Introduction to Nuclear and Particle Physics                | 4                |
| PHYS 404       | Nonlinear Dynamics  | 4                |

# For Chemistry Track

| Course<br>Code | Course Name                           | Course<br>Credit |
|----------------|---------------------------------------|------------------|
| CHEM 130       | Science of Cooking                    | 4                |
| PHYS 402       | Solid State and Soft Matter Physics   | 4                |
| CHEM 403       | Advanced Topics in Physical Chemistry | 4                |
| CHEM 410       | Introduction to Materials Chemistry   | 4                |

# Molecular Bioscience with Tracks in Cell and Molecular Biology, Genetics and Genomics, Biogeochemistry, Biophysics

All biological sciences rest on two central principles – all organisms and their characteristics are the product of evolution, and all life processes have a physical and chemical basis. Simply put, at the most fundamental level, there is a shared molecular basis of life. Despite the astonishing diversity of living organisms, from bacteria living in deep ocean hydrothermal vents to cherry trees flowering in the spring to complex modern humans shaping the world around us, many features of all organisms at the cellular and molecular levels are fundamentally similar because of shared evolutionary history. Discoveries of fundamental molecular mechanisms in one species - a bacteria or fungus or fruit fly, for example - often apply to other distantly related organisms like humans. Solving many of the most perplexing and challenging biological, agricultural, medical, societal, and environmental problems in today's world requires a broad and deep understanding of the molecular basis of life. The highly interdisciplinary field of molecular bioscience seeks to understand at the level of atoms and molecules how living things acquire energy and chemical nutrients from their environment, how they use that energy to fuel the basic biochemical reactions and cellular functions required for life, how they use molecular information encoded in their DNA to grow, survive, and reproduce, and how their metabolic and biochemical processes transform the environment in which we all live.

The broad goal of molecular bioscience, to understand the mechanisms of life processes at the physical, chemical, and cellular levels, requires students to integrate knowledge from several disciplines that traditionally are treated as separate realms of knowledge. Molecular bioscience is at the intersection of biology, chemistry, and physics, but most undergraduate programs require that students focus on one discipline at the exclusion of the other two. In contrast, the Molecular Bioscience major at DKU is designed to integrate fully the fields of biology, chemistry, and physics throughout the major's course of study, so DKU students trained in molecular bioscience will be better prepared to understand and make fundamental advances on the tremendous challenges facing our current and future generations in human health, agriculture, biotechnology, and global environmental change.

Through the required interdisciplinary introductory courses including Biochemistry, Biophysics, Genomics and Evolution, and Biomedical Ethics, all molecular bioscience students will gain core foundational knowledge and skills that uniquely will enable them to pursue one of four more specialized tracks of courses that focus some of the most exciting fields of science today. Students who choose the <u>Cell and Molecular Biology track</u>, for example, will learn of stunning new discoveries of how cells work at the molecular level, and how that knowledge is critical for advances in cancer biology and medicine, pharmacology, biochemistry, virology, immunology, developmental biology, and the Biotech industries. The <u>Genetics and Genomics track</u> will provide students with deep insight into how the explosive fields of functional genomics, bioinformatics, and computational biology are revolutionizing our understanding of life. Students will learn how genomics is revealing the complex and highly orchestrated mechanisms that organisms use to regulate genes and genomes, how genomes evolve via population genomic processes, and how new methods like DNA editing promise to transform

medicine, agriculture, and our understanding of basic biological processes. The <u>Biophysics track</u> will allow students to apply principles of physics to biological systems at molecular, organismal, and ecological levels. These students will learn how such integrated applications of these principles are leading to the incredible breadth of advances biophysicists are making in bioelectronics, quantum biology, nanotechnology, structural biology, biomechanics, biochemistry, and cell and molecular biology. Finally, students who choose the <u>Biogeochemistry track</u> will discover how the activities of biological systems and other chemical, physical, and geological processes drive the global or local cycles of chemicals like carbon and nitrogen, and ultimately lead to global environmental change. These students, with their interdisciplinary training in molecular bioscience with a focus on ecosystem science, will be uniquely prepared to solve existential challenges like human-mediated global climate change and environmental degradation.

### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

#### For tracks of Cell and Molecular Biology, Genetics and Genomics, Biogeochemistry:

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101 & 102

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)                   | 4                |
| INTGSCI<br>101 | Integrated Science 1  | 4                |
| INTGSCI<br>102 | Integrated Science 2  | 4                |
| And choose on  | e of the following courses                                  |                  |
| MATH 205       | Probability and Statistics (was Mathematical Foundations 3) | 4                |
| STATS 101      | Introduction to Applied Statistical Methods                 | 4                |

#### Option 2: only applicable to Class of 2022 who have taken INTGSCI 101

| Course<br>Code | Course Name                               | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1) | 4                |

| INTGSCI<br>101  | Integrated Science 1  | 4 |
|---|---|---|
| BIOL 110  | Integrated Science - Biology                                | 4 |
| CHEM 110<br>*   | Integrated Science - Chemistry                              | 4 |
| CHEM 120<br>*   | Core Concepts in Chemistry: An Environmental Perspective    | 4 |
| And choose one of the following courses                           |   |   |
| MATH 205  | Probability and Statistics (was Mathematical Foundations 3) | 4 |
| STATS 101   | Introduction to Applied Statistical Methods                 | 4 |
| * Students need to take either CHEM 110 or CHEM 120 but not both. |   |   |

Option 3: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code                          | Course Name   | Course<br>Credit |
|---|---|------------------|
| MATH 101                                | Calculus (was Mathematical Foundations 1)                   | 4                |
| BIOL 110                                | Integrated Science - Biology                                | 4                |
| CHEM 110                                | Integrated Science - Chemistry                              | 4                |
| PHYS 121                                | Integrated Science - Physics                                | 4                |
| And choose one of the following courses |   |                  |
| MATH 205                                | Probability and Statistics (was Mathematical Foundations 3) | 4                |
| STATS 101                               | Introduction to Applied Statistical Methods                 | 4                |

### For Biophysics track:

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101 & 102

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| INTGSCI<br>101 | Integrated Science 1                                    | 4                |

| INTGSCI | Integrated Science 2 | 4 |
|---------|----------------------|---|
| 102     |                      |   |
|         |                      |   |

# Option 2: only applicable to Class of 2022 who have taken INTGSCI 101

| Course<br>Code  | Course Name  | Course<br>Credit |
|---|--|------------------|
| MATH 101  | Calculus (was Mathematical Foundations 1)                | 4                |
| MATH 201  | Multivariable Calculus (was Mathematical Foundations 2)  | 4                |
| INTGSCI<br>101  | Integrated Science 1                                     | 4                |
| BIOL 110  | Integrated Science - Biology                             | 4                |
| CHEM 110<br>*   | Integrated Science - Chemistry                           | 4                |
| CHEM 120<br>*   | Core Concepts in Chemistry: An Environmental Perspective | 4                |
| PHYS 121  | Integrated Science - Physics                             | 4                |
| * Students need to take either CHEM 110 or CHEM 120 but not both. |  |                  |

# Option 3: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1)               | 4                |
| MATH 201       | Multivariable Calculus (was Mathematical Foundations 2) | 4                |
| BIOL 110       | Integrated Science - Biology                            | 4                |
| CHEM 110       | Integrated Science - Chemistry                          | 4                |
| PHYS 121       | Integrated Science - Physics                            | 4                |

# Interdisciplinary Courses

| Course<br>Code | Course Name         | Course<br>Credit |
|----------------|---------------------|------------------|
| CHEM 201       | Organic Chemistry 1 | 4                |

| BIOL 202 | Genomics and Evolution       | 4 |
|----------|------------------------------|---|
| BIOL 305 | Introduction to Biochemistry | 4 |
| PHYS 303 | Introduction to Biophysics   | 4 |
| BIOL 320 | Bioethics                    | 4 |

### **Disciplinary Courses**

# For Cell and Molecular Biology Track:

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| BIOL 201       | Cell and Molecular Biology     | 4                |
| BIOL 212       | Microbiology                   | 4                |
| BIOL 304       | Molecular Genetic Analysis     | 4                |
| BIOL 306       | Cell Signaling and Diseases    | 4                |
| BIOL 315       | Experimental Molecular Biology | 4                |

# For Genetics and Genomics Track:

| Course<br>Code | Course Name                                 | Course<br>Credit |
|----------------|---|------------------|
| BIOL 201       | Cell and Molecular Biology                  | 4                |
| BIOL 304       | Molecular Genetic Analysis                  | 4                |
| BIOL 314       | Computational Biology and Bioinformatics    | 4                |
| BIOL 403       | Experimental Methods in Functional Genomics | 4                |
| BIOL 407       | Population Genomics and Molecular Evolution | 4                |

# For Biogeochemistry Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| ENVIR 102      | Dynamic Earth and Oceans: Physical and Biological Sciences for the Environment | 4                |
| BIOL 208       | General Ecology  | 4                |

| BIOL<br>311/ENVIR<br>311                             | Biogeochemistry                       | 4 |
|--|---------------------------------------|---|
| And choose one                                       | course from the following two courses |   |
| BIOL<br>313/ENVIR<br>313                             | Ecosystem Service                     | 4 |
| BIOL 319   | Global Change Biology                 | 4 |
| And choose one course from the following two courses |                                       |   |
| BIOL 312   | Ecophysiology                         | 4 |
| ENVIR<br>315/CHEM<br>315                             | Aqueous Geochemistry                  | 4 |

### For Biophysics Track:

| Course<br>Code | Course Name  | Course<br>Credit |  |
|----------------|--|------------------|--|
| PHYS 122       | General Physics II                                     | 4                |  |
| MATH 202       | Linear Algebra   | 4                |  |
| PHYS 201       | Optics and Modern Physics                              | 4                |  |
| PHYS 302       | Thermal and Statistical Physics                        | 4                |  |
| PHYS 406       | Biophysics   | 4                |  |
| And choose two | And choose two courses from the following four courses |                  |  |
| PHYS 301       | Classical Mechanics                                    | 4                |  |
| PHYS 304       | Electricity and Magnetism                              | 4                |  |
| PHYS 401       | Quantum Mechanics                                      | 4                |  |
| PHYS 404       | Nonlinear Dynamics                                     | 4                |  |

### **Electives**

Courses listed in the table below are recommended electives for the major and the course list will be updated periodically. Students can also select other courses in different divisions as electives.

# For Cell and Molecular Biology Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| BIOL 203       | Molecular, Behavioral and Social Evolution: Evolution of<br>Genomes, Traits, Behaviors and Societies | 4                |
| BOL 401        | Advanced Biochemistry: Cell Metabolism   | 4                |
| BIOL 310       | Developmental Biology  | 4                |
| BIOL 314       | Computational Biology and Bioinformatics   | 4                |
| CHEM 404       | Physical Biochemistry  | 4                |
| BIOL 307       | Cancer Genetics  | 4                |

# For Genetics and Genomics Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| ENVIR 202      | Biodiversity and Conservation  | 4                |
| BIOL 203       | Molecular, Behavioral and Social Evolution: Evolution of<br>Genomes, Traits, Behaviors and Societies | 4                |
| BIOL 212       | Microbiology   | 4                |
| BIOL 310       | Developmental Biology: Development, Stem Cells, and<br>Regeneration                                  | 4                |
| BIOL 317       | Systems Biology  | 4                |
| BIOL 404       | Genomics of Adaptation   | 4                |

# <u>For Biogeochemistry Track:</u>

| Course<br>Code | Course Name                            | Course<br>Credit |
|----------------|--|------------------|
| BIOL 201       | Cell and Molecular Biology             | 4                |
| ENVIR 202      | Biodiversity and Conservation          | 4                |
| ENVIR 304      | Environmental Chemistry and Toxicology | 4                |
| BIOL 318       | Food Web Ecology                       | 4                |

| BIOL 405 | Microbial Ecology | 4 |
|----------|-------------------|---|
|          |                   |   |

# For Biophysics Track:

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| BIOL 201       | Cell and Molecular Biology     | 4                |
| MATH 303       | ODE and Dynamical Systems      | 4                |
| BIOL 316       | Quantitative Physiology        | 4                |
| MATH 403       | Partial Differential Equations | 4                |
| CHEM 404       | Physical Biochemistry          | 4                |
| MATH 410       | Modeling Biological Systems    | 4                |

## Natural Sciences/Social Sciences Majors

### **Environmental Science / Public Policy**

The pressing needs for sustainable development and acceptable environmental quality are placing increasing demands upon governments and industries locally, nationally, and worldwide. To help meet those demands, the Environmental Science program is designed to provide training for students intending to enter environmental professions or to pursue graduate study in environmental science and related fields such as chemistry, public health, law, and policy. The Environmental Science major offers an interdisciplinary course of study that combines elements of the natural and social sciences relevant to understanding the biosphere and its interaction with human society. In order to appreciate and explore more deeply the effects of natural and human-induced processes, and the interactions of the physical components of the planet on the environment, students will take courses that lay the foundations for them to engage in careers that will allow them to influence environmental science and policy and to improve human and environmental health.

The Environmental Science major includes both coursework and experiential learning about the underlying science, and the social, political, legal and economic factors that both encourage and hinder environmental cooperation and competition around the world. All students pursuing this major must complete a set required Divisional Foundational courses that provide the required background and fundamentals in the discipline essential to advanced work in the major. The major includes a set of five required interdisciplinary courses (four set courses plus one to choose from a list of two courses) which provide a well-rounded, in-depth examination of environmental science and policy issues. In addition to the foundational and interdisciplinary and disciplinary requirements, students also have the choice of a number of elective courses that provide flexibility to add depth in their specific field of study, and/or explore other subject matters as they see fit.

The <u>Public Policy track</u> is designed for students most interested in the social, cultural, economic, and political aspects of environmental sciences. The track provides a healthy balance between basic sciences and public policy aspects to prepare graduates for translating this knowledge into meaningful action and innovative policy solutions.

This major also has a track in Chemistry. Please see details on the chemistry track under Environmental Science/Chemistry.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

### **Divisional Foundation Courses**

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101

| Course<br>Code | Course Name                               | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1) | 4                |
| SOSC 101       | Foundational Questions in Social Science  | 4                |
| SOSC 102       | Introduction to Research Methods          | 4                |
| INTGSCI<br>101 | Integrated Science 1                      | 4                |

Option 2: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code | Course Name                               | Course<br>Credit |
|----------------|---|------------------|
| MATH 101       | Calculus (was Mathematical Foundations 1) | 4                |
| SOSC 101       | Foundational Questions in Social Science  | 4                |
| SOSC 102       | Introduction to Research Methods          | 4                |
| BIOL 110       | Integrated Science - Biology              | 4                |
| CHEM 110       | Integrated Science - Chemistry            | 4                |

# **Interdisciplinary Courses**

| Course<br>Code   | Course Name  | Course<br>Credit |
|--|--|------------------|
| ENVIR 101  | Introduction to Environmental Sciences   | 4                |
| ENVIR 102  | Dynamic Earth and Oceans: Physical and Biological Sciences for the Environment | 4                |
| ENVIR 201  | Applied Environmental Science and Policy                                       | 4                |
| ENVIR 301  | International Environmental Policy   | 4                |
| And choose one course from the following three courses |  |                  |
| ENVIR 202  | Biodiversity and Conservation  | 4                |
| ENVIR<br>302/ECON<br>302                               | Environmental Economics & Policy   | 4                |
| ENVIR<br>404/ECON<br>404                               | Environmental Justice: The Economics of Race, Place and Pollution              | 4                |

# **Disciplinary Courses**

| Course<br>Code                                       | Course Name   | Course<br>Credit |  |
|--|---|------------------|--|
| PUBPOL<br>101  | Introduction to Policy Analysis                             | 4                |  |
| PUBPOL<br>301  | Political Analysis for Public Policy                        | 4                |  |
| PUBPOL<br>303  | Policy Choice as Value Conflict                             | 4                |  |
| And choose on  | And choose one course from the following two courses        |                  |  |
| STATS 101  | Introduction to Statistical Methods                         | 4                |  |
| MATH 205   | Probability and Statistics (was Mathematical Foundations 3) | 4                |  |
| And choose one course from the following two courses |   |                  |  |
| PUBPOL<br>304  | Microeconomic Policy Tools                                  | 4                |  |
| ECON 201   | Intermediate Microeconomics I                               | 4                |  |

# **Electives**

Students can choose the recommended electives in the major or select other courses in different divisions as electives. The course list will be updated periodically.

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| PUBPOL<br>201  | Climate Change Law and Policy                                 | 4                |
| PUBPOL<br>202  | Global Disasters: Science and Policy                          | 4                |
| ENVIR 203      | The Theory and Practice of Sustainability                     | 4                |
| ENVIR 204      | Global Environmental Issues and Policies                      | 4                |
| PUBPOL<br>209  | The Politics of Environmental Crises                          | 4                |
| ENVIR 303      | Climate Change and Society in China                           | 4                |
| ENVIR 305      | Environment and Development Economics in Developing Countries | 4                |
| ENVIR 403      | Energy Economics and Policy                                   | 4                |

### Global Health with Tracks in Biology and Public Policy

The global health major introduces students to global health as an area of study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. A synthesis of population-based prevention with individual-level clinical care, global health aims to reduce health disparities through attention to modifiable determinants of health and provision of sustainable health services and human development. As a field of study, global health has emerged from tropical medicine, public health, and international health to encompass the complex transactions between societies that are a defining feature of globalization. Because many global health problems stem from economic, social, environmental, political, and healthcare inequalities, defining these problems and designing solutions is highly interdisciplinary and involves fields that span across health sciences, medicine, and public health, but also that bridge to a broad range of academic fields, including biology, agriculture, anthropology, business, computer science, engineering, environmental sciences, economics, history, law, psychology, public policy, and sociology, among others. To introduce students to this interdisciplinary field, the global health major integrates courses in the natural and social sciences and encourages students to take relevant electives in the humanities.

Health issues do not know borders. The advances in transportation and the increasing amount of human travel propels nations to address health issues in a timely manner and more deeply than ever before. Given the size of China's population and its geographic location, there is no better place for students to immerse themselves in the study of global health. Every nation has faced challenges related to global health: from HIV/AIDS to Ebola and SARS, as well as health issues that arise from poverty, famine and natural disasters. The opportunity for students to study these issues in China will not just provide a generation of global health experts for China itself, but also for the entire world.

The <u>Biology track</u> within the Global Health major is designed for students interested in a biological perspective on global health, in particular cell and molecular biology, infectious diseases, microbiology, and anatomy and physiology. The track is designed to encourage breadth in the life sciences but also allows students to acquire depth in a chosen area of scientific concentration through the choice of electives, as is encouraged for students who desire to pursue graduate studies or intend to pursue a career in research. The <u>Public Policy track</u> is designed for students most interested in the social, cultural, economic, and political aspects of global health. The track provides a healthy balance between basic sciences and public policy aspects to prepare graduates for translating this knowledge into meaningful action and innovative policy solutions.

### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

### **Divisional Foundation Courses**

# For Biology Track:

Option 1: only applicable to Class of 2022 who have taken INTGSCI 101 & 102  $\,$ 

| Course<br>Code | Course Name   | Course<br>Credit |  |
|----------------|---|------------------|--|
| MATH 101       | Calculus (was Mathematical Foundations 1)                   | 4                |  |
| INTGSCI<br>101 | Integrated Science 1  | 4                |  |
| INTGSCI<br>102 | Integrated Science 2  | 4                |  |
| And choose on  | And choose one of the following courses                     |                  |  |
| MATH 205       | Probability and Statistics (was Mathematical Foundations 3) | 4                |  |
| STATS 101      | Introduction to Applied Statistical Methods                 | 4                |  |

# Option 2: only applicable to Class of 2022 who have taken INTGSCI 101

| Course  | Course Name   | Course |
|---|---|--------|
| Code  |   | Credit |
| MATH 101  | Calculus (was Mathematical Foundations 1)                   | 4      |
| INTGSCI<br>101  | Integrated Science 1  | 4      |
| BIOL 110  | Integrated Science - Biology                                | 4      |
| CHEM 110<br>*   | Integrated Science - Chemistry                              | 4      |
| CHEM 120<br>*   | Core Concepts in Chemistry: An Environmental Perspective    | 4      |
| And choose one of the following courses                           |   |        |
| MATH 205  | Probability and Statistics (was Mathematical Foundations 3) | 4      |
| STATS 101   | Introduction to Applied Statistical Methods                 | 4      |
| * Students need to take either CHEM 110 or CHEM 120 but not both. |   |        |

Option 3: Applicable to Class of 2023 and any student who has not taken INTGSCI 101

| Course<br>Code                          | Course Name   | Course<br>Credit |
|---|---|------------------|
| MATH 101                                | Calculus (was Mathematical Foundations 1)                   | 4                |
| BIOL 110                                | Integrated Science - Biology                                | 4                |
| CHEM 110                                | Integrated Science - Chemistry                              | 4                |
| PHYS 121                                | Integrated Science - Physics                                | 4                |
| And choose one of the following courses |   |                  |
| MATH 205                                | Probability and Statistics (was Mathematical Foundations 3) | 4                |
| STATS 101                               | Introduction to Applied Statistical Methods                 | 4                |

# For Public Policy Track:

| Course<br>Code  | Course Name                               | Course<br>Credit |
|---|---|------------------|
| MATH 101  | Calculus (was Mathematical Foundations 1) | 4                |
| SOSC 101  | Foundational Questions in Social Science  | 4                |
| SOSC 102  | Introduction to Research Methods          | 4                |
| And choose one of the following courses                           |   |                  |
| INTGSCI<br>101 *  | Integrated Science 1                      | 4                |
| BIOL 110  | Integrated Science - Biology              | 4                |
| * INTGSCI 101 is discontinued and was available to Class of 2022. |   |                  |

# Interdisciplinary Courses

| Course Code | Course Name                   | Course<br>Credit |
|-------------|-------------------------------|------------------|
| GLHLTH 101  | Introduction to Global Health | 4                |
| GLHLTH 201  | Global Health Ethics          | 4                |
| GLHLTH 302  | Social Determinants of Health | 4                |

| And choose one from the following three courses |  |   |
|---|--|---|
| GLHLTH 203                                      | Global Disease Control Programs and Policies | 4 |
| GLHLTH 303                                      | Global Comparative Health Care Systems       | 4 |
| GLHLTH 304                                      | Global Health Governance and Policy          | 4 |
| And choose one from the following four courses  |  |   |
| GLHLTH 305                                      | Biological Basis of Disease                  | 4 |
| GLHLTH 306                                      | Evolution of Health and Disease              | 4 |
| GLHLTH 110                                      | Ecosystem Health and Human Well-Being        | 4 |
| GLHLTH 307                                      | Global Mental Health                         | 4 |

# **Disciplinary Courses**

# For Biology Track:

| Course<br>Code | Course Name                  | Course<br>Credit |
|----------------|------------------------------|------------------|
| CHEM<br>201    | Organic Chemistry I          | 4                |
| BIOL 201       | Cell and Molecular Biology   | 4                |
| BIOL 202       | Genomics and Evolution       | 4                |
| BIOL 208       | General Ecology              | 4                |
| BIOL 212       | Microbiology                 | 4                |
| BIOL 305       | Introduction to Biochemistry | 4                |

# For Public Policy Track:

| Course Code | Course Name                          | Course<br>Credit |
|-------------|--------------------------------------|------------------|
| STATS 101 * | Introduction to Statistical Methods  | 4                |
| PUBPOL 101  | Introduction to Policy Analysis      | 4                |
| PUBPOL 301  | Political Analysis for Public Policy | 4                |
| PUBPOL 303  | Policy Choice as Value Conflict      | 4                |

| Choose one course from the following two courses            |                               |   |
|---|-------------------------------|---|
| PUBPOL 304  | Microeconomic Policy Tools    | 4 |
| ECON 201  | Intermediate Microeconomics I | 4 |
| * Students can take MATH 205 as a substitute for STATS 101. |                               |   |

### **Electives**

Students can choose the recommended electives in the major or select other courses in different divisions as electives. The course list will be updated periodically.

### For Biology Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| BIOL 203       | Molecular, Behavioral and Social Evolution: Evolution of<br>Genomes, Traits, Behaviors and Societies | 4                |
| GLHLTH<br>301  | Global Health Research Methods   | 4                |
| BIOL 306       | Cell Signaling and Diseases  | 4                |
| BIOL 307       | Cancer Genetics  | 4                |
| BIOL 308       | Evolution of Infectious Diseases   | 4                |
| BIOL 309       | Comparative Vertebrate Anatomy   | 4                |
| BIOL 310       | Development Biology  | 4                |

### For Public Policy Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| PUBPOL<br>102  | Introduction to the United States Health Care System | 4                |
| PUBPOL<br>305  | War and Public Health in Africa                      | 4                |

| PUBPOL<br>306 | International Development and Poverty | 4 |
|---------------|---------------------------------------|---|
| GLHLTH<br>202 | Media and Health Communication        | 4 |

### **Social Sciences Majors**

# Institutions and Governance with tracks in Economics, Political Science, and Public Policy

The Institutions and Governance major enables students to study the formal and informal rules that societies use to govern themselves at the local, national, and global levels. By focusing on institutions and governance as a guiding framework, students can better understand the dynamics of wealth and poverty, innovation versus technological/economic stagnation, and stability versus turmoil in different states and societies. Students in this major will be exposed to the deep political science, economic, sociological, historical and anthropological explorations of institutional designs in a variety of constructs, such as governments, interest groups and social movements, media, and religion, among others. By their senior year, students will be able to speak authoritatively on the comparative theory of institutions, the history of institutional and policy development, the drivers of institutional change, and distributional effects of institutional choices. Particular attention will be paid to the challenges of governance, such as the processes and structures that societies adopt to manage their collective affairs, with an emphasis on the implementation and evaluation of government programs.

The world is more and more interconnected at a variety of levels and students are going to need a better understanding of the institutions that govern this global integration. The more that students can identify, analyze and engage with global institutions and understand their governing processes, the more they will be able to navigate these complexities. This focus in Institutions and Governance will prepare students for a variety of careers requiring expertise in public administration, international development, political risk analysis, multinational investment and work in the non-profit sector at both the domestic and international levels. Students can choose among three disciplinary tracks: Economics, Political Science, or Public Policy.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

#### For Economics Track:

| Course<br>Code | Course Name                               | Course<br>Credit |
|----------------|---|------------------|
| SOSC 101       | Foundational Questions in Social Science  | 4                |
| MATH 101       | Calculus (was Mathematical Foundations 1) | 4                |

## For Tracks of Political Science, Public Policy:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| SOSC 102       | Introduction to Research Methods         | 4                |

# **Interdisciplinary Courses**

| Course Code      | Course Name                                 | Course<br>Credit |
|------------------|---|------------------|
| STATS 101 *      | Introduction to Statistical Methods         | 4                |
| ETHLDR 203       | Conceptions of Democracy and Meritocracy    | 4                |
| POLSCI 307       | Political Economy of Institutions           | 4                |
| POLSCI 201       | Political Institutions and Processes        | 4                |
| POLSCI 308       | Global Governance                           | 4                |
| GCHINA<br>202    | Modern Chinese Politics                     | 4                |
| INSTGOV<br>490   | Senior Seminar: Advanced Topics             | 4                |
| * Students can t | ake MATH 205 as a substitute for STATS 101. | ,                |

# **Disciplinary Courses**

## For Economics Track:

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| ECON 101       | Economics Principles           | 4                |
| ECON 201       | Intermediate Microeconomics I  | 4                |
| ECON 202       | Intermediate Microeconomics II | 4                |
| ECON 203       | Introduction to Econometrics   | 4                |
| ECON 204       | Intermediate Macroeconomics    | 4                |

#### For Political Science Track:

| Course<br>Code | Course Name                          | Course<br>Credit |
|----------------|--------------------------------------|------------------|
| POLSCI 101     | International Politics               | 4                |
| ETHLDR         | Ethics, Markets and Politics         | 4                |
| PUBPOL<br>301  | Political Analysis for Public Policy | 4                |
| POLSCI 301     | Program Evaluation                   | 4                |
| POLSCI 302     | Public Opinion                       | 4                |

#### For Public Policy Track:

| Course Code               | Course Name                                      | Course<br>Credit |  |
|---------------------------|--|------------------|--|
| PUBPOL 101                | Introduction to Policy Analysis                  | 4                |  |
| PUBPOL 301                | Political Analysis for Public Policy             | 4                |  |
| PUBPOL 303                | Policy Choice as Value Conflict                  | 4                |  |
| PUBPOL<br>315/ECON<br>315 | Economics of the Public Sector                   | 4                |  |
| Choose one cour           | Choose one course from the following two courses |                  |  |
| PUBPOL 304                | Microeconomic Policy Tools                       | 4                |  |
| ECON 201                  | Intermediate Microeconomics I                    | 4                |  |

#### **Electives**

Courses listed in the table below are recommended electives for this major and the course list will be updated periodically. Students can also select other courses in different divisions as electives.

#### For Economics Track:

| Course<br>Code | Course Name      | Course<br>Credit |
|----------------|------------------|------------------|
| ECON 301       | Health Economics | 4                |

| ECON<br>302/ENVIR<br>302 | Environmental Economics & Policy                                  | 4 |
|--------------------------|---|---|
| ECON 303                 | Financial Institutions  | 4 |
| ECON 304                 | Economic Growth   | 4 |
| ECON 307                 | History of Monetary & International Crises                        | 4 |
| ECON 308                 | Economic History and Modernization of the Islamic Middle East     | 4 |
| ECON 401                 | Competitive Strategy & Industrial Organization                    | 4 |
| ECON 402                 | International Finance   | 4 |
| ECON<br>404/ENVIR<br>404 | Environmental Justice: The Economics of Race, Place and Pollution | 4 |

## For Political Science Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| POLSCI<br>102  | Social Choice and Democracy  | 4                |
| POLSCI<br>105  | Contemporary Political Ideologies  | 2                |
| POLSCI<br>106  | Political Rhetoric, Crisis, and Leadership                                     | 2                |
| HIST 202       | World History and Global Interactions  | 4                |
| POLECON<br>202 | The Politics of International Economic Relations: America in the World Economy | 4                |
| GCHINA<br>202  | Modern Chinese Politics  | 4                |
| POLSCI<br>208  | Political and Social Inequality  | 4                |
| POLSCI<br>209  | Democratic Erosion   | 2                |
| POLSCI<br>210  | International Relations in East Asia   | 4                |

| POLSCI<br>211/LIT<br>211 | Politics and Literature                           | 4 |
|--------------------------|---|---|
| POLSCI<br>212            | Pathologies of Modern Society: Foundational Ideas | 4 |
| POLSCI<br>303            | International Politics of East Asia               | 4 |

# For Public Policy Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| PUBPOL<br>213  | Authoritarian Regimes                                | 4                |
| PUBPOL<br>308  | Managing the Oceans to Solve Global Problems         | 4                |
| PUBPOL<br>309  | War and Public Health in Africa                      | 4                |
| PUBPOL<br>311  | Economic and Political History of the European Union | 4                |
| PUBPOL<br>410  | Counterterrorism Law and Policy                      | 4                |

#### Political Economy with tracks in Economics, Political Science, and Public Policy

Within the field of international relations in general, and international political economy in particular, interested Duke Kunshan University students will have a chance to explore--both broadly and deeply, a large array of the world's most pressing issues--issues that will determine the balance between peace and conflict over the coming decades. Given the growing impact of globalization and the rather profound structural changes occurring in international affairs, it is imperative that we train a new generation of international relations theorists and practitioners who can appreciate, manage and lead in the increasingly complex world that we face on a daily basis.

The field of international political economy utilizes an interdisciplinary approach to examine the reciprocal relationships between politics and markets, both within and among countries, employing a variety of analytical and research tools, including those of economics. Its concerns include interactions among economic and political development; cooperation and conflict among nations, groups, and individuals; the distribution of material resources and political/economic power; the effects of political actors and institutions on economic outcomes and vice versa; the causes and consequences of technological change, growth, and globalization; and regulation and global governance. The curriculum will provide students an overview of the changing face of international relations as well as impart to them the critical tools and techniques that inform the study of international political economy. Students will have an opportunity to examine and assess a broad range of global issues using the lens and conceptual frameworks of political economy. Students can choose among the three disciplinary tracks: Economics, Political Science, or Public Policy.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

#### For Economics Track:

| Course<br>Code | Course Name                               | Course<br>Credit |
|----------------|---|------------------|
| SOSC 101       | Foundational Questions in Social Science  | 4                |
| MATH 101       | Calculus (was Mathematical Foundations 1) | 4                |

#### For Political Science Track:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |

| And choose one course from the following two courses |   |   |
|--|---|---|
| SOSC 102   | Introduction to Research Methods          | 4 |
| MATH<br>101  | Calculus (was Mathematical Foundations 1) | 4 |

# For Public Policy Track:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| SOSC 102       | Introduction to Research Methods         | 4                |

# **Interdisciplinary Courses**

| Course Code   | Course Name                         | Course<br>Credit |
|---|-------------------------------------|------------------|
| STATS 101 *   | Introduction to Statistical Methods | 4                |
| ECON 101  | Economics Principles                | 4                |
| ETHLDR 202  | Ethics, Markets, Politics           | 4                |
| POLECON<br>201  | International Political Economy     | 4                |
| POLECON<br>301  | Development                         | 4                |
| POLECON<br>302/GCHINA<br>301                                | China's Economic Transition         | 4                |
| POLECON<br>490  | Senior Seminar: Advanced Topics     | 4                |
| * Students can take MATH 205 as a substitute for STATS 101. |                                     |                  |

## **Disciplinary Courses**

#### For Economics Track:

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| ECON 201       | Intermediate Microeconomics I  | 4                |
| ECON 202       | Intermediate Microeconomics II | 4                |
| ECON 203       | Introduction to Econometrics   | 4                |
| ECON 204       | Intermediate Macroeconomics    | 4                |

# For Political Science Track:

| Course        | Course Name                              | Course |
|---------------|--|--------|
| Code          |  | Credit |
| POLSCI 101    | International Politics                   | 4      |
| POLSCI 201    | Political Institutions and Processes     | 4      |
| ETHLDR<br>203 | Conceptions of Democracy and Meritocracy | 4      |
|               |  |        |
| POLSCI 301    | Program Evaluation                       | 4      |
| POLSCI 302    | Public Opinion                           | 4      |

# For Public Policy Track:

| Course Code                                      | Course Name                          | Course<br>Credit |
|--|--------------------------------------|------------------|
| PUBPOL 101                                       | Introduction to Policy Analysis      | 4                |
| PUBPOL 301                                       | Political Analysis for Public Policy | 4                |
| PUBPOL 303                                       | Policy Choice as Value Conflict      | 4                |
| PUBPOL<br>315/ECON<br>315                        | Economics of the Public Sector       | 4                |
| Choose one course from the following two courses |                                      |                  |
| PUBPOL 304                                       | Microeconomic Policy Tools           | 4                |

| ECON 201 | Intermediate Microeconomics I | 4 |
|----------|-------------------------------|---|
| ECON 201 |                               |   |

#### **Electives**

Students can choose the recommended electives in their tracks or select other courses in different divisions as electives. The course list will be updated periodically.

#### For Economics Track:

| Course<br>Code           | Course Name   | Course<br>Credit |
|--------------------------|---|------------------|
| ECON 301                 | Health Economics  | 4                |
| ECON<br>302/ENVIR<br>302 | Environmental Economics & Policy                                  | 4                |
| ECON 303                 | Financial Institutions  | 4                |
| ECON 304                 | Economic Growth   | 4                |
| ECON 307                 | History of Monetary & International Crises                        | 4                |
| ECON 308                 | Economic History and Modernization of the Islamic Middle East     | 4                |
| ECON 401                 | Competitive Strategy & Industrial Organization                    | 4                |
| ECON 402                 | International Finance   | 4                |
| ECON<br>404/ENVIR<br>404 | Environmental Justice: The Economics of Race, Place and Pollution | 4                |

## For Political Science Track

| Course Code    | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| POLSCI 102     | Social Choice and Democracy  | 4                |
| POLSCI 105     | Contemporary Political Ideologies  | 2                |
| POLSCI 106     | Political Rhetoric, Crisis, and Leadership                                     | 2                |
| HIST 202       | World History and Global Interactions  | 4                |
| POLECON<br>202 | The Politics of International Economic Relations: America in the World Economy | 4                |

| GCHINA<br>202         | Modern Chinese Politics                           | 4 |
|-----------------------|---|---|
| POLSCI 208            | Political and Social Inequality                   | 4 |
| POLSCI 209            | Democratic Erosion                                | 2 |
| POLSCI 210            | International Relations in East Asia              | 4 |
| POLSCI<br>211/LIT 211 | Politics and Literature                           | 4 |
| POLSCI 212            | Pathologies of Modern Society: Foundational Ideas | 4 |
| POLSCI 303            | International Politics of East Asia               | 4 |

## For Public Policy Track

| Course Code | Course Name                             | Course<br>Credit |
|-------------|---|------------------|
| PUBPOL 120  | Globalization and Corporate Citizenship | 4                |
| PUBPOL 210  | Development and Africa                  | 4                |
| PUBPOL 211  | Globalization and Public Policy         | 4                |
| PUBPOL 214  | Globalization and History               | 4                |
| PUBPOL 307  | Market Power and Public Policy          | 4                |

#### Social Sciences/Arts and Humanities Majors

# Cultures and Movements with tracks in Cultural Anthropology, Sociology, and History

Culture and movements are two interdependent areas of inquiry studied across the social sciences that have implications for understanding contemporary public discourse, policy debates, and current events. Culture refers to the ways people act and interact, the material objects that shape their lives, the social and political organizations that shape social action, and how these change over time. Nearly every human action is shaped in some way by the cultural context in which it is embedded. Movements refer to the interactions and dynamics of practices, values, beliefs, economic systems and institutions over time and include—but are not limited to—social, political, and economic changes that reflect where a society has been and that shape where it may go in the future. Cultural perspectives are uniquely positioned to shed light on movements by providing insight into how movements are shaped—and how they shape—the broader society in which they occur. Cultural perspectives also contribute to understanding movements by clarifying the internal functioning of the social organizations that create and are changed by movements.

This major has three tracks, Cultural Anthropology, Sociology, and History, each of which provides students the opportunities for academic study and applied research and practice. Students in this major will be exposed to interdisciplinary approaches to both theoretical understanding of culture and movements and the methods used to study related issues. Theoretical approaches include individual-centered, pragmatist, structuralism, cognitive, and political orientations. Methodological approaches incorporate ethnographic, survey research, network analysis, computational, and other approaches. By their senior year, students will have the skills to read cutting-edge research in this interdisciplinary field and will be equipped to compete for jobs with policy organizations, corporations, NGOs, and other top employers. They will also be well-prepared to apply to graduate programs in the social sciences, public policy, history, and management.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

# For Tracks of Sociology, Cultural Anthropology:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| SOSC 102       | Introduction to Research Methods         | 4                |

## **For History Track:**

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| ARUHU<br>101   | The Art of Interpretation: Written Texts | 4                |

## **Interdisciplinary Courses**

| Course Code    | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| CULMOVE<br>101 | Cultures of Globalization  | 4                |
| CULMOVE<br>201 | Migration, Inequality and Culture  | 4                |
| CULMOVE<br>202 | Culture and Social Movements   | 4                |
| CULMOVE<br>203 | Wealth, Inequality and Power   | 4                |
| CULMOVE<br>301 | Social Science Perspectives on China: From the Socialist<br>Past to the Global Present | 4                |
| CULMOVE<br>390 | Junior Seminar: Advanced Topics  | 4                |
| CULMOVE<br>490 | Senior Seminar: Advanced Topics  | 4                |

# Disciplinary Courses

# For Cultural Anthropology Track:

| Course Code    | Course Name                                      | Course<br>Credit |
|----------------|--|------------------|
| CULANTH<br>206 | The Ethnography of China: New Directions         | 4                |
| CULANTH<br>211 | Gender, Mobility and Labor                       | 4                |
| CULANTH<br>302 | Field Methods                                    | 4                |
| And choose two | courses from the following five courses          |                  |
| CULANTH<br>207 | Cultures of New Media                            | 4                |
| CULANTH<br>208 | Global Migration and Ethics                      | 4                |
| CULANTH<br>304 | The Anthropology of Doing Good: China and Beyond | 4                |
| CULANTH<br>305 | The Culture of Development: Africa               | 4                |
| CULANTH<br>405 | Medical Anthropology                             | 4                |

# For Sociology Track

| Course Code  | Course Name                                 | Course<br>Credit |
|--|---|------------------|
| SOCIOL 105   | Theory and Society                          | 4                |
| SOCIOL 110   | Sociological Inquiry                        | 4                |
| SOCIOL 202   | Sociology of Culture                        | 4                |
| And choose two courses from the following five courses |   |                  |
| STATS 101 *  | Introduction to Applied Statistical Methods | 4                |
| SOCIOL 111   | Contemporary Social Problems                | 4                |

| SOCIOL 180  | Society, the Self, and the Changing Natural World | 4 |
|---|---|---|
| SOCIOL 204  | Identity, Action, and Emotion                     | 4 |
| SOCIOL 211  | Social Inequality                                 | 4 |
| * Students can take MATH 205 as a substitute for STATS 101. |   |   |

## For History Track:

# World History thematic area:

| Course<br>Code   | Course Name  | Course<br>Credit |
|--|--|------------------|
| HIST 201   | History Methods and Research   | 4                |
| And choose on  | ne of the following five Pre-Modern World History courses            |                  |
| HIST 111   | Ancient Roots to Global Routes                                       | 4                |
| HIST 112   | History of the Indian Ocean World                                    | 4                |
| HIST 113   | Peoples and Cultures of Ancient South Asia, 3500BCE-1750CE           | 4                |
| HIST 202   | World History and Global Interactions                                | 4                |
| HIST 312   | Southeast Asia and the Rise of Global Trade                          | 4                |
| And choose one of the following three Modern World History courses               |  |                  |
| HIST 110   | Historical Perspectives on Contemporary Global Issues                | 4                |
| HIST 313   | Southeast Asia from the Age of Imperialism to the Global Cold<br>War | 4                |
| HIST 410   | The Spice Race: How the Spice Trade shaped our World                 | 4                |
| And one course from electives in the World History thematic area (200-400 level) |  | 4                |
| And one histories  | ry course outside of the World History thematic area (100-400        | 4                |

#### **Electives**

Students can choose the recommended electives in their tracks or select other courses in different divisions as electives. The course list will be updated periodically.

#### For Cultural Anthropology Track:

| Course Code    | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| CULANTH<br>101 | Introduction to Cultural Anthropology                                       | 4                |
| CULANTH<br>105 | Sound in Everyday Life; Anthropological Perspectives                        | 4                |
| CULANTH<br>106 | Home, House, and Housing: An Anthropological Exploration of Human Dwellings | 4                |
| CULANTH<br>209 | Globalization and Alternative-Globalizations                                | 4                |
| CULANTH<br>303 | Politics of Food: Land, Labor, Health, and Economics                        | 4                |

## For Sociology Track

| Course Code | Course Name   | Course<br>Credit |
|-------------|---|------------------|
| SOCIOL 104  | Love, Marriage, and Family in Comparative<br>Perspective        | 4                |
| SOSC 203    | The Social, Political, and Economic Implications of Immigration | 4                |
| SOCIOL 205  | Gender, Work, and Organizations                                 | 4                |
| SOCIOL 301  | Race, Ethnicity, and Citizenship                                | 4                |

#### **For History Track**

Electives in the World History thematic area:

| Course Code | Course Name                 | Course<br>Credit |
|-------------|-----------------------------|------------------|
| HIST 107    | Gandhi and Moral Leadership | 4                |
| HIST 114    | Modern South Asia           | 4                |

| HIST 115 | Brides of the Sea: Trading Cities in the Indian Ocean World, 200BCE to 2000CE     | 2 |
|----------|---|---|
| HIST 116 | Mughal India Through the Eyes of European Travelers                               | 2 |
| HIST 121 | Pan-Africanism: Global Story of an American Idea                                  | 2 |
| HIST 204 | Asia in World History   | 4 |
| HIST 206 | World History in Seven Meals  | 4 |
| HIST 314 | Writing the History of War  | 4 |
| HIST 315 | Why Be a Bandit?  | 4 |
| HIST 411 | Seeing History from the Mountains and the Seas:<br>Ethnographic histories of Asia | 4 |
| HIST 412 | Global Labor History  | 4 |

# Global China Studies with tracks in History, Philosophy, Religious Studies, Economics, and Political Science

This major prepares students to engage, work with, and understand China in the twenty-first century. It provides students with opportunities to gain deep historical knowledge of China in the ancient, pre-modern, and modern periods, while focusing on the place and impact of China in the world—past, present, and future. Students will be exposed to debates about China's philosophical traditions and their force in shaping China's history and present; the political dynamics of development, decision-making, and grassroots protest; the importance of religion, entrepreneurialism, innovation, and social networks in China and beyond its borders; and the role of digital media, visual culture, and the internet in everyday social, economic and political life.

This major recognizes that China has continually had a global presence for many centuries, deeply influencing people, cultures, technologies, ecologies and economies elsewhere in our world, and that its influence is now deepening even further as China prepares to become a major player in the realm of global politics and economics. This major will query the meanings of "China" as a nation-state, a region, and culture in a global setting, and provide students with a new set of analytical and critical thinking skills in order to purposefully engage the changing landscape of academics, business, government, policy, and the arts. This major has tracks in History, Political Science, Economics, Philosophy, and Religious Studies.

The major in Global China Studies prepares students for a world in which China — and Chinese firms, organizations, and individuals — are at the center of shaping the 21st century. It prepares international students for their lifelong engagement with China: its polity, economy, and society. It prepares Chinese students to navigate the wider world with a firm understanding of their own roots, their unique history and institutions, and the ability to see their own country as others see it. It prepares students for careers in business, the professions, and public service with a foundational knowledge of China's global role, past, present and future.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

#### For tracks of History, Philosophy, Religious Studies

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| ARHU 101       | The Art of Interpretation: Written Texts | 4                |

## For Economics track:

| Course<br>Code               | Course Name   | Course<br>Credit |
|------------------------------|---|------------------|
| SOSC 101                     | Foundational Questions in Social Science                    | 4                |
| MATH 101                     | Calculus (was Mathematical Foundations 1)                   | 4                |
| And one of the courses below |   |                  |
| STATS 101                    | Introduction to Applied Statistical Methods                 | 4                |
| MATH 205                     | Probability and Statistics (was Mathematical Foundations 3) | 4                |

# For Political Science track:

| Course<br>Code                      | Course Name   | Course<br>Credit |
|-------------------------------------|---|------------------|
| COCC 101                            | Farm 1-Caral Oraclians in Carial Calana                     | 1                |
| SOSC 101                            | Foundational Questions in Social Science                    | $\mid 4 \mid$    |
| ARHU 101                            | The Art of Interpretation: Written Texts                    | 4                |
| And choose one of the courses below |   |                  |
| SOSC 102                            | Introduction to Research Methods                            | 4                |
| STATS 101                           | Introduction to Applied Statistical Methods                 | 4                |
| MATH 205                            | Probability and Statistics (was Mathematical Foundations 3) | 4                |

## Interdisciplinary Courses

| Course<br>Code                   | Course Name                 | Course<br>Credit |
|----------------------------------|-----------------------------|------------------|
| GCHINA<br>201                    | From Empire to Nation       | 4                |
| GCHINA<br>202                    | Modern Chinese Politics     | 4                |
| GCHINA<br>203                    | Visual China                | 4                |
| GCHINA<br>301/<br>POLECON<br>302 | China's Economic Transition | 4                |

| GCHINA<br>302 | The Factory: From Socialist Industrialism to World Assembly | 4 |
|---------------|---|---|
| GCHINA<br>390 | Junior Seminar: Advanced Topics                             | 4 |
| GCHINA<br>490 | Senior Seminar: Advanced Topics                             | 4 |

# **Disciplinary Courses**

# For History track:

# Chinese History thematic area:

| Course<br>Code   | Course Name                  | Course<br>Credit |
|--|------------------------------|------------------|
| HIST 201   | History Methods and Research | 4                |
| HIST 103   | Chinese History 3            | 4                |
| And choose one of the following two Pre-Modern Chinese History courses |                              |                  |
| HIST 101   | Chinese History 1            | 4                |
| HIST 102   | Chinese History 2            | 4                |
| And one course from electives in the thematic area (200-400 level)  4  |                              | 4                |
| And one history course outside of the thematic area (100-400 level)  4 |                              |                  |

# For Philosophy Track:

| Course   | Course Name                                  | Course |
|----------|--|--------|
| Code     |  | Credit |
| PHIL 101 | Introduction to Western Philosophy           | 4      |
| PHIL 102 | Introduction to Classical Chinese Philosophy | 4      |
| PHIL 105 | History of Modern European Philosophy        | 4      |
| PHIL 204 | Theory of Knowledge                          | 4      |
| PHIL 205 | Logic  | 4      |

# For Religious Studies Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| RELIG 101      | Comparative Religious Studies                          | 4                |
| RELIG 106      | Religion and Leadership                                | 4                |
| RELIG 201      | Confucianism, Daoism and Buddhism                      | 4                |
| RELIG 203      | Judaism, Christianity, and Islam                       | 4                |
| RELIG 302      | Religious and Philosophical Thought on the Environment | 4                |

## For Economics Track:

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| ECON 101       | Economics Principles           | 4                |
| ECON 201       | Intermediate Microeconomics I  | 4                |
| ECON 202       | Intermediate Microeconomics II | 4                |
| ECON 203       | Introduction to Econometrics   | 4                |
| ECON 204       | Intermediate Macroeconomics    | 4                |

## For Political Science Track:

| Course        | Course Name                              | Course |
|---------------|--|--------|
| Code          |  | Credit |
| POLSCI 101    | International Politics                   | 4      |
| POLSCI 201    | Political Institutions and Processes     | 4      |
| ETHLDR<br>203 | Conceptions of Democracy and Meritocracy | 4      |
| POLSCI 301    | Program Evaluation                       | 4      |
| POLSCI 302    | Public Opinion                           | 4      |

#### **Electives**

Students can choose the recommended electives in their tracks or select other courses in different divisions as electives. The course list will be updated periodically.

#### For History track:

Electives in the Chinese History thematic area:

| Course Code               | Course Name   | Course<br>Credit |
|---------------------------|---|------------------|
| HIST 108                  | Shanghai Nightscapes: A Nocturnal History of the City                                   | 2                |
| LIT<br>108/MEDIART<br>108 | Love and Dreams on the Chinese Stage  | 2                |
| HIST 117                  | Sounds and the Chinese City: Live Music Scenes in Urban China                           | 2                |
| HIST 205                  | Shanghai: From Treaty Port to Global Metropolis   | 4                |
| HIST 301                  | China in Global Perspective 1: China and the Silk Roads<br>World: 500-1500              | 4                |
| HIST 302                  | China in Global Perspective 2: The Internationalization of Modern China                 | 4                |
| HIST 303                  | China and the US Comparative 1: The United States and China in War and Revolution       | 4                |
| HIST 304                  | China and the US Comparative 2 The World of Universities in China and the United States | 4                |
| HIST 305                  | Special Topics course in History of Institutions  | 4                |

## For Philosophy Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| PHIL 103       | Chinese and Mediterranean Philosophy                                 | 4                |
| PHIL 106       | Global Philosophy  | 4                |
| PHIL 107       | What's the Right Thing to Do? Ethics and Justice in the Modern World | 4                |
| PHIL 108       | Philosophy and Ethics of Artificial Intelligence                     | 2                |
| PHIL 109       | Philosophy Through Computer Science                                  | 2                |

| PHIL 110 | Philosophy and Sport              | 2 |
|----------|-----------------------------------|---|
| PHIL 202 | Problems in Philosophy of Science | 4 |
| PHIL 301 | Philosophy of Mind                | 4 |

## For Religious Studies Track:

| Course<br>Code | Course Name                                  | Course<br>Credit |
|----------------|--|------------------|
| RELIG 102      | Prophets and Priests                         | 4                |
| PHIL 102       | Introduction to Classical Chinese Philosophy | 4                |
| RELIG 103      | Law and Revelation                           | 4                |
| PHIL 103       | Chinese and Mediterranean Philosophy         | 4                |
| RELIG 104      | Myth and Nation                              | 4                |
| RELIG 105      | Gods and People                              | 4                |
| RELIG 107      | Readings in Religious Literature             | 2                |
| RELIG 202      | Modern Buddhism                              | 4                |
| RELIG 204      | The Problem of Evil                          | 4                |
| RELIG 303      | The Human Condition                          | 4                |
| RELIG 304      | Ethics in Religious Perspective              | 4                |

## For Economics Track:

| Course<br>Code           | Course Name                                | Course<br>Credit |
|--------------------------|--|------------------|
| ECON 301                 | Health Economics                           | 4                |
| ECON<br>302/ENVIR<br>302 | Environmental Economics & Policy           | 4                |
| ECON 303                 | Financial Institutions                     | 4                |
| ECON 304                 | Economic Growth                            | 4                |
| ECON 307                 | History of Monetary & International Crises | 4                |

| ECON 308                 | Economic History and Modernization of the Islamic Middle East     | 4 |
|--------------------------|---|---|
| ECON 401                 | Competitive Strategy & Industrial Organization                    | 4 |
| ECON 402                 | International Finance   | 4 |
| ECON<br>404/ENVIR<br>404 | Environmental Justice: The Economics of Race, Place and Pollution | 4 |

#### For Political Science Track:

| Course<br>Code        | Course Name                                       | Course<br>Credit |
|-----------------------|---|------------------|
| POLSCI 102            | Social Choice and Democracy                       | 4                |
| POLSCI 105            | Contemporary Political Ideologies                 | 2                |
| POLSCI 208            | Political and Social Inequality                   | 4                |
| POLSCI 209            | Democratic Erosion                                | 2                |
| POLSCI 210            | International Relations in East Asia              | 4                |
| POLSCI<br>211/LIT 211 | Politics and Literature                           | 4                |
| POLSCI 212            | Pathologies of Modern Society: Foundational Ideas | 4                |
| POLSCI 221            | US/China Relations                                | 4                |
| POLSCI 303            | International Politics of East Asia               | 4                |
| POLSCI 307            | Political Economy of Institutions                 | 4                |
| POLSCI 308            | Global Governance                                 | 4                |

#### US Studies with tracks in History, Literature, Political Science, and Public Policy

America is a unique experiment in self-governance, economic formation, and cultural production. It is rooted in Puritan settlement and the American Revolution and has been reshaped from the beginning by racial, religious, regional, linguistic, and sexual minorities upwardly mobile and on-the-make. U.S. nationality therefore includes both patriotic nationalism and pointed dissent. There is also a long history to U.S. connections with Asia and of Asian—especially Chinese—impact on the United States, which is now taking on ever greater force as China and the United States engage on the global stage.

US Studies fosters understanding of the ideas, cultures, art, institutions, aspirations, and realities that have played an important role in the development of American society and public life. Particular attention is paid to core ideas of American citizenship and to the ways in which institutions have facilitated and constrained efforts by marginalized groups to achieve full citizenship. U.S. Studies is therefore both an appreciation and a critique. It captures the utopian impulse in the American narrative, its far-reaching and inspiring vision, and its many successes including the achievement of a revelatory ironic and self-critical literature. It also examines ideas of nationhood that transcend national boundaries and forms of nationalist ideology that have produced anti-nationalist dissent. The courses offered in the program examine the formation of historical, philosophical, religious, social, artistic and political traditions that shape American political thought, institutions, culture and literature. Students can choose among four disciplinary tracks with the overall US Studies major: History, Literature, Political Science, and Public Policy.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

#### For tracks of History, Literature

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| ARHU<br>101    | The Art of Interpretation: Written Texts | 4                |

#### For Political Science track:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |

| ARHU<br>101   | The Art of Interpretation: Written Texts                    | 4 |
|---------------|---|---|
| And choose or | ne of the courses below                                     |   |
| SOSC 102      | Introduction to Research Methods                            | 4 |
| STATS<br>101  | Introduction to Applied Statistical Methods                 | 4 |
| MATH<br>205   | Probability and Statistics (was Mathematical Foundations 3) | 4 |

## For Public Policy track:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| ARHU<br>101    | The Art of Interpretation: Written Texts | 4                |
| SOSC 102       | Introduction to Research Methods         | 4                |

# **Interdisciplinary Courses**

| Course Code | Course Name                                 | Course<br>Credit |
|-------------|---|------------------|
| LIT 104     | The American Romance of Self-Making         | 4                |
| LIT 106     | American Otherness and Otherness in America | 4                |
| POLSCI 103  | American Ideas and the Idea of America      | 4                |
| POLSCI 207  | Democratic Institutions in America          | 4                |
| POLSCI 310  | America in the World                        | 4                |
| USTUD 390   | Junior Seminar: Advanced Topics             | 4                |
| USTUD 490   | Senior Seminar: Advanced Topics             | 4                |

## **Disciplinary Courses**

#### For History Track:

American History thematic area:

| Course<br>Code  | Course Name   | Course<br>Credit |
|---|---|------------------|
| HIST 201  | History Methods and Research                        | 4                |
| HIST 104  | American History to 1876                            | 4                |
| HIST 105  | American History from Reconstruction to the Present | 4                |
| And one course from electives in the thematic area (200-400 level)  |   | 4                |
| And one history course outside of the thematic area (100-400 level) |   | 4                |

#### For Literature Track:

#### **American Literature track:**

| Course<br>Code | Course Name   | Course<br>Credit |
|----------------|---|------------------|
| LIT 105        | The Epic of America (the Novel)   | 4                |
| LIT 205        | American Lyric Across Borders (Poetry)                                    | 4                |
| LIT 308        | American Icons (rhetoric and performance—pulpit /address /theater/ music) | 4                |
| And two cours  | ses (200 level or above) from the American Literature Electives           | 8                |

## For Political Science Track:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| POLSCI 101     | International Politics                   | 4                |
| POLSCI 201     | Political Institutions and Processes     | 4                |
| ETHLDR<br>203  | Conceptions of Democracy and Meritocracy | 4                |
| POLSCI 301     | Program Evaluation                       | 4                |
| POLSCI 302     | Public Opinion                           | 4                |

#### For Public Policy Track:

| Course Code       | Course Name                                 | Course<br>Credit |
|-------------------|---|------------------|
| STATS 101 *       | Introduction to Statistical Methods         | 4                |
| PUBPOL 101        | Introduction to Policy Analysis             | 4                |
| PUBPOL 301        | Political Analysis for Public Policy        | 4                |
| PUBPOL 303        | Policy Choice as Value Conflict             | 4                |
| Choose one cou    | rse from the following two courses          | ,                |
| PUBPOL 304        | Microeconomic Policy Tools                  | 4                |
| ECON 201          | Intermediate Microeconomics I               | 4                |
| * Students can ta | nke MATH 205 as a substitute for STATS 101. |                  |

#### **Electives**

Students can choose the recommended electives in their tracks or select other courses in different divisions as electives. The course list will be updated periodically.

#### For History Track:

Electives in the American History thematic area:

| Course Code | Course Name  | Course<br>Credit |
|-------------|--|------------------|
| POLSCI 106  | Political Rhetoric, Crisis, and Leadership           | 2                |
| HIST 120    | Writing Historical Fiction                           | 4                |
| HIST 121    | Pan-Africanism: Global Story of an American Idea     | 2                |
| POLSCI 202  | U.S. Citizenship: History, Meaning and Conflict      | 4                |
| HIST 203    | America in Asia, Asians in America                   | 4                |
| POLSCI 203  | Civil Rights and Civil Liberties                     | 4                |
| POLSCI 221  | US/China Relations                                   | 4                |
| SOSC 301    | Religion and Community in America                    | 4                |
| SOCIOL 301  | Race, Ethnicity, and Citizenship                     | 4                |
| POLSCI 304  | Revolutions and Foundings: A Comparative Perspective | 4                |

| POLSCI 305 | American Capitalism in the World                  | 4 |
|------------|---|---|
| HIST 306   | The United States and China in War and Revolution | 4 |
| HIST 307   | Cold War America                                  | 4 |
| HIST 308   | Immigration and the American Experience           | 4 |
| HIST 311   | Documenting Durham and the New South              | 4 |

## For Literature Track

American Literature Electives:

| Course<br>Code | Course Name                                       | Course<br>Credit |
|----------------|---|------------------|
| LIT 201        | Asian-American Arts and Letters                   | 4                |
| LIT 202        | African American Literature and Culture           | 4                |
| LIT 206        | Early Literatures from Colonization to Revolution | 4                |
| LIT 207        | The American Renaissance and Its Rivals           | 4                |
| LIT 301        | The Realist Moment                                | 4                |
| LIT 302        | America's Novel Modernity                         | 4                |
| LIT 303        | The Literary Arts of the Cold War                 | 4                |
| LIT 304        | The Center Stage of Ethnic and Women's Writing    | 4                |
| LIT 305        | The U.S. and the Contemporary Global Imagination  | 4                |
| USTUD<br>210   | American Musicals                                 | 4                |
| USTUD<br>301   | The Western Across Boundaries                     | 4                |

## For Political Science Track

| Course<br>Code | Course Name                       | Course<br>Credit |
|----------------|-----------------------------------|------------------|
| POLSCI<br>102  | Social Choice and Democracy       | 4                |
| POLSCI<br>105  | Contemporary Political Ideologies | 2                |

| POLSCI<br>106            | Political Rhetoric, Crisis, and Leadership                                     | 2 |
|--------------------------|--|---|
| HIST 202                 | World History and Global Interactions  | 4 |
| POLECON<br>202           | The Politics of International Economic Relations: America in the World Economy | 4 |
| POLSCI<br>208            | Political and Social Inequality  | 4 |
| POLSCI<br>209            | Democratic Erosion   | 2 |
| POLSCI<br>210            | International Relations in East Asia   | 4 |
| POLSCI<br>211/LIT<br>211 | Politics and Literature  | 4 |
| POLSCI<br>212            | Pathologies of Modern Society: Foundational Ideas                              | 4 |
| POLSCI<br>303            | International Politics of East Asia  | 4 |

## For Public Policy Track

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| PUBPOL<br>102  | Introduction to the United States Health Care System         | 4                |
| PUBPOL<br>212  | Immigrant Dreams, U.S. Realities: Immigration Policy History | 4                |
| PUBPOL<br>216  | Civic Participation and Public Policy                        | 4                |

#### Arts and Humanities/Social Sciences Majors

# Ethics and Leadership with tracks in Philosophy, Religious Studies, and Public Policy

The human sciences have made significant advances in understanding what makes for effective leaders and organizations and the qualities of character needed to make sound decisions. For example, social and organizational psychology and history have identified qualities of leaders and group dynamics that foster loyalty, trust, and creativity. Political science, economics and history have explored different models for supportive and regulatory relationships between governments and markets. Expertise of this kind is crucial for enabling leaders to deal with the challenges posed by globalization, climate change, and profound changes in technology that are drastically altering the kinds of work available in a constantly changing economy.

The Ethics and Leadership major meets a critical need to integrate such expertise from the human sciences with the best of thought from philosophy, religion, psychology, and literature about the ultimate ends of human life, about right and wrong, rights, duties and the common good. Leaders need the ability to see, to frame, and think wisely about the ethical issues that confront them. The major is not just for those who aspire to hold political office or high-ranking positions within various organizations. Citizens or members of organizations should have thoughtful and informed conceptions of what makes a good leader, so that they may choose wisely or be prepared to become one. People often serve as leaders or co-leaders in smaller groups within their organizations. People find themselves in social contexts where they may be called upon to lead, and they may decide to do so simply not because they desired to be leaders all along, but because they are needed.

This interdisciplinary major, drawing from fields such as philosophy, political theory, history, literature, religion, and the social and natural sciences, seeks to provide students with the specific expertise that is needed to address issues such as global health, pollution and the environment or regulation of corporations and markets. Students will be encouraged and guided in the task of framing specific expertise with a broader and deeper framework of thinking about what kinds of leaders and citizens they should be, and what their ultimate values ought to be. The major will encourage them to know more and to think more deeply about their own cultural tradition, but also will take them through different traditions of thought about how to make ethical decisions, about the virtues of leaders, the virtues of those they lead, and the right relationship between the two. Students will be encouraged to identify and form views about the differences as well as the similarities between different cultural traditions of thought about these matters, as well as about ultimate values that go into thinking about justice and the good life and how such values relate to conceptions of human spirituality, the divine, and the sacred, how this affects the way human beings relate to one another and with the natural world. Such global perspectives, rooted in one's own traditions, are more than ever crucial for leadership. Students can choose among three disciplinary tracks: Philosophy, Religious Studies, and Public Policy.

## Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

#### For tracks of Philosophy, Religious Studies:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| SOSC 101       | Foundational Questions in Social Science | 4                |
| ARHU<br>101    | The Art of Interpretation: Written Texts | 4                |

#### For Public Policy track:

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| ARHU<br>101    | The Art of Interpretation: Written Texts | 4                |
| SOSC 101       | Foundational Questions in Social Science | 4                |
| SOSC 102       | Introduction to Research Methods         | 4                |

#### **Interdisciplinary Courses**

| Course<br>Code | Course Name                              | Course<br>Credit |
|----------------|--|------------------|
| ETHLDR<br>101  | Ethics and Leadership                    | 4                |
| ETHLDR<br>202  | Ethics, Markets, and Politics            | 4                |
| ETHLDR<br>203  | Conceptions of Democracy and Meritocracy | 4                |
| ETHLDR<br>390  | Junior Seminar: Advanced Topics          | 4                |
| ETHLDR<br>490  | Senior Seminar: Advanced Topics          | 4                |

| And choose two courses from the following six courses |  |   |
|---|--|---|
| ETHLDR<br>204   | Environmental Ethics                   | 4 |
| ETHLDR<br>205   | Trust and Cross-Cultural Leadership    | 4 |
| ETHLDR<br>206   | Global Justice and Health Care         | 4 |
| ETHLDR<br>209   | The Psychology of Justice              | 4 |
| ETHLDR<br>301   | Ethics of Nudging                      | 4 |
| ETHLDR<br>302   | The Sociology of Morality and Politics | 4 |

#### **Disciplinary Courses**

## For Philosophy Track:

| Course<br>Code | Course Name                                  | Course<br>Credit |
|----------------|--|------------------|
| PHIL 101       | Introduction to Western Philosophy           | 4                |
| PHIL 102       | Introduction to Classical Chinese Philosophy | 4                |
| PHIL 105       | History of Modern European Philosophy        | 4                |
| PHIL 204       | Theory of Knowledge                          | 4                |
| PHIL 205       | Logic  | 4                |

# For Religious Studies Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| RELIG 101      | Comparative Religious Studies                          | 4                |
| RELIG 106      | Religion and Leadership                                | 4                |
| RELIG 201      | Confucianism, Daoism and Buddhism                      | 4                |
| RELIG 203      | Judaism, Christianity, and Islam                       | 4                |
| RELIG 302      | Religious and Philosophical Thought on the Environment | 4                |

#### For Public Policy Track:

| Course Code   | Course Name                                      | Course<br>Credit |  |
|---|--|------------------|--|
| STATS 101 *   | Introduction to Statistical Methods              | 4                |  |
| PUBPOL 101  | Introduction to Policy Analysis                  | 4                |  |
| PUBPOL 301  | Political Analysis for Public Policy             | 4                |  |
| PUBPOL 303  | Policy Choice as Value Conflict                  | 4                |  |
| Choose one cou  | Choose one course from the following two courses |                  |  |
| PUBPOL 304  | Microeconomic Policy Tools                       | 4                |  |
| ECON 201  | Intermediate Microeconomics I                    | 4                |  |
| * Students can take MATH 205 as a substitute for STATS 101. |  |                  |  |

#### **Electives**

Students can choose the recommended electives in their tracks or select other courses in different divisions as electives. The course list will be updated periodically.

#### For Philosophy Track:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| PHIL 103       | Chinese and Mediterranean Philosophy                                 | 4                |
| PHIL 106       | Global Philosophy  | 4                |
| PHIL 107       | What's the Right Thing to Do? Ethics and Justice in the Modern World | 4                |
| PHIL 108       | Philosophy and Ethics of Artificial Intelligence                     | 2                |
| PHIL 109       | Philosophy Through Computer Science                                  | 2                |
| PHIL 110       | Philosophy and Sport   | 2                |
| PHIL 111       | Non-Human Animal Ethics  | 2                |
| PHIL 202       | Problems in Philosophy of Science                                    | 4                |
| PHIL 206       | Climate Change Ethics  | 2                |
| PHIL 301       | Philosophy of Mind   | 4                |

# For Religious Studies Track

| Course<br>Code | Course Name                      | Course<br>Credit |
|----------------|----------------------------------|------------------|
| RELIG 102      | Prophets and Priests             | 4                |
| RELIG 103      | Law and Revelation               | 4                |
| RELIG 104      | Myth and Nation                  | 4                |
| RELIG 105      | Gods and People                  | 4                |
| RELIG 107      | Readings in Religious Literature | 2                |
| RELIG 202      | Modern Buddhism                  | 4                |
| RELIG 204      | The Problem of Evil              | 4                |
| RELIG 303      | The Human Condition              | 4                |
| RELIG 304      | Ethics in Religious Perspective  | 4                |

# For Public Policy Track

| Course<br>Code | Course Name                    | Course<br>Credit |
|----------------|--------------------------------|------------------|
| PUBPOL<br>110  | Introduction to Human Rights   | 4                |
| PUBPOL<br>215  | Law, Ethics and Responsibility | 4                |
| PUBPOL<br>217  | Enterprising Leadership        | 4                |
| PUBPOL<br>218  | Ethics in an Unjust World      | 4                |
| PUBPOL<br>310  | Family Rights and Human Rights | 2                |
| PUBPOL<br>312  | News as Moral Battleground     | 4                |

#### Media and Arts with tracks in Creative Practice and History

The Media and Arts major captures the breadth of both media as communications process and art as creative and documentary expressions. By exploring the history of media and arts as well as emerging technologies and cultures, students in this major will gain a depth of understanding that is broadly applicable to future life choices. Media studies might include communications studies, journalism, science, technology and society at the local, as well as national and global levels. Arts studies might address visual art in film, photography, and sound; music; theater; and literature. The intersection of media and arts will provide both a well-rounded foundation as well as the opportunity to immerse oneself in a particular field of study or practice.

Understanding of media and the arts is foundational to the concept of interdisciplinarity that is the basis for a liberal arts education at Duke Kunshan University. On the one hand, exposure to the arts provides for the complete student: a well-rounded individual who is able to see the world in both its breadth and depth, thus creatively seeking, discovering and implementing solutions to global problems. In particular, the documentary arts intersect history with creativity; the understanding of cultural tradition with the artistic imagination. On the other hand, media literacy is not a luxury. In this interconnected world, it is a necessity. Students in this major will gain a more complete understanding of the evolution of media, broadly defined, and how the media and media systems of today interact with the institutions, individuals and ideas in society.

The Media and Arts major has two tracks: 1) Creative Practice and 2) History. The Creative Practice track will focus on providing opportunities for students to create the media and arts that interest them, with a strong academic foundation. The History track provides a mixture of humanities and social science approaches to understanding media and arts, creating a foundation for work in the field or further graduate-level study.

#### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

#### **Divisional Foundation Courses**

| Course<br>Code | Course Name                                 | Course<br>Credit |
|----------------|---|------------------|
| ARHU<br>101    | The Art of Interpretation: Written Texts    | 4                |
| ARHU<br>102    | The Art of Interpretation: Images and Sound | 4                |

# **Interdisciplinary Courses**

| Course Code    | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| MEDIART<br>101 | Introduction to Media Studies and the Arts         | 4                |
| MEDIART<br>210 | Media and Arts Practicum                           | 4                |
| MEDIART<br>211 | Media, Arts and Critical Theory                    | 4                |
| MEDIART<br>390 | Junior Seminar: Advanced Topics                    | 4                |
| MEDIART<br>490 | Senior Seminar: Advanced Topics                    |                  |
| And choose one | from the following two History courses             | 1                |
| HIST 210       | Global Art History                                 | 4                |
| HIST 220       | Global Media History                               | 4                |
| And choose one | from the following three Creative Practice courses |                  |
| MEDIART<br>103 | Introduction to Moving Image Practice              | 4                |
| MEDIART<br>104 | Introduction to Photography                        | 4                |
| MEDIART<br>110 | Audio Documentary                                  | 4                |

# Disciplinary Courses

## For Creative Practice Track

| Course Code    | Course Name                        | Course<br>Credit |
|----------------|------------------------------------|------------------|
| MEDIART<br>109 | Introduction to Visual Culture     | 4                |
| MEDIART<br>202 | Ideas, Imagination, and Creativity | 4                |
| HIST 207       | History of Media Art               | 4                |

| Practicum course I: Choose one from the list of 200 level creative practice courses in the electives  | 4 |
|---|---|
| Practicum course II: Choose one from the list of 300 level creative practice courses in the electives |   |

## For History Track:

#### **Art History thematic area:**

| Course Code  | Course Name   | Course<br>Credit |
|--|---|------------------|
| HIST 201   | History Methods and Research                        | 4                |
| HIST 106   | Art History 1                                       | 4                |
| CULANTH<br>201   | New Media and Society                               | 4                |
| And one course from electives in the thematic area (200-400 level) |   | 4                |
| And one history  | course outside of the thematic area (100-400 level) | 4                |

#### **Electives**

Students can choose the recommended electives in their tracks or select other courses in different divisions as electives. The course list will be updated periodically.

#### For Creative Practice Track

| Course Code            | Course Name                          | Course<br>Credit |
|------------------------|--------------------------------------|------------------|
| MEDIART<br>105         | Introduction to Film Studies         | 4                |
| MEDIART<br>108/LIT 108 | Love and Dreams on the Chinese Stage | 2                |
| MEDIART<br>204         | The Photographic Essay               | 4                |
| MEDIART<br>205         | Digital Imaging                      | 4                |
| MEDIART<br>206         | Computer Graphics                    | 4                |

| MEDIART<br>207 | Creative Writing and Elements of Story                                | 4 |
|----------------|---|---|
| MEDIART<br>212 | Editing for Film and Video  | 4 |
| MEDIART<br>301 | Experimental Filmmaking   | 4 |
| MEDIART<br>302 | Contemporary Documentary Film   | 4 |
| MEDIART<br>303 | Documentary Photography and the Cultural Landscape                    | 4 |
| MEDIART<br>304 | The On-Going Moment: Presentations of Time in Still and Moving Images | 4 |
| MEDIART<br>305 | Producing Docu-Fiction  | 4 |
| MEDIART<br>306 | Foundations of Interactive Game Design                                | 4 |
| MEDIART<br>310 | Screenwriting   | 4 |
| MEDIART<br>311 | Cinematography  | 4 |
| MEDIART<br>312 | Graphic Design in Motion  | 4 |

# For History Track:

Electives in the Art History thematic area:

| Course<br>Code | Course Name                                  | Course<br>Credit |
|----------------|--|------------------|
| MEDIART<br>106 | The Visual Culture of News, Past and Present | 4                |
| MEDIART<br>109 | Introduction to Visual Culture               | 4                |
| GCULS 201      | Culture and Industry                         | 4                |

| GCHINA<br>203  | Visual China   | 4 |
|----------------|--|---|
| MEDIART<br>208 | Comparative Media Systems and Chinese Mass Media                   | 4 |
| LIT 208        | From Cool Japan to the Korean Wave: Popular Culture from East Asia | 4 |
| POLSCI 302     | Public Opinion   | 4 |
| MEDIART<br>307 | International Communication  | 4 |

# **Arts and Humanities Majors**

### Global Cultural Studies with tracks in Literature and History

Cultural Studies is an interdisciplinary field of research and teaching that investigates the forms of life and culture produced in today's interconnected world. Combining the strengths of the social sciences and the humanities, and drawing on methods and theories from literary studies, cultural anthropology, history, sociology, media studies, film studies, communications, economics, etc., Cultural Studies explores ways in which "culture" creates and transforms individual experiences, everyday life, social relations and power. With its attentiveness to power relations, hegemony, inequality and diversity, Cultural Studies has a productive role to play in building a better world. Put simply, Cultural Studies is not just an abstract academic field but a production of knowledge that has real world implications.

Focusing on the practical and theoretical issues arising from cross-cultural encounters around the world, Cultural Studies examines conventional cultural products (literature, film, visual art, music, social media, new technology, etc.) and also their broader political and social contexts (colonialism, modernity, capitalism, etc.). In today's era of economic globalization and neoliberal restructuring, the language of culture is increasingly heard in debates about issues as diverse as nationalism, political conflicts, human rights, immigration, trade, the environment, media, literacy, and education. In the new millennium, increasing students' capacity to live with and understand the heterogeneity and flux that characterize global flows of people, culture, and capital is of paramount importance. The major in Global Cultural Studies has tracks in Literature and in History and imparts students with skills and competency in critical thinking, cultural analysis, and communication for careers in education, creative industry, NGOs and international business and law.

### Major Requirements

(Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in 2019-2020.)

### **Divisional Foundation Courses**

| Course<br>Code | Course Name                                 | Course<br>Credit |
|----------------|---|------------------|
| ARHU<br>101    | The Art of Interpretation: Written Texts    | 4                |
| ARHU<br>102    | The Art of Interpretation: Images and Sound | 4                |

# **Interdisciplinary Courses**

| Course Code    | Course Name                       | Course<br>Credit |
|----------------|-----------------------------------|------------------|
| GCULS 105      | Critical Comparative Studies      | 4                |
| GCULS 201      | Culture and Industry              | 4                |
| GCULS 202      | Empires and Culture               | 4                |
| GCULS 302      | Gender and Globality              | 4                |
| CULMOVE<br>201 | Migration, Inequality and Culture | 4                |
| GCULS 390      | Junior Seminar: Advanced Topics   | 4                |
| GCULS 490      | Senior Seminar: Advanced Topics   | 4                |

# **Disciplinary Courses**

# For Literature Track:

# **World Literature track:**

| Course<br>Code   | Course Name  | Course<br>Credit |
|--|--|------------------|
| LIT 102  | Introduction to Literary Theory Writ Large                         | 4                |
| LIT 203  | Reading Empire: Anglophone, Francophone, Sinophone and Japanophone | 4                |
| LIT 209  | Critical Inter-Asia: Rethinking Local and Global Connections       | 4                |
| And two courses (300 level or above) from World Literature Electives |  | 8                |

# For History Track:

# World History thematic area:

| Course   | Course Name   | Course |
|--|---|--------|
| Code   |   | Credit |
| HIST 201   | History Methods and Research                                      | 4      |
| And choose one   | e of the following five Pre-Modern World History courses          |        |
| HIST 111   | Ancient Roots to Global Routes                                    | 4      |
| HIST 112   | History of the Indian Ocean World                                 | 4      |
| HIST 113   | Peoples and Cultures of Ancient South Asia, 3500BCE-1750CE        | 4      |
| HIST 202   | World History and Global Interactions                             | 4      |
| HIST 312   | Southeast Asia and the Rise of Global Trade                       | 4      |
| And choose one   | e of the following three Modern World History courses             | 1      |
| HIST 110   | Historical Perspectives on Contemporary Global Issues             | 4      |
| HIST 313   | Southeast Asia from the Age of Imperialism to the Global Cold War | 4      |
| HIST 410   | The Spice Race: How the Spice Trade shaped our World              | 4      |
| And one course from electives in the thematic area (200-400 level) |   | 4      |
| And one history  | y course outside of the thematic area (100-400 level)             | 4      |

### **Electives**

Courses listed in the table below are recommended electives for the major and the course list will be updated periodically. Students can also select other courses in different divisions as electives.

# For Literature Track:

Electives in World Literature:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| LIT 107        | From Data to Narrative: A Workshop in Non-fiction Writing          | 2                |
| LIT 204        | Online Novels and the Chinese Public Sphere                        | 4                |
| LIT 208        | From Cool Japan to the Korean Wave: Popular Culture from East Asia | 4                |

| LIT 210                  | Robots and Monsters: Unruly Human Creations in World<br>Literature | 4 |
|--------------------------|--|---|
| LIT<br>211/POLSCI<br>211 | Politics and Literature  | 4 |
| GCULS 301                | Religion and Sexuality   | 4 |
| GCULS 303                | Chinatowns: A Cultural History                                     | 4 |
| LIT 306                  | Melodrama East and West  | 4 |
| LIT 307                  | Digital Storytelling   | 4 |
| GCULS 401                | Games and Culture: Politics, Pleasure and Pedagogy                 | 4 |
| GCULS 402                | Digital Tribes   | 4 |

# For History Track:

Electives in World History thematic area:

| Course<br>Code | Course Name  | Course<br>Credit |
|----------------|--|------------------|
| HIST 107       | Gandhi and Moral Leadership  | 4                |
| HIST 114       | Modern South Asia  | 4                |
| HIST 115       | Brides of the Sea: Trading Cities in the Indian Ocean World, 200BCE to 2000CE  | 2                |
| HIST 116       | Mughal India Through the Eyes of European Travelers                            | 2                |
| HIST 121       | Pan-Africanism: Global Story of an American Idea                               | 2                |
| HIST 204       | Asia in World History  | 4                |
| HIST 206       | World History in Seven Meals   | 4                |
| HIST 314       | Writing the History of War   | 4                |
| HIST 315       | Why Be a Bandit?   | 4                |
| HIST 411       | Seeing History from the Mountains and the Seas: Ethnographic histories of Asia | 4                |
| HIST 412       | Global Labor History   | 4                |

# **Course Descriptions**

Not every course listed is offered every semester, and the course list will be updated periodically. Please refer to the online Course Catalog for Courses offered in AY2019-2020.

**Courses with Course Subject: Arts (ARTS)** 

ARTS 21 General Art, Studio (4 credits)

Credit for advanced placement on the basis of the College Board examination in Studio Art.

Courses with Course Subject: Arts and Humanities (ARHU)

ARHU 101: The Art of Interpretation: Written Texts (4 credits)

Training in close reading and analysis of text remains a foundational skill in the arts and humanities, whether the text is literary or documentary. This core course combines practical training in close reading of a variety of texts, with strategies of analysis that are theoretically informed without, however, offering a comprehensive treatment of theory per se. The course will focus both on reading and analysis of literary texts, and on the nuanced unpacking of documents (official, unofficial, personal) with a view to historical method.

**Prerequisite(s):** None.

ARHU 102: The Art of Interpretation: Images and Sound (4 credits)

This class will train students to develop skill and sophistication in viewing and analysis of images, including art objects, film, and new media; and in sound studies, including sonic culture, film music, and traditional musical arts. The goal is audiovisual literacy – the creation and interpretation of sound and image that has become central to the ways we experience and understand the world. This core course combines practical training (how to see, how to hear) with a variety of modes of analysis.

**Prerequisite(s):** None.

Courses with Course Subject: Biology (BIOL)

BIOL 20 General Biology (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Biology.

### BIOL 110 Integrated Science - Biology (4 credits)

Integrated Science-Biology employs five themes that describe properties of life and will be reiterated over again in Integrated Science-Biology: Organization (Structure and Function), Cycling of Energy and Matter, Information (Genetic Variation), Homeostasis (Interactions), and Evolution. These themes will be unified under the organizational principles of the Scientific Methods, formulating hypothesis and testing hypothesis with experiments. Students in Integrated Science-Biology will develop the understanding of key concepts in the context of cross-talks with chemistry and physics. While no previous knowledge is required, some background is advantageous.

Prerequisite(s): None

### BIOL 201 Cell and Molecular Biology (4 credits)

Introduces major concepts in eukaryotic cell biology with a focus on molecular biology. A major emphasis is placed on transcription, translation, protein targeting and transport. In addition, the structure and function of organelles and how they function in metabolism and energetics will be examined. The role of the cytoskeleton and extra cellular matrix in governing cell shape and motility will be addressed as well as the genetic regulation of DNA replication and its place in the cell cycle and how disruption of either can lead to cancer. The laboratory portion of the class would introduce common laboratory molecular biology techniques like DNA isolation, PCR, cloning, sequencing, immunocytochemistry and fluorescent microscopy.

Prerequisite(s): INTGSCI 102; or, BIOL 110 and CHEM 110 or 120

#### BIOL 202 Genomics and Evolution (4 credits)

Examines the structure and function of genomics and the flow of genomic information from parent to progeny and through populations. Changes in genetic makeup underlie important biological processes from disease to adaptation and evolution. Topics include classical transmission genetics (inheritance, assortment, recombination), bacterial and phage genetics, gene regulation, genome structure and stability, mutation and repair, population genomics, complex trait inheritance evaluation and modern genomic techniques. The laboratory portion examines genetic inheritance in common laboratory model systems like yeast and Drosophila with projects that show what can be learned about gene function by the examination of mutants. Mutants will be created by random mutagenesis as well as targeted recombination and CRISPR.

**Prerequisite(s):** INTGSCI 102 or BIOL 110.

### <u>BIOL 203 Molecular, Behavioral and Social Evolution: Evolution of Genomes, Traits,</u> Behaviors and Societies (4 credits)

Looks through the lenses of different disciplines to examine Darwin's theories on natural selection and evolution, and explore current ideas about the evolution of complex social behaviors and societies. This course starts with an introduction to the key concepts of biological evolution; variation, inheritance, fitness, natural selection and the modification of physical traits, followed by an examination of how simple behaviors evolved in animals and humans. Discussion of these topics also considers ideas from other disciplines that influenced Darwin, such as those of economist, Thomas Malthus and geologist, Charles Lyell. The second part of the course investigates how Darwin's theories might also explain the evolution of social behaviors such as cooperation, altruism and language, and considers some contemporary theories about the evolution of societies. Finally, the course will end with an investigation of Darwin's influence on important ideas within other disciplines such as those of political theorist; Karl Marx, psychologist; William James and philosopher/sociologist; Herbert Spencer.

Prerequisite(s): INTGSCI 101 or BIOL 110 or Consent of the Instructor

#### BIOL 208 General Ecology (4 credits)

Humans are the dominant species on Earth and ecology is key to understanding the multiple feedbacks through which their activities affect human health. Fundamental principles of ecology, from population to ecosystem levels, will be examined through the lens of human health. Topics include human population growth and carrying capacity, why we age, infectious disease dynamics, the microbiome and human health, sustainable agriculture and food security, sustainable harvest of wild foods, dynamics of pollutants in food webs, ecosystem services to humans, and human impacts of climate change.

Prerequisite(s): None.

#### BIOL 212 Microbiology (4 credits)

This course examines a number of different types of microbes including bacteria, archaea, fungi and viruses. Classical and modern approaches to the study of microorganisms and their roles/applications in everyday life, food, medicine, research and the environment. Topics covered include microbial cell structure/function, growth, genetics, energetics/metabolism, evolution and ecology. Virology topics include structure, life cycle, modes of transmission and host ranges. Additional examination of the role of microorganisms in disease, infection and immunology. The laboratory portion would stress aseptic technique and microbial culture; molecular, cytochemical, and physiological tests for microbial identification; and fermentation and its products for food and industrial production.

**Prerequisite(s):** BIOL 201 or Consent of the Instructor

### BIOL 304 Molecular Genetic Analysis (4 credits)

A range of genetic traits can be mapped and investigated using molecular approaches. Here we will utilize several model systems to examine different molecular methods to identify genetic traits ranging from single gene complementation/rescue in yeast to recombination and SNP mapping in Drosophila to whole genome association studies in human populations.

Prerequisite(s): BIOL 201, BIOL 202

#### BIOL 305 Introduction to Biochemistry (4 credits)

Provides an introduction to the chemistry of biological macromolecules from the single molecule to cellular metabolism to the whole organism level. Protein biochemistry topics include protein synthesis, folding and structure, enzyme catalysis and kinetics, and analysis methods. Cellular metabolism topics include glycolysis, gluconeogenesis, the Krebs cycle, oxidative phosphorylation, and fatty acid and amino acid metabolism. Whole organism biochemistry/physiology topics include glycogen storage, insulin signaling and diabetes.

Prerequisite(s): CHEM 201

#### BIOL 306 - Cell Signaling and Diseases (4 credits)

During the past several decades, exploration in basic research has yielded extensive knowledge about the numerous and intricate signaling processes involved in the development and maintenance of a functional organism. In order to demonstrate the importance and processes of cellular communication, this course will focus on cell signaling mechanisms and diseases resulting from their malfunction, such as cancer, stroke, and neuron degeneration (including Parkinson's disease, Alzheimer's disease, Huntington's disease, and Amyotrophic lateral sclerosis). Students will be exposed to current literature and cutting edge knowledge.

Prerequisite(s): BIOL 201

#### BIOL 307 - Cancer Genetics (4 credits)

Overview of the genetic changes associated with cancer and the molecular events that transform normal cellular processes into tumor-promoting conditions. Topics include: tumor viruses, oncogenes, growth factors, signal transduction pathways, tumor suppressors, cell cycle control, apoptosis, genome instability, stem cells, metastasis, and current therapeutic approaches.

Prerequisite(s): BIOL 201, BIOL 202

#### BIOL 308 Evolution of Infectious Diseases (4 credits)

Covers the physiology and the ecological and evolutionary dynamics of a suite of infectious diseases. Case studies include influenza, cholera, HIV, and myxomatosis, among others, with

an emphasis on pathogens infecting humans. Topics include: basic immunology, the physiology of different disease processes and transmission, the role of population size on disease transmission, the effects of climate and behavioral changes on disease dynamics, networks of disease spread, spatial spread of disease, evolution of virulence, antigenic evolution, emerging infectious diseases.

Prerequisite(s): BIOL 201, BIOL 202

#### BIOL 309 Comparative Vertebrate Anatomy (4 credits)

The structure, function and evolution of the vertebrate body systems including skeletal, digestive, circulatory, respiratory and nervous systems. Emphasis on understanding the functional, evolutionary and developmental basis for the similarities and difference observed among living vertebrates. In addition, examination of the physiological principles that function within these systems using examples like neural control, gas exchange, movement, excretion and metabolism. The laboratory portion will examine the various systems (muscular, skeletal, nervous, etc.) of human and non-human anatomical specimens. It will also include experiments examining the physiological aspects of the nervous, and respiratory systems.

**Prerequisite(s):** Consent of the instructor

#### BIOL 310 Developmental Biology: Development, Stem Cells, and Regeneration (4 credits)

Mechanisms of fertilization, control of cell divisions, diversification of cell types, organization and differentiation of cells and tissues of the organism, and patterning necessary to establish the body plan of many organisms including vertebrates, invertebrates and plants. Included among these mechanisms are the roles of transcription factors in controlling the trajectories toward tissues, signal transduction, morphogenetic movements, and other mechanisms used by different plants and animals to build a functional adult. Also includes stem cell biology, regeneration of tissues, sex determination, and evolutionary mechanisms of diversification.

Prerequisite(s): BIOL 201

#### BIOL 311 Biogeochemistry (4 credits)

Biogeochemistry is the study of how chemical elements flow through living systems and their physical environments. This course will investigate the factors that influence the cycling of those elements that are essential to life as well as the liberation, transport and exposure pathways of toxic trace elements. Concepts of nutrient limitation, element stoichiometry, primary productivity and carbon sequestration will be covered in depth, and will be applied to the study of human impacts on the global biogeochemical cycles of water, carbon, nutrients and trace metals.

Prerequisite(s): BIOL 110, and CHEM 110 or 120

### **BIOL 312 Ecophysiology (4 credits)**

This course examines how plants sense and react to environmental change in both an organismal and evolutionary context and how those reactions are scaled to the specific change. The environmental changes examined include light, temperature, water, CO2, and nutrient availability. To examine these changes at the molecular level, a detailed review of plant development, growth, and physiology is also covered.

Prerequisite(s): BIOL 208 or Consent of the Instructor

#### BIOL 313 Ecosystem Service (4 credits)

Ecosystem services are the benefits that people obtain from ecosystems and utilizes a system level approach to examine the interactions between four services. The course will include discussion of nutrient recycling as a supporting service, food production as a provisioning service, carbon sequestration as a regulating service and education as a cultural service as well as how they fit together in a sustainable system. Students will learn through case studies of the application of conservation, restoration and market valuation approaches to protecting critical ecosystem processes.

**Prerequisite(s):** BIOL 208 or Consent of the Instructor

### BIOL 314 Computational Biology and Bioinformatics (4 credits)

This course focuses on the analysis of genomic and genome-related biological data sets using computational methods. The course will cover not only the identification, retrieval and exploration of specific values from a large, genomic data set, but will also include the genome-scale comparison of data sets. Topics discussed will include genome sequence assembly, alignments, RNAseq analysis, motif finding, and gene classifications.

Prerequisite(s): COMPSCI 201, BIOL 201, BIOL 202, plus MATH 205 or STATS 101

#### BIOL 315 Experimental Molecular Biology (4 credits)

Progress in laboratory molecular biology and biotechnology have yielded phenomenal advancements in research, medicine, and diagnostics. In this hands-on laboratory course, students will perform many of the most common experimental methods in molecular biology: PCR, protein purification, site-directed mutagenesis, CRISPR and gene synthesis in one continuous project involving regulated protein localization.

Prerequisite(s): BIOL 201

### BIOL 316 Quantitative Physiology (4 credits)

This course is a mathematical examination of processes in human physiological systems including pressure and electrical forces, concentration, kinetics and diffusion and mechanical forces. Examples of each will be discussed in the nervous, cardiovascular, renal, gastrointestinal, respiratory, and endocrine systems. The laboratory portion will complement the lecture topics and use detailed statistical analysis of data.

Prerequisite(s): MATH 101; BIOL 110; MATH 205 or STATS 101

### BIOL 317 Systems Biology (4 credits)

Introduction to concepts and applications of Systems Biology. Identification of molecular interactions that underlie cellular function using data acquired through high-throughput approaches. A focus on transcription networks, and the types of network motifs they contain, including feed-forward loops, autoregulation, and the single-input module will be discussed. Examples of networks in development will be covered.

**Prerequisite(s):** BIOL 201; and MATH 205 or STATS 101

#### **BIOL 318 Food Web Ecology (4 credits)**

This course examines the movement of food energy through a community and ecosystem. After examining species diversity and abundance in ecosystems, the course will look at the species interactions within that ecosystem, including the role of keystone species. The roles of primary and secondary producers in a community and the role of decomposers will be examined to bring the cycle to a close.

Prerequisite(s): BIOL 208 or Consent of the Instructor

#### BIOL 319 Global Change Biology (4 credits)

The rapid change in Earth's climate has distinct biological causes and effects and in this course, both will be addressed. Beginning with a review of the Earth's climate system and how it has evolved over time to its current state, students will then examine the human-driven causes of its rapid CO2 and temperature changes. These changes have consequences and detailed examinations of examples such as species range shifts, extinctions, and changes in biological event timing will be discussed.

Prerequisite(s): BIOL 208 or Consent of the Instructor

#### BIOL 320 Bioethics (4 credits)

This course examines the study of ethical issues emerging from technological advancements in biomedical research using a combination of disciplines including biology, philosophy, and law. Topics discussed may include disease diagnostics quandaries (pre-natal as well as

elderly); genetic modification of animals and plants for agriculture, and of humans for disease relief; and animal rights with regard to research, farm, and home. The legal aspects of genomics, cloning and diagnostics will also be discussed.

**Prerequisite(s):** None

### BIOL 401 Advanced Biochemistry: Cell Metabolism (4 credits)

Builds on and extends the core metabolism concepts introduced in BIOL305: Introduction to Biochemistry. Detailed examination of additional cellular anabolic and catabolic pathways including nucleotides, lipids, cholesterol, and others. This course had an increased focus on the metabolic similarities and differences between humans, bacteria, and plants.

Prerequisite(s): BIOL 305

### BIOL 403 Experimental Methods in Functional Genomics (4 credits)

Functional genomics aims to identify a function for every gene in a genome. Using model systems like yeast, fruit flies and human cell lines, scientists can work toward this goal using a variety of methods. Approaches discussed will include a genetic approach by systematically reducing gene function by mutation or RNAi and examining a phenotype. Cellular location approaches using GFP fusions, yeast two-hybrid, and proteomics approaches will also be reviewed.

Prerequisite(s): BIOL 201, BIOL 202

#### BIOL 404 Genomics of Adaptation (4 credits)

Contemporary studies of how populations and species evolved adaptations to their ecological habitats. Focus on modern methods of genome mapping and sequence data and analysis in wild populations that can identify genetic changes that contributed to ecological adaptations. Emphasis on case studies of genomics of adaptation in plant and animal systems, including humans and our adaptations to environments that our ancestors encountered as they colonized diverse habitats throughout the world. Examples will also illustrate how speciation and hybridization can contribute to adaptive biodiversity.

Prerequisite(s): BIOL 202

### BIOL 405 Microbial Ecology (4 credits)

Microorganisms represent the greatest diversity of life on Earth and couple the geochemical world to the living one across many ecosystems. This course will examine the role of microorganisms in biogeochemical cycles in terrestrial and aquatic ecosystems. Other topics discussed will include the symbiosis of microbes with plants, animals and other microbes to form communities. Finally, the role of microorganisms in converting or decomposing biological or geochemical materials will be addressed.

**Prerequisite(s):** BIOL 110, and CHEM 110 or 120

### BIOL 406 Population Ecology (4 credits)

This course examines a species population and its interactions within their ecosystem. Topics covered include demography and dynamics of structured populations, population regulation, population dynamics, metapopulations, and life history strategies. Interspecific interaction topics covered include competition, mutualism, host-parasite and predator/prey interactions.

Prerequisite(s): BIOL 208 or Consent of the Instructor

#### BIOL 407 Population Genomics and Molecular Evolution (4 credits)

This course examines the genetic mechanisms of evolutionary change at the DNA sequence level in populations. Topics covered will include models of nucleotide and amino acid substitution, linkage disequilibrium and joint evolution of multiple loci. Evolutionary topics include neutrality, adaptive selection and hitchhiking. Case histories of molecular evolution as well as hypothesis testing and estimation of evolutionary parameters will be discussed.

Prerequisite(s): BIOL 202

**Courses with Course Subject: Capstone (CAPSTONE)** 

CAPSTONE 495 Signature Work Capstone I (4 credits)

**CAPSTONE 496 Signature Work Capstone II (4 credits)** 

Courses with Course Subject: Chemistry (CHEM)

CHEM 20 General Chemistry (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Chemistry.

## CHEM 110 Integrated Science - Chemistry (4 credits)

With an integrated approach, this course examines basic concepts and fundamental principles in chemistry based on the laws of physics. The course starts with an introduction to the static structures of atoms, molecules and matter including life itself, followed by an exploration of the dynamical and collective processes during chemical reactions. It explains how atoms, the basic building blocks of matter, interact with each other and construct the world around us, how subatomic electrons modulate the chemical properties of elements, and how the rearrangement of atoms during chemical reactions gives rise to astonishing phenomena in nature. Centered on topics in chemistry, this course not only prepares students for upper-level disciplinary courses, but also helps students develop an interdisciplinary molecular perspective, which allows them to tackle problems in various fields such as condensed matter physics, molecular biology, medicine, materials science and environmental science. While no previous knowledge is required, some background is advantageous. Not open to students who have credits for both INTGSCI 101 and 102 or CHEM 120

**Prerequisite(s):** None.

#### CHEM 120 Core Concepts in Chemistry: An Environmental Perspective (4 credits)

Current challenges and opportunities in environmental science require a foundational knowledge of core concepts in chemistry. In this course, students will learn core chemical concepts including properties of gases and solutions, thermodynamics, kinetics, equilibrium, electrochemistry and nuclear chemistry as they apply to the understanding of ozone depletion, photochemical smog, climate change, acid deposition, dissolved oxygen, pH, alkalinity and alternative energy sources.

Prerequisite(s): INTGSCI 101, MATH 101

#### CHEM 130 Science of Cooking (4 credits)

Course material includes an introduction to the structure of molecules as well as their interand intramolecular interactions, with an emphasis on those species of importance to food and cooking. Additional science topics include cell structure of plants and meats and methods of heat transfer. Chemical reactivity as it relates to cooking, fermentation, food preservation and spoilage will also be discussed.

**Prerequisite(s):** None

### CHEM 201 Organic Chemistry I (4 credits)

In this course students will learn to recognize organic chemical structures and reactions that are akin to those found in living cells, as well as learn the molecular underpinnings for the many consumer goods and products we encounter and use in daily life. In addition to covering the scientific principles and applications of organic chemistry, this course will also explore how a variety of organic molecules have had an impact on history, society, and global economics. Organic Chemistry I is both an introductory and survey course for learning the foundations of organic chemistry, and is sufficient to support further studies and coursework in the areas of biology, environmental sciences, and global health. Laboratory: techniques of separation, organic reactions and preparations, and systematic identification of compounds by their spectral and chemical properties.

Prerequisite(s): INTGSCI 102 or CHEM 110 or CHEM 120

#### CHEM 202 Organic Chemistry II (4 credits)

Continuation of CHEM 201.

Prerequisite(s): CHEM 201

### CHEM 210 General Chemistry II (4 credits)

This course is the continuation of the Integrated Science - Chemistry continuum, including intermolecular forces, states of matter, aqueous ionic equilibrium and solubility equilibrium, dynamics (kinetics and thermodynamics), electrochemistry, and nuclear chemistry. Lab experiments verifying related theories and utilizing data analysis are also part of the course.

Prerequisite(s): INTGSCI 102 or CHEM 110 or CHEM 120

#### CHEM 301 Elements of Physical Chemistry (4 credits)

The course introduces students to core concepts in physical chemistry including quantum chemistry, molecular structure, molecular spectroscopy, thermodynamics, and kinetics. The course also includes laboratory experiments illustrative of these topics, as well as instruction and practice in writing the laboratory notebook and formal laboratory reports.

Prerequisite(s): CHEM 210 and PHYS 122

#### CHEM 315 Aqueous Geochemistry (4 credits)

This course is designed to provide the student with an understanding of the fundamentals of aqueous geochemistry. This course focuses on the fundamental aquatic geochemical processes (e.g. mineral precipitation/dissolution, solution complexation, acid-base chemistry) that shape and transform the Earth's surface as a result of rock-water interactions, and associated impacts on the fate and transport of inorganic and organic contaminants in aqueous and

geochemical environments. Topics to be covered include the chemical composition of soils, geochemical specalation, mineral weathering and stability, sorption and ion exchange, soil redox processes, chemical kinetics at environmental surfaces, and the nature, composition, structure, and properties of pollutants coupled with the major chemical mechanisms controlling the occurrence and mobility of chemicals in the environment.

Prerequisite(s): INTGSCI 102 or CHEM 110 or CHEM 120

#### CHEM 401 Analytical Chemistry (4 credits)

Fundamentals of qualitative and quantitative measurement with emphasis on chemometrics, quantitative spectrometry, electrochemical methods, and common separation techniques, including laboratory experiments that illustrate various of these techniques.

Prerequisite(s): CHEM 301

### CHEM 402 - Inorganic Chemistry (4 credits)

Bonding, structures, and reactions of inorganic compounds studied through physical chemical concepts.

Prerequisite(s): CHEM 301

### CHEM 403 Advanced Topics in Physical Chemistry (4 credits)

Builds on and extends the core concepts introduced in Elements of Physical chemistry. Advanced topics and recent developments in physical chemistry.

Prerequisite(s): CHEM 301

#### CHEM 404 Physical Biochemistry (4 credits)

This course examines the theory and methods used to characterize the physical properties of biological macromolecules like DNA, RNA, and protein. A portion of the course will cover thermodynamics of biological macromolecules including both molecular measurements and statistical thermodynamic modeling. A second portion of the course will examine analysis methods including X-Ray diffraction, Spectroscopy, NMR, and Mass Spectrometry.

Prerequisite(s): PHYS 122; BIOL 305

### CHEM 410 Introduction to Materials Chemistry (4 credits)

This course will cover a variety of different types of materials and their properties including solids (insulators, semiconductors, conductors, superconductors, magnetic materials), soft materials (polymers, gels, liquid crystals), nanoscale structures, and organic electronics. The application of basic chemical principles to problems in materials discovery, design, and characterization will be discussed. Topics covered will include inorganic solids, nanoscale

materials, polymers, and biological materials, with specific focus on the ways in which atomiclevel interactions dictate the bulk properties of matter.

Prerequisite(s): CHEM 402

**Courses with Course Subject: Chinese (CHINESE)** 

**Chinese as Second Language Courses** 

CHINESE 101A Beginning Chinese 1 - A (2 credits)

This course is for students with little or no knowledge of the Chinese language, and is designed for building basic communicative proficiency in Mandarin Chinese. The course teaches speaking, listening, reading, and writing skills, but it places special emphasis on the oral communication skills needed for daily life interactions in Chinese, and students will be required to practice using Chinese for daily life tasks outside class. Students will begin learning to read basic high-frequency characters, and learn how to write characters properly with correct stroke order. Additionally students will learn about Chinese culture, especially as it relates to managing the daily tasks of life in China. This course is required for students in the CSL track who have not previously studied Chinese.

**Prerequisite(s):** None

CHINESE 101B Beginning Chinese 1 - B (2 credits)

Continuation of CHINESE 101A.

Prerequisite(s): CHINESE 101A

CHINESE 102A Beginning Chinese 2 - A (2 credits)

This course continues teaching basic communicative proficiency in Mandarin Chinese. As with CHINESE 101, the course teaches speaking, listening, reading, and writing skills. Special emphasis will be placed on learning the oral communication skills needed for daily life interactions in Chinese, and students will be expected to practice using Chinese for daily life tasks outside class. Students will learn to read high-frequency characters and learn how to write characters properly with correct stroke order. Additionally students will learn about Chinese culture, especially as it relates to managing the daily tasks of life in China.

**Prerequisite(s):** CHINESE 101B or the equivalent.

CHINESE 102B Beginning Chinese 2 - B (2 credits)

Continuation of CHINESE 102A

Prerequisite(s): CHINESE 102A

CHINESE 131A First Year Chinese for Heritage Learners 1 - A (2 credits)

This course is designed for CSL track students who were raised in a Chinese-speaking environment and who are proficient in speaking and listening to Chinese in daily and social conversation, but who have little or no ability to read or write in Chinese. This course will focus on teaching these students to read and write in Chinese, improve their pronunciation and grammatical structures of Mandarin, and expand vocabulary beyond daily life. Students will develop these skills both through curricular activities (such as pair work, writing essays and diaries, and group work) and extracurricular activities (such as Chinese Table and Language Partners). Topics of the course range from home and social life to cultural and social issues.

**Prerequisite(s):** None

CHINESE 131B First Year Chinese for Heritage Learners 1 - B (2 credits)

Continuation of CHINESE 131A

Prerequisite(s): CHINESE 131A

CHINESE 132A First Year Chinese for Heritage Learners 2 – A (2 credits)

This course is a continuation of CHINESE 131. This course will continue developing students' reading and writing ability in Chinese, improving their pronunciation and their grasp of the grammatical structures of Mandarin, and expanding vocabulary beyond daily life. Students will develop these skills both through curricular activities (such as pair work, writing essays and diaries, and group work) and extracurricular activities (such as Chinese Table and Language Partners). Topics of the course will vary from home and social life to cultural and social issues.

**Prerequisite(s):** CHINESE 131B or equivalent.

CHINESE 132B First Year Chinese for Heritage Learners 2 – B (2 credits)

Continuation of CHINESE 132A

Prerequisite(s): CHINESE 132A

#### CHINESE 201A Intermediate Chinese 1 - A

This course is designed to help students continue building basic communicative proficiency in Mandarin Chinese. The primary emphasis is on oral communication skills, with a focus on conversations in Chinese, and students will be expected to find opportunities outside class to practice using their Chinese for social interaction. Students will also learn to read dialogues that provide good models of social interaction in Chinese, and will practice writing simple texts. Additionally students will learn about Chinese culture, especially as it relates to social interaction.

Prerequisite(s): CHINESE 102B or equivalent.

#### CHINESE 201B Intermediate Chinese 1 - B (2 credits)

Continuation of CHINESE 201A

Prerequisite(s): CHINESE 201A

#### CHINESE 202A Intermediate Chinese 2 - A (2 credits)

This course is designed to help students continue building basic communicative proficiency in Mandarin Chinese. The primary emphasis is on oral communication skills, with a focus on social conversations in Chinese, and the course includes assignments in which students will find opportunities outside class to practice using their Chinese for social interaction. Students will also continue building their ability to read dialogues that provide good models of social interaction in Chinese, and practice writing simple texts. Additionally students will learn about Chinese culture, especially as it relates to Chinese life and society.

**Prerequisite(s):** CHINESE 201B or equivalent.

#### CHINESE 202B Intermediate Chinese 2 – B (2 credits)

Continuation of CHINESE 202A

Prerequisite(s): CHINESE 202A

#### CHINESE 231A Second Year Chinese for Heritage Learners 1 – A (2 credits)

This course, a continuation of CHINESE 132, is designed to help Chinese heritage students continue improving their formal and informal discourse in speaking and writing. This course aims to further expand and refine students' language skills by studying a variety of texts that are written with advanced intermediate-level vocabulary (including vocabulary denoting abstract concepts), complex grammatical structures, and formal language uses. Students will develop these skills both through curricular activities (such as pair work, writing essays and

diaries, and group work) and extracurricular activities (such as Chinese Table and Language Partners). Topics of the course will focus on social and cultural issues in contemporary China.

**Prerequisite(s):** CHINESE 132B or equivalent.

#### CHINESE 231B Second Year Chinese for Heritage Learners 1 – B (2 credits)

Continuation of CHINESE 231A

Prerequisite(s): CHINESE 231A

### CHINESE 232A Second Year Chinese for Heritage Learners 2 – A (2 credits)

This course, a continuation of CHINENSE 231, is designed to help Chinese heritage students continue improving their formal and informal discourse in speaking and writing. This course aims to further expand and refine students' language skills by studying a variety of texts that are written with advanced intermediate-level vocabulary (including vocabulary denoting abstract concepts), complex grammatical structures, and formal language uses. Students will develop these skills both through curricular activities (such as pair work, writing essays and diaries, and group work) and extracurricular activities (such as Chinese Table and Language Partners). Topics of the course focus on social and cultural issues in contemporary China.

**Prerequisite(s):** CHINESE 231B or equivalent.

#### CHINESE 232B Second Year Chinese for Heritage Learners 2 - B (2 credits)

Continuation of CHINESE 232A

Prerequisite(s): CHINESE 232A

### CHINESE 301A Advanced Intermediate Chinese 1 – A (2 credits)

This course reinforces what students have learned in the Intermediate Chinese courses, and continues to expand and refine their skills in listening, speaking, reading, and writing by learning a variety of texts that are written with advanced vocabulary (including academic vocabulary and vocabulary denoting abstract concepts), complex grammatical structures, and formal language uses. In addition, students will be introduced to current social issues in China (such as parenting, demographics, marriage, etc.) and different aspects of Chinese culture (such as courtesy, family relationships, ethics, etc.). Through learning and discussing these social and cultural issues, students are expected to deepen their understanding of Chinese society and culture. Students will further practice their spoken Chinese outside class by conversing with Chinese speakers about the topics studied in class.

**Prerequisite(s):** CHINESE 202B or equivalent.

### CHINESE 301B Advanced Intermediate Chinese 1 - B (2 credits)

Continuation of CHINESE 301A

Prerequisite(s): CHINESE 301A

#### CHINESE 302A Advanced Intermediate Chinese 2 – A (2 credits)

This course transitions students toward reading authentic texts relating to Chinese society (e.g. newspaper and magazine articles), with emphasis on learning relevant vocabulary. It also builds students' ability to comprehend authentic media resources (e.g. television programs, documentaries, etc.) on similar topics. Oral skills will be built through discussion of these topics, and students will also be expected to practice their spoken Chinese outside class by conversing with Chinese speakers about the topics studied in class. Students will also continue to build their writing skills by writing short papers in Chinese relating to the topics studied.

**Prerequisite(s):** CHINESE 301B or equivalent.

#### CHINESE 302B Advanced Intermediate Chinese 2 - B (2 credits)

Continuation of CHINESE 302A

Prerequisite(s): CHINESE 302A

### CHINESE 401A Advanced Chinese – Issues in Modern China 1 – A (2 credits)

In this course students will learn about social and cultural issues in China through study of authentic texts in Chinese and authentic media resources (e.g. television programs, documentaries, etc.). Oral skills will be built through discussion of these topics, and students will also be expected to practice their spoken Chinese outside class by talking with Chinese speakers about the topics studied in class. Students will also continue to build their writing skills by writing short papers in Chinese relating to the topics studied.

**Prerequisite(s):** CHINESE 302B or equivalent.

#### CHINESE 401B Advanced Chinese – Issues in Modern China 1 – B (2 credits)

Continuation of CHINESE 401A

Prerequisite(s): CHINESE 401A

#### CHINESE 402A Advanced Chinese – Issues in Modern China 2 – A (2 credits)

The Advanced Chinese course sequence is designed to build students' ability to read authentic texts in Chinese, such as newspaper texts; it also builds students' ability to watch and listen to authentic media programs (e.g. television programs, documentaries, etc.). Students will be

introduced to the following themes: popular culture, social change, cultural traditions, history and politics. Through study and discussion, students will be able to better understand the social and cultural issues in China, improve reading and listening abilities, and deliver detailed and organized presentations on these topics.

**Prerequisite(s):** CHINESE 401B or equivalent.

#### CHINESE 402B Advanced Chinese - Issues in Modern China 2 - B (2 credits)

Continuation of CHINESE 402A

Prerequisite(s): CHINESE 402A

#### CHINESE 403 Readings in Pre-Modern Chinese (4 credits)

This course builds students ability to read and interpret pre-modern bai hua texts. The course will focus on stories from Feng Menglong's Sanyan, the most popular and well-known collection of vernacular Chinese short stories published in the late Ming period (late sixteenth and early seventeenth centuries); also included will be excerpts from late Ming plays/operas (xiqu). This course will also introduce and lecture on the culture and urban life of the late Ming Dynasty, aiming to enhance students' understanding of pre-modern Chinese literature and social life.

Prerequisite(s): CHINESE 402B or equivalent.

#### CHINESE 404: Readings in Modern Chinese Fiction (4 credits)

In this course students will read selections from the works of important modern Chinese writers. Students will learn about important modern Chinese authors and fiction, and also build reading vocabulary and extensive reading skills, as well as presentation skills and ability to write reviews of works of fiction.

**Prerequisite(s):** CHINESE 402B or equivalent.

#### CHINESE 405: Readings in Contemporary Chinese Fiction (4 credits)

In this course students will read short stories and novels by contemporary Chinese authors. Students will build their extensive reading skills and reading speed, and also discussion skills and ability to write reviews.

**Prerequisite(s):** CHINESE 402B or equivalent.

### CHINESE 406A: Debating Issues in Contemporary China - A (4 credits)

In this course students will read research issues in contemporary China, primarily using Chinese language resources, and develop advanced speaking skills through debating these issues.

**Prerequisite(s):** CHINESE 402B or equivalent.

### CHINESE 406B: Debating Issues in Contemporary China - B (4 credits)

Continuation of CHINESE 406A.

Prerequisite(s): CHINESE 406A or equivalent.

#### CHINESE 407 Readings in Classical Chinese (4 credits)

This course teaches students how to read basic texts in Classical Chinese, with an emphasis on understanding the distinctive grammar of Classical Chinese and especially the use of particles. Oral skills will be built through discussion of the ideas in the texts.

Prerequisite(s): CHINESE 402B or equivalent.

#### CHINESE 409 Chinese Book Club (4 credits)

This course is designed for learners of Chinese who already have read authentic texts in textbooks, but have read few or no Chinese books for native speaker audiences. The goal is to help students develop stronger extensive reading skills, more specifically, to improve the reading speed, build the ability to guess the meaning of sentences and paragraphs even when students don't know all the words in them, and increase the comfort level when reading authentic texts.

**Prerequisite(s):** CHINESE 402B or equivalent.

#### CHINESE 491: Independent Study in Chinese (4 credits)

This independent study course, offered by the Language and Culture Center through the Language Learning Studio, gives students an opportunity to build advanced Chinese skills in areas for which regular courses are not offered at Duke Kunshan University. In this course students will work with one of the Chinese language faculty members in the Language Learning Studio to design a language learning plan, and will then work with that faculty member to carry it out for one semester. Students may repeat independent study courses.

**Prerequisite(s):** CHINESE 402B or equivalent.

### Courses with Course Subject: Chinese Society and Culture (CHSC)

These credits cannot be counted toward the 136 credit requirement, but they may be counted toward the additional credit requirements for students from the Chinese mainland, Hong Kong, Macau, and Taiwan. (See section on Credits Required for Degrees in Part 3.)

### CHSC 101 Chinese Humanistic Spirit and Institutions (4 credits)

This course explores the humanistic spirit inherent in Chinese culture and the forms and changes of historically influential political systems. Topics will be closely linked to two aspects of the humanistic spirit and social institutions. On the one hand, it allows students to understand the philosophical spirit and moral reasoning characteristic of Chinese culture, as well as the Chinese political system along with its changes. On the other hand, it enables students to appreciate the intrinsic spirit of Chinese culture featuring introspection, learning, tolerance and constant change, therefore revealing the internal spiritual forces for China's social institution reforms as well as the universality and uniqueness of contemporary China's social, political and legal institutions.

### CHSC 102 Social Changes in China (4 credits)

This course reviews the history in which how China, as an ancient civilization, has revived from the fallen state in modern times to a mighty power in today's world, helping students to understand and perceive Chinese society along with its changing trends with longer-term vision, the connotation of the Chinese national spirit, and the reason why today's China cherishes independence while vigorously promoting opening up.

### Courses with Course Subject: Computer Science (COMPSCI)

#### <u>COMPSCI 20 Computer Science Principles (4 credits)</u>

Credit for Advanced Placement on the basis of the College Board Examination in Computer Science Principles.

#### COMPSCI 101 Introduction to Computer Science (4 credits)

As an introductory course for computer science, this course will bring you not only the fundamental knowledge on a variety of CS topics, but also the essential computational problem-solving skills with hands on programming experience. Successfully completing this course will serve a solid foundation for other courses in the computer science or data science major. It can also bring new concepts and tools to other domains in social science, arts humanities and natural science. This course is an elective course open to everyone, and no specific prerequisite required.

COMPSCI 201 Introduction to Programming and Data Structures (4 credits)

This course covers data and representations, functions, conditions, loops, strings, lists, sets, maps, hash tables, trees, stacks, graphs, object-oriented programming, programming interface

and software engineering.

Prerequisite(s): None

COMPSCI 207 Image Data Science (4 credits)

This course introduces the logical structure of digital media and explores computational media manipulation. The course uses the Python programming language to explore media

manipulation and transformation. Topics include spatial and temporal resolution, color,

texture, filtering, compression and feature detection.

COMPSCI 301 Algorithms and Databases (4 credits)

This course covers sorting, order statistics, binary search, dynamic programming, greedy algorithms, graph algorithms, minimum spanning trees, shortest paths, SQL, file organization,

hashing, sorting, query, schema, transaction management, concurrency control, rash recovery,

distributed database, and database as a service.

Prerequisite(s): COMPSCI 201

COMPSCI 302 Computer Vision (4 credits)

This course covers image formation and representation, camera geometry and calibration, multi-view geometry, stereo, 3D reconstruction from images, motion analysis, image

segmentation, and object recognition.

Prerequisite(s): STATS 302

**COMPSCI 303 Search Engines (4 credits)** 

This course covers Boolean retrieval, dictionary, index, vector space model, score, query, XML,

language model, text classification, clustering, and web search.

Prerequisite(s): STATS 302

**COMPSCI 304 Speech Recognition (4 credits)** 

This course covers speech production and perception, template-based recognition, hidden

Markov modeling, language processing, robust recognition, speech inference, multimodal

interface and applications.

Prerequisite(s): STATS 302

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### **COMPSCI 401 Cloud Computing (4 credits)**

This course covers cloud infrastructures, virtualization, distributed file system, software defined networks and storage, cloud storage, and programming models such as MapReduce and Spark.

Prerequisite(s): COMPSCI 301

### COMPSCI 402 Artificial Intelligence (4 credits)

This course covers uninformed search, informed search, constraint satisfaction, classical planning, neural network, deep learning, hidden Markov model, Bayesian network, Markov decision process, reinforcement learning, active learning and game theory.

Prerequisite(s): STATS 303

### Courses with Course Subject: Cultural Anthropology (CULANTH)

### CULANTH 20 Topics in Cultural Anthropology Studies (4 credits)

Credit for International Baccalaureate (IB) Diploma in Cultural Anthropology or equivalent.

### CULANTH 101 Introduction to Cultural Anthropology (4 credits)

This course introduces the key concepts and debates within Cultural Anthropology with topics such as racism and essentialism, kinship, gender and sexuality, globalization, etc. In an age where debates addressing migration, robotics, genetic engineering, and ecological crises abound, questions about how humanity is experienced and defined have become more pertinent than ever before.

#### CULANTH 105 Sound in Everyday Life: Anthropological Perspectives (4 credits)

This course introduces students to the study of sound and sonic environments in urban spaces. Students will learn about theoretical approaches that approach sound and sonic landscapes as socially cultivated and study listening as a cultural practice. This course includes study of sound and music from different traditions around the world, recorded soundscapes (films, games, installations), built and ecological environments (parks, subways, streets, institutions, clubs, neighborhoods), the politics of making sound, and the history and use of sound technology (sound production, reproduction, reception, acoustic materials). This course introduces students to the study of noise in relation to public life, the representation of public life in sound, the shaping of city living practices by its acoustic architecture, and creative responses of sound in urban activist projects. Students in this course will conduct their own fieldwork on urban soundscapes.

### <u>CULANTH 106 Home, House, and Housing: An Anthropological Exploration of Human</u> Dwellings (4 credits)

This course will explore the home as a site of attachment, the house as a place that emerged from social relationships, and housing an infrastructure whose construction is shaped by politico-economic forces. The interrelationship between the home, the house, and housing will be discussed. The course will cover contemporary issues of housing such as gentrification, segregation, and eviction. The course will provide broader and deeper understandings of the meanings of home and our relationship to the built environment.

### CULANTH 201 New Media and Society (4 credits)

New media – ranging from the Internet to Twitter and Facebook, from informational networks to handheld devices – have in recent years drastically influenced the social relations for individual and communities, and have exerted profound influence on social, economic and political life. The course traces the development of new media, their relationship to previous modes of communication and transmission, and how digital technologies influence emerging and changing spheres of economic, political and social exchanges.

#### CULANTH 206 The Ethnography of China: New Directions (4 credits)

The course provides a critical overview to the anthropology and ethnography of contemporary China. Beginning with the emergence of ethnology in China in the 1920s and 1930s, students will be introduced to some of the key figures in the pre-revolutionary period of China, and the key concepts, theories, and frameworks that emerged during this period in dialogue both with Soviet and British anthropology. The course then turns to the socialist period, and considers early Maoist approaches to the social sciences, and the state project to identify and classify China's minority nationalities in the 1950s. The post- Mao reform era (1978 to the present) witnesses the globalization of China and the flourishing of a wide range of new kinds of ethnographic projects. This section of the course will pay particular attention to issues of transformations in class, gender, and ethnicity, the study of rural to urban migration, the anthropology of China's urbanization, environmentalism, commodification and consumption, and the study of development in China's ethnic border regions.

#### CULANTH 207 Cultures of New Media (4 credits)

This course is an anthropological examination of 'new media' - their varied forms and histories, how they are used and understood, and their meanings and effects within different communities of users. We will chart a number of technologies deemed 'new' in their day and the social meanings and communities that such technologies generated. We will also explore new media in domains of art and literature, as well as issues of race, gender, sexuality and how other indices of difference come to bear on new media and its use. Most course material will be drawn from anthropology, but will also draw on media studies, visual studies, cultural

studies and critical theory, queer and gender theory, history and geography. Students will make use of the Duke library resource page for this class: http://guides.library.duke.edu/new\_media.

#### CULANTH 208 Global Migration and Ethics (4 credits)

This course examines the current scholarship on the anthropology and interdisciplinary study of global migration, and the ethical predicaments at center of contemporary forms of human mobility. Students will consider the particularities of migratory experiences in different regions of the world, and the different types of local, national, and global moral economies that emerge in these different places and histories. Particular attention will be focused on the political questions that arise when human compassion runs into conflict with the desire to preserve the cultural integrity of one's national identity. The course will draw on ethnographic texts, legal and policy materials, biographies, literature, film, and artistic responses to contemporary migration and refugee crises.

#### <u>CULANTH 209 Globalization and Alternative-Globalizations (4 credits)</u>

The course explores the culture, politics and process of globalization in light of the responses, ideologies, and practices of the anti-globalization movement. We will focus on the interrelationship between the analysis of globalization and policy formulation on such topics as social justice, radical environmentalism, animal rights, labor, migration, poverty, natural resource management, religion and citizenship. Special attention will be focused on the role of social media, film, and photography in anti- and alternative globalization movements. Case studies from the United States, Latin America, South and East Asia, Africa, and Europe will be explored.

#### CULANTH 211 Gender, Mobility and Labor (4 credits)

This course takes students on a journey into the worlds of gender, labor, and mobility as they intersect in dynamic and intimate ways. Topics include: exploration the concept of gender by using anthropological and sociological theories; examination of foundational concepts in political economy, including the state, the family firm, class, labor, migration and accumulation; ethnographic case studies on factory labor, housework, sex work, the service industry and IT work across Asia, Europe, and North America; analyzing how historical and contemporary pressures of industrialization, urbanization, uneven development, and information technology challenge our assumptions about gendered labor and migration; how care work, domestic labor, intimacy, and affect do not fit singularly into cultural categories of feminine versus masculine; public versus private; or individual versus collective domains.

#### CULANTH 302 Field Methods (4 credits)

This course explores the history and practice of ethnographic field research and engages central debates about ethnographic method. The readings prompt deeper reflection on doing

field research, and challenges students to think about anthropological ways of knowing. Students will be required to carry out field research, define and design a project, recording (through field notes or other methods) every step of the way. This is thus a writing- and field research-intensive course. It is organized into several practical components—constituting "the field," participant-observation ("deep hanging out"), interviewing, and writing up findings. Students will get the chance to put several key methods into practice—analyzing spaces, collecting life histories, doing semi-structured interviews and conducting participant-observation. Students will also have the option to experiment with other methods of collecting data, including the use of photography or digital video.

### CULANTH 303 - Politics of Food: Land, Labor, Health, and Economics (4 credits)

Explores the food system through fieldwork, study, and guest lectures that include farmers, nutritionists, sustainable agriculture advocates, rural organizers, and farmworker activists. Examines how food is produced, seeks to identify and understand its workers and working conditions in fields and factories, and, using documentary research conducted in the field and other means, unpacks the major current issues in the food justice arena globally and locally. Fieldwork required, but no advanced technological experience necessary. At least one group field trip, perhaps to a local farm or farmers market, required.

#### CULANTH 304 The Anthropology of Doing Good: China and Beyond (4 credits)

This course explores the intersection of neoliberalism, development and humanitarianism, largely from the perspective of cultural anthropology and the social studies of development. We often think of development as the betterment of mankind and as overall progress. Personal, economic, or otherwise, we tend to view development as a positive process. This course is meant to question widespread assumptions about development. How has development become a discourse and a practice of power since the 1940s? Why do many observers see development as a neocolonial phenomenon? Is development mitigating the domination of the "first world" on the "third world," or is it contributing to it? How have development agencies evolved and responded to critiques over time? We will pay close attention to the social relations that constitute and inform the relations, rights and obligations that exist between wealthy and the poor, including China, the US, and many other countries.

#### CULANTH 305 The Culture of Development: Africa (4 credits)

This course takes up the vexed issue of economic development in Africa – its failures and its successes – from the early colonial period to the present, focusing especially on the transition from the 1960s "modernizing" moment to the Millennium projects and the humanitarian aid of the present. We will read the works of development experts, World Bank executives, anthropologists and historians, exploring the challenges of these projects and what might be done in the future.

### CULANTH 405 Medical Anthropology (4 credits)

Illness and healing fundamentally shape our sense of the boundaries between nature and culture, life and death, mind and body, self and environment, and human and machine. The central goal of this course is to examine where, how, and why we encounter, challenge, bridge, or sustain these divisions. To pursue this goal, we examine the cultural, social, and political dimensions of biomedicine globally and cross-culturally. We study ethnographic writing as unique methodological and theoretical inroads into these perspectives. Our discussions will draw on both scholarly and popular cultural accounts of the experiential and interpretive aspects of medicine. Course readings introduce you to key concepts in critical medical anthropology, and trace health, illness, and biomedicine through gender, sexuality and race.

### Courses with Course Subject: Cultures and Movements (CULMOVE)

### **CULMOVE 101 Cultures of Globalization (4 credits)**

This course traces the histories of global exchange and explores how they intersect with various cultures of globalization in the present-day. This course analyzes how early exploration and colonial trade relate to global connections in the contemporary period. This course shows how historical and anthropological approaches have shed light on the importance of border-crossings and cross-cultural encounters in shaping social identities and differences; spatial cores and peripheries; and hierarchies and societal transformations. Attention to global encounters allows us to deepen our understanding of trade, civilization, state-building, labor, and global food chains. Together, these aspects of everyday life and social organization reveal the diversity and dynamism of globalization.

#### CULMOVE 201 Migration, Inequality and Culture (4 credits)

This course introduces students to the major episodes and patterns in the history of human migration over the last millennium. Examining how people on the move have shaped various institutions and cultural forms which illuminate global structures of power and inequality. Learning how migrations have shaped and have been shaped by ideas and practices of race, class, gender, citizenship, colonialism, nation, nationalism, political movements, trade, religion, and labor. Observing the change over time in the mutually constitutive relationship between migration and systems of power and inequality.

### <u>CULMOVE 202 Culture and Social Movements (4 credits)</u>

This course focuses on the culture and politics of social movements, interest groups, NGOs, and collective protest activity. This course explores theoretical approaches to understand the organizational, tactical, and affective dimensions of social discontent, resistance, collective action, and protest. It will also examine histories of direct action such as public provocation and moral shock, occupation of buildings and sit-ins, marches and street blocking, performance and "art-activism". The students will be required to select and conduct an

independent research project. Possible examples: Black Lives Matters, the Tea-Party, "white rage" and the election of Donald Trump, neo-fascist movements in Europe and elsewhere, the Arab Spring, environmental protest movements, labor activism, and suicide as a form of protest.

### CULMOVE 203 Wealth, Inequality and Power (4 credits)

This course is about how some people get ahead and have income, wealth, and power while others stay poor. People generally agree that having some wealth is better than having none, but wealth – and the processes that create wealth – are perhaps more important than we usually acknowledge. In the course, we will distinguish wealth (ownership of houses, savings, and investments) from income (wages and salaries) and discuss why this difference matters. We will discuss how wealth, income, and other material benefits are distributed across people and families. Then we will spend the bulk of the semester exploring the origins and consequences of wealth ownership and inequality.

# <u>CULMOVE 301 Social Science Perspectives on China: From the Socialist Past to the Global Present (4 credits)</u>

This course is an advanced course on social science approaches to the study of China. We begin with the role of anthropology and sociology in the May Fourth Period, and then trace its development through the socialist period and into the transition to a market economy. We explore the dynamics between the rural and the urban under different regimes, forms of unequal social and economic development, the socialist "work unit" system, theories of "guanxi" (social exchange), the role and figure of the peasant and the more recent figure of the cosmopolitan urbanite, the changing dynamics between public and private life, the cultures and politics of China's multi-ethnic border regions, population control and birthing policies, and the changing structures and attitudes toward family, marriage, gender and sexuality. These topics will be surveyed both books and articles, feature films, novels and short stories, documentaries and readings from popular culture. While this course will utilize materials from the "western" anthropology of China, we will also engage the flourishing field of sociocultural anthropology within China, inviting leading anthropologists in China for guest lectures and conversations via teleconferencing. A fieldwork dimension will also be added to the course, focusing on Kunshan, Shanghai and environs, and the Suzhou corridor.

CULMOVE 390 Junior Seminar: Advanced Topics (4 credits)

CULMOVE 490 Senior Seminar: Advanced Topics (4 credits)

### Courses with Course Subject: Data Science (DATASCI)

### DATASCI 291 Independent Study in Data Science (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

### DATASCI 293 Research Independent Study in Data Science (2 or 4 credits)

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### DATASCI 391 Independent Study in Data Science (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### DATASCI 393 Research Independent Study in Data Science (2 or 4 credits)

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Course may be taken by junior and senior students who have demonstrated aptitude for independent work. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### **Courses with Course Subject: Economics (ECON)**

#### ECON 21 Introduction to Microeconomics (4 credits)

This is the equivalent for Principles of Microeconomics from Advanced Placement on the basis of a score of 4 or 5 on the Advanced Placement Microeconomics exam, or credit for a sufficient

score on a Duke Kunshan University -recognized international examination such as the International Baccalaureate.

### ECON 22 Introduction to Macroeconomics (4 credits)

This is the equivalent for Principles of Macroeconomics from Advanced Placement on the basis of a score of 4 or 5 on the Advanced Placement Macroeconomics exam, or credit for a sufficient score on a Duke Kunshan University-recognized international examination such as the International Baccalaureate.

#### ECON 101 Economics Principles (4 credits)

Basic microeconomic concepts such as demand and supply, market structures and pricing, market efficiency and equilibrium. Macroeconomic concepts such as inflation, unemployment, trade, economic growth and development. Different perspectives on issues of monetary and fiscal policy. Emphasis on public policy issues and the logic behind the economic way of thinking.

#### ECON 201 Intermediate Microeconomics I (4 credits)

Introduction of the concepts of preferences and technologies. Intermediate development of the theory of demand, supply and competitive equilibrium from individual preferences and technologies. Income and substitution effects, uncompensated demand and marginal willingness to pay. Conditions under which competitive markets result in efficient outcomes. Conditions under which government policy has the potential to increase efficiency. Tension between economic efficiency and different notions of equity.

Prerequisite(s): ECON 101

#### ECON 202 Intermediate Microeconomics II (4 credits)

Calculus-based generalization of the theory of demand and supply developed in Intermediate Microeconomics I. Individual behavior in environments of risk and uncertainty. Introduction to game theory and strategic interaction. Adverse selection, moral hazard, non-competitive market structures, externalities, public goods.

Prerequisite(s): ECON 201, MATH 101

#### ECON 203 Introduction to Econometrics (4 credits)

Introduction to the theory and practice of econometrics. Estimation, hypothesis testing and model evaluation in the linear regression model. Observational and experimental methods to identify causal effects including instrumental variable and panel data methods. Lectures are supplemented by labs that use STATA.

Prerequisite(s): ECON 101; MATH 101; and STATS 101 or MATH 205

#### ECON 204 Intermediate Macroeconomics (4 credits)

Intermediate level treatment of macroeconomic models, fiscal and monetary policy, inflation, unemployment, economic growth.

Prerequisite(s): ECON 201

#### ECON 301 Health Economics (4 credits)

Economic aspects of the production, distribution, and organization of health care services, such as measuring output, structure of markets, demand for services, pricing of services, cost of care, financing, mechanisms, and their impact on the relevant markets.

Prerequisite(s): ECON 202

### ECON 302 Environmental Economics & Policy (4 credits)

The role of the environment in the theory and practice of economics. Topics include ways in which markets fail to efficiently allocate resources in the presence of pollution, along with the array of policies regulators used to correct those failures; the empirical techniques used by economists to put values on environmental commodities; and an examination of questions related to everyday environmental issues, particularly those confronting China, and the developing world.

Prerequisite(s): ECON 201

#### ECON 303 Financial Institutions (4 credits)

The operations of commercial and central banking and non-banking financial institutions and instruments in the United States, determination of monetary aggregates and interest rates, the financial impacts of Treasury operations, and the linkages from Federal Reserve actions to price level, employment, economic growth, and balance of payments objectives. Coverage of models of monetary economics (for example the Cagan money demand function, cash in advance models). The dynamics and real effects of inflation.

Prerequisite(s): ECON 204

#### ECON 304 Economic Growth (4 credits)

Examination of the enormous differences in living standards across countries, which reflect differences in growth experiences. Course studies both analytical foundations of modern growth theory and the most recent advances in modeling to shed light on old and new questions about such experiences.

Prerequisite(s): ECON 203, ECON 204

# ECON 307 History of Monetary & International Crises (4 credits)

Course examines monetary/financial crises plaguing the world since the 16th century. Analyzes origin, unfolding, and impact of crises, debates generated by them, and formulation/implementation of policy measures. Attention is paid to international implications/connections on European/Asian money supply, banking/credit systems; reaction to South Sea Bubble and John Law Credit Systems in numerous European nations; experiments with paper money in America; rise/demise of gold standard in 19th/20th century; currency and exchange rate problems of last three decades. Case studies will be selected and assigned according to participants' interests.

Prerequisite(s): ECON 204

## ECON 308 Economic History and Modernization of the Islamic Middle East (4 credits)

Economic development of the Middle East from the rise of Islam to the present. Transformation of the region from an economically advanced area into part of the underdeveloped world. Role of religion in economic successes and failures. Obstacles to development today. Topics: Islamic economic institutions, economic roles of Islamic law, innovation and change, political economy of modernization, interactions with other regions, economic consequences of Islamism.

Prerequisite(s): ECON 101

## ECON 315 Economics of the Public Sector (4 credits)

Applies tools of intermediate micro economics to the public sector. Develops economic justifications for government intervention into the economy and examines and evaluates various government policies and programs. Provides a solid foundation for applied benefit cost analysis.

Prerequisite(s): ECON 201 or PUBPOL 304

## ECON 401 Competitive Strategy and Industrial Organization (4 credits)

Foundations of the field of industrial organization, including the theory of the firm, models of competition, market structure, pricing and dynamic models. Emphasis on theory with support from specific industries, including telecommunications, retail and airlines.

Prerequisite(s): ECON 202

# ECON 402 International Finance (4 credits)

Analysis of the determinants of international capital movements, trade imbalances, and nominal and real exchange rates. Policy debates such as the foreign indebtedness of the United

States, emerging market debt crises, exchange-rate-based inflation stabilization, and balance-of-payment crises.

Prerequisite(s): ECON 204

#### ECON 404 Environmental Justice: The Economics of Race, Place and Pollution (4 credits)

Minorities and low-income households bear a disproportionate burden from environmental pollution. The inequality may happen in many countries, cultures and contexts. This course examines ways in which environmental injustices in the USA, China and in the world may arise out of discriminatory behavior and/or market forces founded on individual, firm, and government incentives. The course also analyses policies that are aimed at providing fair treatment and equal protection from pollution regardless of race, color, or income. The course first sets the theoretical framework used to document and explain disproportionate exposures. Based on this foundation, students then review existing empirical evidence through case studies and evaluate competing explanations of sources of injustice. The objective of this course is to enable students to examine environmental justice issues using an economics framework, which provides a different perspective for evaluating policies to address environmental inequities observed in today's world.

Prerequisite(s): ECON 201

# **Courses with Course Subject: English (ENGLISH)**

#### ENGLISH 20 Literature and Composition (4 credits)

Credit for Advanced Placement on the basis of the College Board examination in Literature and Composition.

# ENGLISH 22 Composition and Language (4 credits)

Credit for Advanced Placement on the basis of the College Board examination in Composition and Language.

# Courses with Course Subject: English for Academic Purposes (EAP)

# EAP 101A Writing about Language Learning - A (2 credits)

This is a content-based academic English skills course focused on writing, designed for first semester EAP-track students. In this course students will study one or more issues related to language learning (e.g. how to sustain motivation); then they will write course papers presenting their views on these issues. Students will learn how to research an issue, and how to appropriately quote and/or cite sources. They will learn how to plan and write course

papers that summarize the views of others, state clear positions in response, and make cases for those positions. Students will also practice making short presentations. Additionally, students will design and carry out plans to improve the accuracy of their written English. This course, required for EAP-track students, is normally taken in Year 1, Semester 1. There is no prerequisite.

### EAP 101B Writing about Language Learning - B (2 credits)

Continuation of EAP 101A.

Prerequisite(s): EAP 101A

# EAP 102A Writing about Culture Learning - A (2 credits)

This is a content-based academic writing course for EAP-track students that further builds written and oral communication skills introduced in EAP101. In this course students will study generalizations that are often made about significant aspects of a Western culture (e.g. the idea that U.S. culture is relatively individualistic); then they will write papers in which they analyze and critically examine these generalizations. Students will practice researching issues and appropriately making use of resource materials. They will practice planning and writing course papers in which they take a stand on an issue and then make a case for their position. Students will also share ideas by making presentations. This course, required for EAP-track students, is normally taken in Year 1, Semester 2.

Prerequisite(s): EAP 101B

## EAP 102B Writing about Culture Learning - B (2 credits)

Continuation of EAP 102A.

Prerequisite(s): EAP 102A

## EAP 103 Writing about Intercultural Encounters (2 credits)

This course is about one of the most important and interesting topics in today's globalizing world - intercultural communication. In this course, students will build academic English skills through the study of intercultural communication. They will learn about the intercultural communication process and the factors that affect interpretive judgements made in intercultural encounters. In this course students will also build intercultural communication skills and oral English skills through group discussion activities (e.g. critical incident exercises). Students will also build written English skills by writing short essays in which they analyze intercultural encounters. Additionally, students will design and carry out plans to further improve the accuracy of their written English. This is an elective course for EAP track students.

**Prerequisite(s):** None

# EAP 110 Presenting Ideas to Global Audiences (2 credits)

In this course students will learn how to give more effective presentations in English by first studying presentations available on websites such as TEDtalks and then giving brief in-class presentations.

**Prerequisite(s): None** 

# EAP 202 - Studying Cultures through the Media (4 credits)

In this course students will carefully and critically learn about other cultures by studying media products (e.g. films, television programs, pop songs, etc.) from those cultures, and learn to make effective presentations through which they share the results of their studies. The specific media products focused on in the course will vary according to instructor. This is an elective course for EAP track students.

**Prerequisite(s):** EAP 102B

# EAP 203 - Global Languages (4 credits)

In this course students will study the rise of global languages such as English and Chinese. They will build academic reading skills by studying the history of global languages and the factors (e.g. political, economic, cultural, etc.) that have led to the rise of these languages to global status, and they will develop the ability to present arguments both orally and in writing by making cases about the likely future prospects of these languages. This is an elective course for EAP track students.

Prerequisite(s): EAP 102B

## EAP 204 - Endangered Languages (4 credits)

In this course students will learn about the issue of endangered languages by studying one particular endangered or threatened language, its current status, and the society in which is it used. Students will then build argumentation skills by making a case, presented through both written papers and oral presentations, for what should be done - or not be done - about the issue. This is an elective course for EAP track students.

**Prerequisite(s):** EAP 102B

#### EAP 205 - Strategies for Independent Language Learning (4 credits)

In this course students will learn about independent language learning by designing and carrying out a project to improve some aspect of their second language skills. In the course students will learn about major factors that play a role in independent language learning (e.g. learner autonomy, language learning strategies, motivation). Students will keep journals as they carry out their projects, and write final reports drawing on material from their journals. This is an elective course for EAP track students.

Prerequisite(s): EAP 102B

# Courses with Course Subject: Environment (ENVIR)

#### ENVIR 20 Environmental Science (4 credits)

Credit for Advanced Placement on the basis of the College Board examination in Environmental Science

# ENVIR 101 Introduction to Environmental Sciences (4 credits)

An introduction to the study of environmental sciences and policy through exploration of basic environmental principles in the life, physical, and social sciences. Emphasis on understanding how the atmosphere, hydrosphere, lithosphere, cryosphere, and biosphere function, and how these spheres interact with human consumption, production, and technological patterns and processes. The course includes field trips to local sites as relevant.

# ENVIR 102 Dynamic Earth and Oceans: Physical and Biological Sciences for the Environment (4 credits)

Introduction to the dynamic processes that shape the Earth, the oceans, and the environment and their impact upon society. Earth science topics might include volcanoes, earthquakes, seafloor spreading, floods, landslides, groundwater, seashores and geohazards. Ocean sciences topics might include seafloor evolution, marine hazards, ocean currents and climate, waves and beach erosion, tides, hurricanes/cyclones, marine life and ecosystems, and marine resources. Emphasis on the formulation and testing of hypotheses, quantitative assessment of data, and technological developments that lead to understanding of the biosphere dynamics and associated current and future societal issues.

## ENVIR 201 Applied Environmental Science and Policy (4 credits)

An examination of the interactions between the natural and the social systems as they relate to the environment. Focuses on ecological and earth system cycles, processes, and fundamental relationships, the environmental impact of human-induced change at the local, regional, and global levels. The role of technology and the policy process in determining how environmental problems evolve are addressed. Students will make use of ethical analysis to evaluate environmental tradeoffs, use case studies to integrate multiple disciplinary perspectives on environmental problems and to address issues of environmental justice.

Prerequisite(s): ENVIR 101

# ENVIR 202 Biodiversity and Conservation (4 credits)

An overview of biological diversity, its patterns, and the current extinction crisis. Historical and theoretical foundations of conservation, from human values and law to criteria and frameworks for setting conservation priorities; island biogeography theory, landscape ecology, and socioeconomic considerations in reserve design; management of endangered species in the wild and in captivity; managing protected areas for long term viability of populations; the role of the landscape matrix around protected areas; and techniques for conserving biological diversity in semi-wild productive ecosystems such as forests.

**Prerequisite(s):** ENVIR 102 or consent of the instructor

# ENVIR 203 The Theory and Practice of Sustainability (4 credits)

Theories and practices of sustainability explored with application to the campus and local community environment, including economic, social and environmental factors, and a local to global reach. The Duke and Duke Kunshan University campuses are used as case studies to illustrate institutional practices including building design and operations, utility supply and consumption, carbon offsets design and calculation, transportation, water, sustainability education and communication, behavior change, waste production and recycling, and procurement. In a service-learning project, students will perform sustainability inventories and cost/benefit analyses, and gather behavior change data.

**Prerequisite(s):** None

# ENVIR 291 Independent Study in Environmental Science and Policy (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### ENVIR 293 Research Independent Study in Environmental Science and Policy (2 or 4 credits)

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### ENVIR 301 International Environmental Policy (4 credits)

This course examines the international community's responses to various global environmental problems. Because many environmental problems cross national borders,

solutions require some form of global governance such as state-led mechanisms in the form of international environmental regimes. The course will thus explore how and why states both succeed and fail to negotiate international governance mechanisms. The course will also examine why some international environmental regimes are more effective than others and why states choose to comply with environmental regimes.

### ENVIR 302 Environmental Economics & Policy (4 credits)

The role of the environment in the theory and practice of economics. Topics include ways in which markets fail to efficiently allocate resources in the presence of pollution, along with the array of policies regulators used to correct those failures; the empirical techniques used by economists to put values on environmental commodities; and an examination of questions related to everyday environmental issues, particularly those confronting China, and the developing world.

Prerequisite(s): ECON 201

# ENVIR 303 Climate Change and Society in China (4 credits)

Analysis of Earth's climate history and links between climate and society in China, as well as physical climatology and the future climate in China. Topics include: global climate system, climate feedbacks, energy balance, basic circulation of the atmosphere and ocean, hydrological cycle and carbon cycle, paleoclimate reconstruction, record of natural variations of past climate with emphasis on past changes of monsoon rainfall reconstructed from paleoclimate archives for the past, extrinsic forcing mechanisms of observed paleoclimatic variations. The impact of climate variability and change on Chinese society and history will be discussed.

**Prerequisite(s):** ENVIR 101 or consent of the instructor

#### ENVIR 304 Environmental Chemistry and Toxicology (4 credits)

An overview of the fate and effects of chemicals in the environment. Topics include chemical characterization of pollutants, chemistry of natural waters, soil sediment chemistry, atmospheric chemistry, transfers between and transformations within environmental compartments, toxicokinetics, cellular metabolism, biological levels of organization, and approaches for assessing chemical hazards. Incorporates case studies focused on human health and ecosystem protection.

Prerequisite(s): INTGSCI 102 or CHEM 110 or CHEM 120

# ENVIR 305 Environment and Development Economics in Developing Countries (4 credits)

Course will focus on the major challenges developing countries face in balancing environmental management and economic growth. Class will use economic analyses to examine these challenges and to devise policy solutions, especially given that developing countries often have weak institutional capacity and fewer financial resources to cope with environmental pollution.

**Prerequisite(s):** ECON 101, or consent of the instructor

# ENVIR 311 Biogeochemistry (4 credits)

Biogeochemistry is the study of how chemical elements flow through living systems and their physical environments. This course will investigate the factors that influence the cycling of those elements that are essential to life as well as the liberation, transport and exposure pathways of toxic trace elements. Concepts of nutrient limitation, element stoichiometry, primary productivity and carbon sequestration will be covered in depth, and will be applied to the study of human impacts on the global biogeochemical cycles of water, carbon, nutrients and trace metals.

Prerequisite(s): BIOL 110, and CHEM 110 or 120

#### ENVIR 313 Ecosystem Service (4 credits)

Ecosystem services are the benefits that people obtain from ecosystems and utilizes a system level approach to examine the interactions between four services. The course will include discussion of nutrient recycling as a supporting service, food production as a provisioning service, carbon sequestration as a regulating service and education as a cultural service as well as how they fit together in a sustainable system. Students will learn through case studies of the application of conservation, restoration and market valuation approaches to protecting critical ecosystem processes.

**Prerequisite(s):** BIOL 208 or consent of the instructor

## ENVIR 315 Aqueous Geochemistry (4 credits)

This course is designed to provide the student with an understanding of the fundamentals of aqueous geochemistry. This course focuses on the fundamental aquatic geochemical processes (e.g. mineral precipitation/dissolution, solution complexation, acid-base chemistry) that shape and transform the Earth's surface as a result of rock-water interactions, and associated impacts on the fate and transport of inorganic and organic contaminants in aqueous and geochemical environments. Topics to be covered include the chemical composition of soils, geochemical specalation, mineral weathering and stability, sorption and ion exchange, soil redox processes, chemical kinetics at environmental surfaces, and the nature, composition, structure, and properties of pollutants coupled with the major chemical mechanisms controlling the occurrence and mobility of chemicals in the environment.

Prerequisite(s): INTGSCI 102 or CHEM 110 or CHEM 120

# ENVIR 391 Independent Study in Environmental Science and Policy (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### ENVIR 393 Research Independent Study in Environmental Science and Policy (2 or 4 credits)

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Course may be taken by junior and senior students who have demonstrated aptitude for independent work. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

# ENVIR 402 Chemical Transformation of Environmental Contaminants (4 credits)

Mechanisms and principles underlying organic contaminant transformations in the ambient environment. Topics include hydrolysis, oxidation/reduction, direct and indirect photolysis, and reactions with disinfectant chemicals. Reactions will be considered in context of both natural (e.g. surface water and cloudwater) and engineered (e.g. drinking water, wastewater, and groundwater remediation) systems. Approaches will include both qualitative (reaction mechanism and product identification) as well as quantitative (reaction kinetics and stoichiometry) aspects of environmental reaction chemistry.

Prerequisite(s): CHEM 110 or 120

#### ENVIR 403 Energy Economics and Policy (4 credits)

This course examines the economics of markets and policies for different energy supply sources (such as petroleum, coal, natural gas, electricity, renewables, nuclear), energy demand and efficiency, and their interactions with each other and with the rest of the economy and environment. We will explore rationales for why markets for energy and energy-using technologies have historically been subject to extensive government intervention. Other topics include markets for energy and energy-using technologies, energy price regulation, and energy security.

Prerequisite(s): ECON 101

# ENVIR 404 Environmental Justice: The Economics of Race, Place and Pollution (4 credits)

Minorities and low-income households bear a disproportionate burden from environmental pollution. The inequality may happen in many countries, cultures and contexts. This course examines ways in which environmental injustices in the USA, China and in the world may arise out of discriminatory behavior and/or market forces founded on individual, firm, and government incentives. The course also analyses policies that are aimed at providing fair treatment and equal protection from pollution regardless of race, color, or income. The course first sets the theoretical framework used to document and explain disproportionate exposures. Based on this foundation, students then review existing empirical evidence through case studies and evaluate competing explanations of sources of injustice. The objective of this course is to enable students to examine environmental justice issues using an economics framework, which provides a different perspective for evaluating policies to address environmental inequities observed in today's world.

Prerequisite(s): ECON 201

# Courses with Course Subject: Ethics and Leadership (ETHLDR)

#### ETHLDR 101 Ethics and Leadership (4 credits)

This interdisciplinary course draws on philosophy, sociology and public policy to explore ethical leadership in the twenty-first century. From the challenges facing governments to decisions students confront daily, this course seeks to create and evaluate solutions to ethical dilemmas in a global world. Does a government have the right to insist on another government's adherence to human rights standards? Should a museum be forced to return artifacts that were stolen centuries before the museum acquired them? Do corporations have an obligation to invest in their local communities? Do we have an obligation to help the poor and if so why?

# ETHLDR 201 Ethics, Citizenship and the Examined Life (4 credits)

Ethics, Citizenship and the Examined Life explores several related themes. It attends to traditional Asian and Western ideals and contemporary analyses of moral self-cultivation, personal achievement and meaning; to obligations beyond the self – to family, community, religion, party, nation, and humanity – and whether it is possible to reconcile the criteria for "doing the right thing" across cultures and ages; and to the ways in which Asian and Western philosophical and political traditions have addressed the relationship between a meritocratic elite and democratic forms of government.

#### ETHLDR 202 Ethics, Markets, Politics (4 credits)

What should be the relation between markets in which goods and services are exchanged, the state that has potential supportive and regulatory functions toward the markets, and ethical values such as human welfare, the desire for meaningful work, equality, and justice? To what extent can and should markets be regulated by the state for the sake of such values? Should businesses act on moral values as well as the profit motive? To what extent should consumers guide their choices in the market according to ethical values? An interdisciplinary approach through philosophy, political theory and economics.

#### ETHLDR 203 Conceptions of Democracy and Meritocracy (4 credits)

This course will examine democracy and meritocracy, exploring specifically the components, strengths, and liabilities of each. Particular focus will be on intersections between virtuosity, democracy and meritocracy. Readings will come from philosophy, political theory, history, and sociology. Potential application of these theories to the United States and to China, among other countries, will be discussed.

Prerequisite(s): SOSC 101

## ETHLDR 204 Environmental Ethics (4 credits)

This course addresses the morality of respecting the natural world, including plants, animals and all forms of planetary life for their own sake. Is pollution of air and water wrong in itself, and not simply because it damages resources that present and future generations of human beings need? Does the suffering of nonhuman animals impose a moral claim upon human beings? Do all species have a claim to survive in the face of human development? Different philosophical theories as well as a variety of cultural traditions of thought about the environment will be studied and discussed.

#### ETHLDR 205 Trust and Cross-Cultural Leadership (4 credits)

Leadership works through the cultivation of trust between leaders and the people they lead. Leaders make trade-offs in providing direction ("coercive control") versus cultivating trust-based commitment ("enabling control"). Recently, there has emerged the concept of "soft power," which is the power to get others to want what you want through their attraction to your culture. Leaders often face the challenge of fostering trust across diverse cultures, values, and beliefs. This course draws on philosophy, political science, organizational behavior, sociology and psychology to study the conditions that foster trust within and across societies, and between leaders, the institutions of governance and the governed.

#### ETHLDR 206 Global Justice and Health Care (4 credits)

The gap between those who receive the best health care and those who receive the worst health care in the world is staggering. Do all people have an equal right to long life and prosperity

regardless of where they happen to live? Is there a right to basic health care? What should the most advantaged nations do for the least advantaged? This course studies philosophical theories of global justice, along with particular issues such as the "brain drain" of health care personnel from developing to rich countries, and the alleged bias of pharmaceutical companies against developing drugs most needed in developing markets.

### ETHLDR 209 The Psychology of Justice (4 credits)

What are the conditions under which people come to perceive their societies as just or unjust? What effects does living under conditions of injustice have on human psychology? This course will examine these questions through consideration of three topic areas. In Unit I, "Distributive Justice", asking what justice in distribution of basic human resources consists in. In Unit II, "Social Justice", exploring some of the psychological influences that contribute to prejudice and oppression, and how those influences shape the psychology of minority groups. In Unit III, "Restorative Justice", examining the psychological underpinnings of a system of restorative justice that focuses on rehabilitation and reconciliation, and will examine the psychological complexities of instituting such a system under conditions of inequality.

# ETHLDR 301 Ethics of Nudging (4 credits)

Behavioral economics and the idea of "nudging" have captured the attention of policy makers and the public. The idea that situations can be structured to make some choices and practices easier (and thus more likely) and make others harder (and thus less likely) is well established in psychology, organizational behavior, political science and sociology, but this raises the question of whether it is ethical for those in power to intentionally structure situations to nudge people one way or the other. This course will examine the work on behavioral economics and nudging, and the earlier research in other fields that underpins "nudging" and the practical moral dilemmas it raises.

#### ETHLDR 302 The Sociology of Morality and Politics (4 credits)

Religious, philosophical, social and cultural psychology explain how morality varies so much across cultures, despite the fact that cultures share so many similarities and recurrent themes. This course explores the foundation, the virtues, narratives, and institutions that sit on top of shared moral foundations, and the ways in which they lead to conflict within and across nations as well as the possibilities for managing that conflict.

ETHLDR 390: Junior Seminar: Advanced Topics (4 credits)

ETHLDR 490: Senior Seminar: Advanced Topics (4 credits)

# **Courses with Course Subject: French (FRENCH)**

# FRENCH 24 Advanced Intermediate French Language and Culture (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in French, French Language or French Literature.

# **Courses with Course Subject: German (GERMAN)**

# GERMAN 24 Advanced Placement in German (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in German, German Language and Literature.

# Courses with Course Subject: Global China Studies (GCHINA)

#### GCHINA101 China in the World (4 credits)

China in the World focuses on the historical and contemporary commercial, intellectual, and scientific exchanges between China and multiple locations around the world. The course invites students to think about the engagement of China in the world and the world in China from an interdisciplinary perspective. We investigate how contemporary China has been shaped by key historical events and processes including science, trade and war. Finally, we consider together how these histories will influence China's future engagement with the wider world.

# **GCHINA 201 From Empire to Nation (4 credits)**

This course examines concepts and theories of empire, imperialism, colonialism, and the nation-state, with a particular focus on their circulation and impact in East Asia and China. We trace the history of Western theories of "nation," looking at what the term meant prior to the European nation-state and the imperialist and colonial projects of the 19th and early 20th centuries, and we examine what they mean in the present era of multiculturalism and globalization. We explore how historically Chinese conceptions of civilization and empire were transformed in post-imperial era. We look also at how related concepts of race, ethnicity, religion, gender, and culture have traveled from the West, through the Soviet Union, to China and beyond.

#### GCHINA 202 Modern Chinese Politics (4 credits)

How is the Chinese political system organized? What are the rules, both formal and informal, about how policy is made in China? What determines whether a policy actually works in China? How do everyday people experience politics in China? This class introduces students

to readings, arguments, and concepts that begin to explore the answers to these questions. One of the goals for the class is that students can start to recognize systematic patterns and a logic of action in how the Chinese political system operates.

## GCHINA 203 Visual China (4 credits)

From film's first appearance at a Shanghai teahouse in August 1896 to Jackie Chan's latest transnational stardom, the history of modern Chinese cinema has always sought to raise questions of national and cultural identity. How do Chinese films between the two fins-desiècle create the spectacle of "China," narrate its history, and represent its increasingly diversified cultural landscapes both at home and abroad? Students will study photography, documentary film, cinema and social media in China from the 1930s "Leftist" films to present.

# GCHINA 301 China's Transitioning Economy (4 credits)

This course provides a comprehensive overview of the Chinese economy and China's role in the world economy. China's current economic challenges will be given particular attention. Topics addressed will include: the Chinese economy before 1949; the socialist era, 1949-1978; economic reform and market transition; the role of state enterprises; the return of private and family business; foreign investment; foreign trade; China's role in the East Asian trade-production network; China's evolving financial system; Chinese monetary and exchange rate policy; China's role in global trade balances; the internationalization of the Yuan; and the current effort to rebalance the Chinese economy from an investment to a consumption economy.

#### GCHINA 302 The Factory: From Socialist Industrialism to World Assembly (4 credits)

The rise of China and its economic transition are inseparable from the workings of the factories and the feminization of labor on those assembly lines. For most workers, the factory has been not simply a place to work, but also a "habitus" where rest, sustenance, leisure and consumption are conditioned, regulated, and at times, contested. In this highly interdisciplinary course we will examine the factory not only as a political and economic unit of disciplined work, but also as a cultural and ideological space wherein dreams and anxieties are produced and exhausted.

GCHINA 390 Junior Seminar: Advanced Topics (4 credits)

GCHINA 490 Senior Seminar: Advanced Topics (4 credits)

# Courses with Course Subject: Global Cultural Studies (GCULS)

# GCULS 105 Critical Comparative Studies (4 credits)

What is "culture"? Where can we observe it and how can we study it? And, most importantly for a globalizing world: Can we compare "cultures"? What are the assumptions and parameters that would make such comparison possible in the first place? This course addresses the forces and concerns central to understanding culture and cultural difference. Discussions will pay attention to both the global and local/regional levels on which culture can be observed and compared. Understandings of culture touch upon many forces and concerns, including questions of gender, ideology, religion, nationalism and colonialism. By building a firm understanding of the theoretical approaches to culture, this course will explore the toolbox of comparative cultural studies.

## GCULS 201 Culture and Industry (4 credits)

Apple is currently the most valuable company/brand in the world. Despite its technological origin, the company has always valued design, interface, affect, imagination and creativity skills that the humanities and the interpretive social sciences offer and promote. This course examines how cultural studies, in its analyses of fandom, reception theory, cultural hegemony, etc., provide students the theoretical skills to understand, analyze and prepare for working in the emerging creative industries in China today. Topics that might be included in this course: cultural industry and modernity, popular culture and everyday life, representations of gender and sexuality in advertisement, the impact of new social media and information technology, and censorship.

#### GCULS 202 Empires and Culture (4 credits)

In 1800, Europeans controlled 35 percent of the earth's land surface. By 1914, it was 84 percent; American and Japanese imperialism soon followed. Beyond political control and economic exploitation, culture was instrumental in legitimizing imperial rule through the discourses of civilizing mission, scientific racism, social Darwinism, and in the Japanese case, a coprosperity for Asians through assimilation. However, colonized peoples contested imperialism and colonialism through cultural practices such as mimicry, "signifying", literary practice, and critique of liberalism and humanism. This course examines how culture is inscribed in the workings and failings of empires and their legacies.

#### GCULS 301 Religion and Sexuality (4 credits)

This course offers a critical examination of the relation of religion and sexuality with special attention to Buddhist literature and experience. The course equips students with tools from religious theory, gender theory, and critical theory, which are then used to interpret a range of phenomena including: religious interpretations of sex, sexuality, and gender; the codification and normalization of these rules through texts, symbols, and practices; and recent

challenges to these interpretations. Topics include homosexuality, same-sex marriage, abortion, contraception, gender equality, clerical marriage, married clerics' wives, and clerical sexual abuse. Places Buddhism in conversation with Jewish, Christian, and Islamic traditions.

## GCULS 302 Gender and Globality (4 credits)

Gender is a key principle that structures social differences and inequality. Globality is a condition characterized by time-space compression and ever-expanding connections across national boundaries. How does gender shape processes of globality, and how do gender roles and practices change as national/cultural regulatory systems are no longer able to maintain control over their definitions? Adopting an interdisciplinary approach, this course examines the intersection between gender and globality in contexts such as labor migration, gendered labor in transnational factories and the high-tech industries, marriage and family, sex work and state violence, new reproductive technologies, as well as queer identities and activism. The particular historical contexts we will discuss these themes include colonialism, the Cold War, post-socialism, and neoliberalism.

#### GCULS 303 Chinatowns: A Cultural History (4 credits)

This course explores the intersection of space and ethnicity through the myriad ways Chinatown has circulated as memory, fantasy, narrative, and myth in the dominant cultural imagination. Through this exploration, the course engages the lived realities of overseas Chinese communities, placing them in the broader context of Asian American history. It aims to show how changing conceptions of "Chineseness" have productively engaged with real Chinatowns from Japan to America, and the phantom Chinatowns of film and fiction. Employing multidisciplinary approaches including urban history, architecture and ethnography, the course reveals how the Chinatowns of myth and memory intersect with the lived reality of overseas Chinese communities.

#### GCULS 390 Junior Seminar: Advanced Topics (4 credits)

#### GCULS 401 Games and Culture: Politics, Pleasure and Pedagogy (4 credits)

This course examines analog and computer games from a cultural perspective. It explores how prevailing cultures and values affect game design, their popularity, and user experience. By examining the design of games, the course treats games, as cultural artefacts, and aims to understand how they engage broader cultural and political themes, such as imagining disaster, utopia and dystopia. By examining their popularity among different social, gender and ethnic groups, the course investigates contemporary cultural concerns such as gender politics and racial representation. By exploring the user experience, especially in the arena of massively multiplayer role-playing games (MMRPGs), the course investigates questions of role-playing and identity, ethics, group behavior, competition, and politics.

# GCULS 402 Digital Tribes (4 credits)

This course tracks digital life and creative expression of groups online in a close study of images, captions and hyperlinked tags. It examines rituals, symbols and cultural patterns that structure everyday life of digital tribes online and investigates impact of digital and social media (Weibo, Twitter, Instagram Facebook, livestreaming apps) on the constitution of communities online and offline. Studying varied array of digital tribes: tribes of the deaf, of oil rig workers, of Hindu worshippers, of prison wives and laptop entrepreneurs, students learn about underlying myths, rituals, and cultural symbols that connect groups of people online.

#### GCULS 490 Senior Seminar: Advanced Topics (4 credits)

# Courses with Course Subject: Global Health (GLHLTH)

#### GLHLTH 101 Introduction to Global Health (4 credits)

This course introduces students to the essential features of global health from the varying perspectives of natural science, social science, and the humanities, drawing from a variety of conceptual frameworks at different scales (individual, community, country, and global). This course examines the global burden of diseases, how this burden is measured, and debate the utility of interventions used for disease mitigation and prevention. This course also introduces the state of the world's global health infrastructure and explores how that infrastructure might or should adapt to the future world.

#### GLHLTH 110 Ecosystem Health and Human Well-Being (4 credits)

Explores interactions between ecosystem health and human well-being in context of global change and human population growth. Effects of climate change on food supply, water availability, land degradation and human well-being; impact of species distribution, disease spread, and human health; ecosystem services and human well-being. Case studies used to illustrate the scientific process and to evaluate supporting evidence.

#### GLHLTH 201 Global Health Ethics (4 credits)

This course introduces students to ethical theories and frameworks in the context of historical and current issues in global health. As part of this context students learn about best practices and standards of care in clinical settings, so that they can make cross-cultural and transnational comparisons and use these to set up difficult ethical questions about health disparities. The course emphasizes self-reflection, cultural sensitivity, and flexibility in thinking about ethical issues in a globalized world. In the context of historical and current issues, students analyze and critique the choices of multinational, national, and local policymakers; clinicians; and researchers, with an eye to the impact these choices have on individuals, families, and

communities. Students also explore ethical issues of conducting research on or working with marginalized/stigmatized populations, using case studies and the theoretical frameworks introduced in the course. Students are encouraged to think creatively about the relationship between ethics and health and to explore solutions to what appear to be ethical dilemmas in a variety of contexts. Topics include: human rights and development; the ethics of aid; differential standards of care; protection of human subjects; access to essential medicines; genetic information and confidentiality; pharmaceutical development; health information technology; placebo controlled trials; best outcomes vs. distributive justice.

## GLHLTH 202 Media and Health Communication (4 credits)

This course examines health communication theory, research, and practice. Major topics include the impact of media on health and behavior; use of mass, new, and social media strategies for health promotion, patient-provider communication; and the role of culture in health communication campaign design. Students should have basic understanding of social science research methods. Students will develop the skills necessary to use media strategically to advance public health policies and social change. The course covers the design, implementation and evaluation of media campaigns to promote public health goals, and examines theories and research on media influences with respect to its potential harmful effects on wellbeing. Students will design a digital media-based health communication campaign.

## GLHLTH 203 Global Disease Control Programs and Policies (4 credits)

This course presents the history, social and political context, organization, technical content, funding and evaluation of current, major, global initiatives for disease control. This course emphasizes programs focused on health problems of the developing world and includes, initiatives for vaccines and immunization, non-communicable diseases, safe motherhood and reproductive health, malaria, Neglected Tropical Diseases, HIV, emerging infectious diseases, TB, tobacco control, nutritional interventions and injury control. This course also examines the process of policy formulation and resource allocation to international health and disease control.

#### GLHLTH 291 Independent Study in Global Health (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

# GLHLTH 293 Research Independent Study in Global Health (2 or 4 credits)

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

## GLHLTH 301 Global Health Research Methods (4 credits)

This course introduces research methods in global health. Global health is a multi-disciplinary field, so the course considers approaches common to the behavioral and social sciences, public health, and medicine. Primary interest is the study of causal inference. Global health researchers, practitioners, and donors need to know what programs and interventions "work" and why. To answer questions of impact, the course explores randomized controlled trials, a mainstay of medical research, and spends significant time helping students understand the rationale, process, and limitations of field experiments. Randomization is not always possible or advisable, however, and researchers must build a causal argument using non-experimental methods. The course reviews several approaches, considers relevant threats to causal inference, and discusses how to improve non-experimental research designs. The course also covers research basics, such as developing and testing theory, asking good questions, understanding variability, designing good measurement, and selecting research participants. The latter part of the course turns to more specialized topics in global health research, such as cost effectiveness, community based participatory research, research on humanitarian aid, and monitoring and evaluation. Students will learn how to evaluate published and unpublished research and how to design a global health research project.

Prerequisite(s): GLHLTH 101 or Consent of the Instructor

#### GLHLTH 302 Social Determinants of Health (4 credits)

This course introduces students to the major social factors that affect public health at both the global and national level. Globally, students study a wide range of topics from the health impact of global income inequality, gender, and access to education, to the role of specific work place policies, among other topics. Lectures introduce a social variable (such as race or gender), discuss its theoretical underpinnings, and then link it to the current empirical evidence to health outcomes. Students learn to analyze the strengths and weaknesses of the empirical evidence. The course considers the implications for intervention strategies and policy, with a focus on applicability to lower and middle-income country settings. Students also study how social factors influence health and wellbeing, with a particular focus on national context in specific countries. Topics could include obesity, aging, socioeconomic disadvantage, access to health insurance, public health systems, the role of the media, and racial/ethnic and gender inequalities. The course provides descriptive assessments of health inequalities and analytic examinations of the mechanisms through which social factors affect health.

# GLHLTH 303 Global Comparative Health Care Systems (4 credits)

This course introduces students to the components of health systems (populations, financing, payment, workforce, service delivery, information, medicines and technologies, governance) as they appear in various health system frameworks, and to the ways in which these components and their combinations vary from country to country around the world. The course focuses on comparisons across countries at the same economic level (high-, middle-, and low-income), as well as on comparisons across levels. The course also considers how to assess health system performance, with attention to how measures of performance are invariably tied to often implicit and varying conceptions of health from country to country and culture to culture. Students will learn about the most significant challenges facing health systems within each economic level and about successes and failures in meeting these challenges with health system reforms. The latter part of the course introduces students to the role of politics and policy in strengthening health systems. Throughout the course, students learn not only about health systems but also about what systems (physical, biological, social) are, how they function, and about how systems thinking can be applied fruitfully to the study of health systems.

Prerequisite(s): GLHLTH 101

# GLHLTH 304 Global Health Governance and Policy (4 credits)

This course introduces global health governance and policy in four modules: 1. Globalization; 2. Health; 3. Governance; 4. Policy. Draws on faculty from a range of disciplines, including anthropology, biology, economics, history, medicine, political science, public policy, and sociology, to situate the concept and practice of "global health" within these four broad themes. This course introduces students to the primary governmental, intergovernmental, private, and civil society actors in global health, and provides an understanding of current issues in global health policy, including the political economies of health care, decision-making processes, governance structures, and the resource-constrained realities of global health policy-making.

Prerequisite(s): GLHLTH 101

#### GLHLTH 305 Biological Basis of Disease (4 credits)

This course covers the basics of the structure and function of major organ systems of the human body in health and disease. The course is geared towards any students who are interested in learning more about how the human body works, how disease develops, and how mind-body connections can alleviate the progression of a disease process.

Prerequisite(s): GLHLTH 101, and INTGSCI 101 or BIOL 110

#### GLHLTH 306 Evolution of Health and Disease (4 credits)

Covers evolutionary approaches to understand human health and disease at a global scale. Integration of evolutionary thinking and medical science provides new insights to a wide

array of medical issues including obesity, cancer, allergies, and mental illness. Evolutionary perspectives reveal why some pathogens are more harmful than others, shed light on the origins and spread of infectious diseases in humans, and help in controlling antibiotic resistance. Evolutionary approaches provide insights as to why we age and provide solutions to alleviate human health problems that often differ from modern medical practice. Course will place these perspectives in the context of global health challenges

Prerequisite(s): GLHLTH 101, and INTGSCI 101 or BIOL 110

## GLHLTH 307 Global Mental Health (4 credits)

Course examines global mental health from perspectives of culture, public health, epidemiology, human rights, policy, and intervention. Readings in the course focus on peer-reviewed research literature highlighting topics such as the prevalence of mental health disorders worldwide, the role of culture in mental health, and the interventions backed by strong evidence for prevention and treatment. Students will discuss and critique study methodologies and explore the needs for future research in this emerging field. Course is designed for students with prior research methods and psychology coursework.

**Prerequisites:** GLHLTH 101 and either SOSC 102 or GLHLTH 301

# GLHLTH 391 Independent Study in Global Health (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

## GLHLTH 393 Research Independent Study in Global Health (2 or 4 credits)

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Course may be taken by junior and senior students who have demonstrated aptitude for independent work. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

# Courses with Course Subject: Global Challenges (GLOCHALL)

# GLOCHALL 201 Global Challenges in Science, Technology, and Health (4 credits)

Science and technology play a vital role in addressing today's challenges such as environmental, energy, health issues, and resources management at both the local and global scale. Key developments in fields such as biotechnology, nanotechnology and information technology are important to address these challenges. Novel technologies are being applied to health in many ways, such as linking mobile phones to low-cost peripherals allows for portable, fast and cheap diagnosis of common diseases, especially in low income countries; biopharmaceuticals manufactured in living organisms through the use of recombinant technology, and stem-cell based tissue replacement and repair enabled by advances in biotechnology. The rapid change in environmental setting due to social and economic development and the global migration of rural populations to mega-cities has also created health issues associated with air pollution, water contamination, and inadequate sanitation. In many parts of the world, energy development is directly linked to water and air pollution, and consequently to human health degradation. The ability to continue developing energy resources and providing clean water and air is one of the major challenges of the 21st century and the key for the sustainability of the economic development. New functional materials from nanotechnology are becoming more important in addressing environment and energy challenges. This course will explore these challenges, but also will be forward-looking, as you prepare for your lives in a dynamic world, in which you must confront these global challenges.

## **Courses with Course Subject: History (HIST)**

#### HIST 20 Basic Art History (4 credits)

Credit for Advanced Placement on the basis of the College Board examination in art history.

#### HIST 21 World History (4 credits)

Credit for Advanced Placement on the basis of College Board examination in World History

# HIST 23 American History I (4 credits)

Credit for Advanced Placement on the basis of College Board examination in American History (score of 4 or 5) or equivalent

# HIST 24 American History II (4 credits)

Credit for Advanced Placement on the basis of College Board examination in American History (score of 4 or 5) or equivalent

# HIST 25 European History I (4 credits)

Credit for Advanced Placement on the basis of College Broad examination in European History (score of 4 or 5) or equivalent

# HIST 26 European History II (4 credits)

Credit for Advanced Placement on the basis of College Broad examination in European History (score of 4 or 5) or equivalent

# <u>HIST 101 Chinese History 1: Competing Schools, Warring States, and the Ideal of Empire (4 credits)</u>

This course examines the origin stories of Chinese civilization as found in the historical documents and archeological evidence from the Warring States period. Students use primary source material and historical evidence to interpret the theories of Confucius, Mozi, Laozi, Zhuangzi, and Han Feizi in their historical, social and political contexts, with special regard to the their understanding of the state, the role of government, the military, and civil education. The course then examines the attempts to forge a unified empire, finally achieved under the Qin, and the subsequent policies of the Han dynasty that aimed to make the unified empire last. The course involves visits to local archeological sites where relevant.

# HIST 102 Chinese History 2: Importing Culture and Recasting Society (4 credits)

This course examines what Hu Shi has called the "Indianization" of China. It traces the import of Buddhist ideas, values and practices from India and central Asia, and their impact on Chinese society, religion and politics. It examines the notion of China as multireligious, multiethnic empire and considers the transition from political diversity in the Six Dynasties period to renewed unity in Sui and Tang dynasties. With Chang'an (Xi'an) as the capital of a culturally rich and diverse China, the course examines the impact of a newly discovered inner-Asian cosmopolitanism on Tang aristocracy, culture, religion and politics.

# HIST 103 Chinese History 3: The Foundations of Modern China (4 credits)

The course introduces the foundations of modern China from the Song Dynasty up through the late imperial period (about 1800 CE to 1911). It will cover the major historical events, developments, and trends -- social, political, economic, philosophical, literary, cultural, multiethnic, and China's relations with the other regions. The main focus of the course will be on primary sources, which include dynastic histories, historical biographies, novels, folktales, satires, poetry, contracts, ritual manuals, diaries, letters, scientific treatises, philological studies, and court debates. This course will take an interdisciplinary approach, integrating history with literary studies, philosophy, and anthropology, in order for student to better understand these texts in their historical context.

#### HIST 104 American History to 1876 (4 credits)

This course will survey the history of the present-day United States from precolonial times (pre-1500) to 1876. This was a tumultuous era of American, and world history, fraught with conquest and enslavement, revolutions and civil wars, mass migrations and democratization. This course will particularly investigate indigenous societies, European colonization and African slavery, the American Revolution and the founding of the US nation-state, social movements, sectional conflicts, expansionism and the American Civil War, as well as the reconstruction of American democracy in the wake of the Civil War. Throughout, the course will emphasize the place of the US in global history, the growth of American capitalism, tensions between race and democracy, and the various contributions of women, slaves, merchants, planters, Native Americans, and workers to American culture and politics.

## HIST 105 American History from Reconstruction to the Present (4 credits)

This course will survey the history of the United States, from the downfall of Reconstruction (1877) to the present day. Globally, this era was marked by industrialization, the consolidation and collapse of colonial empires, World Wars, socialist revolutions, decolonization, and the emergence of the United States as the world's pre-eminent geopolitical and economic power. This course will investigate America's place within these global transformations. It will explore the rise of America's industry and the expansion of its frontiers (both within and beyond North America). It will explore the impact of immigrants from across the world upon American society. It will explore America's role in two World Wars and the global Cold War. It will also examine the shifts in American politics, from the expansion of women's rights, labor rights, and African American rights, to the New Deal and Neo-Conservatism, to Barack Obama and Donald Trump.

## HIST 106 Art History 1 (4 credits)

Rather that aiming at a comprehensive survey, this course offers an introduction to key moments in the intersection of history, politics and visual art in the world before 1900s. It places art in a global context, highlighting themes from European, Asian, African and Indigenous art and focuses on art as the exercise of cultural power, and the way that artists have both promoted and resisted these entanglements with elite authority. In each case studied, students will gain sufficient historical background to understand the art in question, but will also engage in the comparative study of art to highlight issues of power, religion, class, and gender.

#### HIST 107 Gandhi and Moral Leadership (4 credits)

Central to Mohandas Karamchand Gandhi's thought and activism was the principle of "moral force." It formed the basis of his unique method of activism, satyagraha (quest for truth), his concept of non-violence, his life-style choices including vegetarianism, his idea of religion and politics, state-building and economics. This course explores the various meanings of the

"moral force" in Gandhian thought and examines its salience within the history of the political milieu – especially, anti-colonial movements in India that he belonged to. This course also discusses the legacies of Gandhi and the relevance of his "moral force" for the twenty-first century world.

# HIST 108 Shanghai Nightscapes: A Nocturnal History of the City (2 credits)

This interdisciplinary course combining the fields of history, sociology, urban studies and urban ethnography examines Shanghai, China's most modern and dynamic city since the 19th century, through the lens of its nighttime leisure pursuits. It explores how the city's nightlife has contributed to its identity and image as a global cosmopolitan metropolis.

# HIST 110 Historical Perspectives on Contemporary Global Issues (4 credits)

This course takes a comparative historical approach to contemporary global issues in various temporal and geographical contexts. Students will focus on issues that emerged in the modern era and may include such topics as terrorism and national security, environmental protection and degradation, resource distribution and trade, health and welfare, and cultural and religious diversity. Students explore the nature of historical change and continuity and will apply historical methods of research and analysis as they investigate the formation and development of particular global issues. The specific case studies and themes in the course will vary by term and instructor.

## HIST 111 Ancient Roots to Global Routes (4 credits)

This course explores the nature of historical change and continuity between the pre-modern era and our current era of global connectivity, taking students from ancient roots to global routes. Instead of a chronological survey, the focus is on broad subjects that cut across fields, regions, and periods. Students will have multiple opportunities to apply historical and interdisciplinary methods of research and analysis to investigate the formation and development of particular global issues, and compare historical and contemporary perspectives on these issues. Topics will vary by term and instructor.

#### HIST 112 History of the Indian Ocean World (4 credits)

The Indian Ocean world encompasses a vast geographical area from the East African coasts to the islands of South China Sea. As the oldest site of "globalization", people and commodities moving across this ocean had played key roles in the spread of religion, highroads of commerce, and geo-politics of empire. Taking the period between 2500BCE and 1900CE as our point of reference we will study, the various approaches employed by historians towards writing the history of the Indian Ocean world. We will learn the various ways of thinking of Indian Ocean as a region and to periodize it.

# HIST 113 Peoples and Cultures of Ancient South Asia, 3500BCE-1750CE (4 credits)

Peoples of South Asia have produced one of the oldest and ever evolving cultures of the world. This course will survey the history of the region from the earliest times to the eve of European conquest. We will learn the historical development of various religious traditions, the state formation processes, and the socio-political institutions that are foundational to South Asian history. In tracing the development of agrarian and urban societies, economic and ecological transformations, formation of various ethnic/religious/linguistic identities and inequalities, we will pay special attention to South Asia's interactions with the wider world.

#### HIST 114 Modern South Asia (4 credits)

South Asia, the most populous part of the world, also boasts of the most diverse population. We will learn the history of modern South Asia through an exploration of South Asian society in under British colonial rule and the problems of South Asia's post-coloniality. Topics will include colonial extraction, racism, communal warfare, casteism, anti-colonial struggles, trade unionism, women's movements and anti-caste movements. Finally, keeping in mind that people did not form any monolithic category, we will study the varying nature of people's identities and resistances, and their position in the imperial formation and the nation state.

# HIST 115 Brides of the Sea: Trading Cities in the Indian Ocean World, 200BCE to 2000CE (2 credits)

Seaborne trade linked the port cities of the Indian Ocean World and Southeast Asia to each other and the world beginning as early as 200BCE. Our class will examine the rise and fall of Asia and Africa's coastal trading cities; the transcultural character of Indian Ocean trading entrepot; the life of merchants; labor migration; and cultural and religious exchange. Student will explore ancient and modern networks of interconnections through group projects on one or more of the global commodities that animated Asian trade, such as silk, slavery, cinnamon, opium, rubber, prostitution, nutmeg, palm oil, bird's nests, black pepper, etc.

#### HIST 116 Mughal India Through the Eyes of European Travelers (2 credits)

This course will survey the history of one of the greatest empires in Indian history, the Mughal empire through the lens of European travel writing between the fifteenth and eighteenth centuries. Some of the questions we will explore are: How are European travelogues important sources for studying Indian history? Is European perspective on Indian society monolithic or is there a variety of European perspectives? Apart from introducing basic history of Mughal India, the course will explore themes such as early Orientalism and the history of the early modern world.

## HIST 117 Sounds and the Chinese City: Live Music Scenes in Urban China (2 credits)

This interdisciplinary course explores the live music scenes of cities in China today and the history of those scenes over the past century. Focusing on the urban space of the live house

featuring jazz, blues, rock, hip hop, electronica, and DJs, we will delve into these scenes and styles of music. Major topics touched upon in this course include globalization, localization, creative cultures and industries, and musical communities and scenes. Cities covered in this course will include Beijing, Shanghai, Kunshan, and Suzhou. Writing assignments will focus on analyzing particular scenes based on research and observations.

### HIST 120 Writing Historical Fiction (4 credits)

This interdisciplinary course teaches students to use historical research as the basis for imaginative writing. Producing an original work of footnoted historical fiction about some aspect of United States history will teach each student how to research and analyze like a historian, while creating artistically like a novelist. Writing Historical Fiction brings U.S. history to life and encourages students to use both the creative and the analytical sides of their brains.

# HIST 121 Pan-Africanism: Global Story of an American Idea (2 credits)

Pan-Africanism began as an idea among ex-slaves and antislavery reformers in America, who believed that Africans and people of African descent across the world had common histories, common experiences, and common struggles against various forms of racism and marginalization. Pan-Africanism, which meant different things to different people, would go on to influence numerous intellectuals and social movements, from Negritude poets to African/Caribbean Independence and the American Civil Rights Movement. This course would survey the growth of this idea in a variety of facets, by looking at is influence upon history-writing, philosophy, poetry, political thought and social movements.

#### HIST 201 Methods of Historical Research (4 credits)

This course offers an introduction to theories, methods and approaches to historical inquiry and research including the use of archives, the interpretation of visual and textual documents, and the recording of oral histories. Students will be exposed to both the humanist and the social scientific approaches to historical research, as well as broader theoretical questions of history and historiography. As such, students learn what is history, how is it made, and what constitutes valid scholarly approaches to historiography. Students will apply their learning by conducting original historical research on a topic of their own choosing and writing a research paper.

#### HIST 202 World History and Global Interactions (4 credits)

This course offers a survey of the history of the world, by which is meant a historical overview of major processes and interactions in the development of human society since its early development some 60,000 years ago, going beyond the fundamental questions and concerns of area studies (such as East Asian studies, South Asian studies). In explaining the large scale processes such as empire building, commerce and religious practices, this course will show

how various forms of human interactions, especially migration played a key role. This course will provide deep historical understanding for some of the pressing issues of the contemporary world such as migration, globalization, and imperialism.

## HIST 203 America in Asia, Asians in America (4 credits)

This course explores the intersection between foreign relations and the evolution of American society, with a focus on Asian-Americans in different moments of history. It is divided into three main historical eras and themes: (1) the early period of Chinese emigration and the building of American railroads until the Exclusion Acts; (2) Japanese-American society before and after Pearl Harbor; (3) Chinese Americans in modern American science, engineering, and innovation. Through the use of representative cases, the course trains students to understand the lives of Asian Americans in relevant historical, cultural and political contexts.

## HIST 204 Asia in World History (4 credits)

Asia as the largest continent of the world comprises of 30 percent of world's land surface and 60 percent of the world's population. But what are the parameters for understanding Asia as a unified, identifiable place? Was there ever an Asian identity in history? Is this identity cultural, economic, political or a mix of all three? Since, all identities are formed in relation to other identities, was an Asian identity formed in reaction to other forms of existing identities in the world? Taking the period between 500 CE and 1950CE as the point of reference, this course exams the above questions in reaching an understanding of what are the various ways and the various historical moments in which we can think of Asia as a shared space amongst an extremely diverse population. Moreover, the course will discuss whether the historical processes that went into the creation of Asian identities were world historical in nature, or in other words, whether these processes had any effect in shaping the histories of societies both within Asia and outside of Asia. This course will aim at developing skills to evaluate to what extent we are "Asian," "global" or otherwise and provide a foundational knowledge to interact with people and institutions within Asia and then the world.

#### HIST 205 Shanghai: From Treaty Port to Global Metropolis (4 credits)

Since the late 19th century, Shanghai has emerged as the leading metropolis in China in many respects. It has served as the breeding grounds and model for the social, political, economic and cultural modernization, and urbanization of China over the century that followed. Through a combination of lectures, readings, film screenings, field trips, and research projects, this course explores the history of Shanghai and connects the colorful legacy of the treaty port era (1842-1943) with the re-emergence of Shanghai as a global metropolis since the 1990s. While focusing mainly on those two eras, which have been the subjects of the bulk of scholarship in the emerging field of "Shanghai Studies," we also examine the relatively neglected history of Shanghai prior to the 1840s, as well as the Mao Years of 1949-1976 when Shanghai became a bastion for the violent politics of the Cultural Revolution.

# HIST 206 World History in Seven Meals (4 credits)

This course offers a study of global history using food as a central focus. The course will center on a series of meals as case studies to examine broader themes, such as human environmental modification and exchange, the role of trade and migration in human history, the powerful influence of identity, and the gendered nature of labor roles in food production and preparation. Students will focus on these themes in various regional and national contexts to identify global patterns in the development of food cultures, and to engage in comparative analyses.

# HIST 207 History of Media Art (4 credits)

The course addresses New Media Art as a specific art historical movement, focusing on technologies, forms, thematic content, and conceptual strategies. While the term, new media art only became in the late nineties the established label for a broad range of artistic practices that exploit new media technologies, many new media artists are profoundly aware of their historical antecedents, making reference to Dada, Pop Art, Conceptual Art, Performance Art, and Fluxus. To understand new media art in a historical context, we will consider the history of technology and media sciences that plays an equally important role in this art's formation and reception. The course thus studies the invention of information technologies and a range of human-machine paradigms that impact the landscape of art history, including cybernetics, network, augmented reality, Biomedia, and ubiquitous computational technology.

# HIST 210 Global Art History (4 credits)

Art has been a part of every society since recorded history. How have the arts told stories about civilizations, ethnicities, communities and peoples? How have the arts evolved and circulated across the globe? The arts provide vital narratives in our understandings of each other as our cultures have both clashed and shared over time. This course asks these questions by focusing on visual arts across cultures not with the aim of comprehensive coverage, but representation of key issues in the interpretation of art. Students will learn how to interpret art from a critical perspective in terms of its relation to broader social, cultural and political dynamics.

# HIST 220 Global Media History (4 credits)

This course explores the emergence and development of different communication media in a broad social and cultural context. From the ancient Asian typewriters to modern Social Networking Service (SNS), media operate in relation to particular social, economic, and technological conditions. This course will aid students in their efforts to make sense of how communications processes have mediated and shaped our interactions with each other as well as our understanding of the world. It does so by examining specific instances of media communications in a number of key cases observed in world history and by showing how technological innovation in media communications has led to new social, cultural, and political forms.

# HIST 301 China in Global Perspective 1: China and the Silk Roads World: 500-1500 (4 credits)

This course introduces the rich and diverse world of trade, religions, and cultures that connected the two ends of the Eurasian world. It starts with survey of Han and Roman trade contacts, and Chinese connections with India via Buddhism, focusing on 7th-15 centuries CE. It examines global interactions produced by the land-based silk routes, including the coming of Islam and Nestorian Christians to China, and travelers to China during the vast Mongol Empire including Marco Polo, It also documents the opening of maritime silk routes through the voyages of the Chinese admiral Zheng He to Africa at the beginning of the 15th century.

#### HIST 302 China in Global Perspective 2: The Internationalization of Modern China (4 credits)

This course studies how foreign relations have shaped modern China from the Opium War to Alibaba. Topics include commercialization, militarization, and industrialization in the making of the modern state; the international education of Chinese at home and abroad; foreigners in China; the international evolution of Chinese enterprise under capitalism and socialism; the People's Republic and the socialist world economy of the 1950s and 1960s; the "international development of China" as conceived by Sun Yat-sen, and the birth of the modern infrastructure state; the Chinese diaspora and the re-opening of China after 1978; contemporary China's state-led and private investments abroad and the emergence of a Chinese global citizenry.

# HIST 303 China and the US Comparative 1: The United States and China in War and Revolution (4 credits)

This course looks at the Chinese-American alliance during World War II from multiple perspectives. What did the partners in this anti-Japanese alliance have in common? What was the level of their mutual understanding? What was the role of key decision-makers in Chongqing, Washington, and Yanan? How did the various actors imagine Chinese-American relations after the war? What can we learn from a Chinese-American alliance that was at once successful and fragile?

# HIST 304 China and the US Comparative 2: The World of Universities in China and the United States (4 credits)

The Unites States is home to many of the world's leading universities, at present. China has developed the fastest growing system of higher education—in quality as in quantity—in the world. What are the strengths and weaknesses of these systems, each of which is very diverse? How can we best compare admissions systems? Governance systems? Research results? And Educational outcomes? What can each system learn from the other?

#### HIST 305 Special Topics in History of Institutions (4 credits)

This special topics course focuses on the historical development of a specific set of institutions in China, such as the evolution of health care, social welfare, military organizations, or child

and family institutions over time. In so doing the course provides an opportunity for students to dive deeply into the historical evolution of institutions as a way to understand the development of modern China in a specific sphere. In this way students gain a deep, specialized knowledge in the history of a particular area, and then demonstrate how that knowledge can be applied more broadly to better understand the historical evolution of modern Chinese society.

## HIST 306 The United States and China in War and Revolution (4 credits)

This course looks at the Chinese-American alliance during World War II from multiple perspectives. What did the partners in this anti-Japanese alliance have in common? What was the level of their mutual understanding? What was the role of key decision-makers in Chongqing, Washington, and Yanan? What was the experience of this alliance from the perspective of ordinary soldiers and the civilians they encountered? How did the various actors imagine Chinese-American relations after the war? What can we learn from a Chinese-American alliance that was at once successful and fragile?

#### HIST 307 Cold War America (4 credits)

This course explores the nearly 50 year conflict between the superpowers of the US and USSR and considers the domestic impact of America's "cold war" against communism. It assesses both the ideological clash and the economic conflict between capitalism and state control. Topics include the development of the atomic bomb, George Kennan's "containment" strategy, the moon race and military and technology competition and the key historical developments such as the Korean War and the Cuban Missile Crisis, as well as relations with China and US influence in Third World countries.

## HIST 308 Immigration and the American Experience (4 credits)

This course studies immigrants and immigration policy in the United States from 1850 to the present, with a focus on the origins and power of immigrant exclusion during three waves of migration: Northern European and Asian migrations between 1850 and 1880; Eastern European, Latin American, and Asian migrations, 1880-1920; and Latin American, African, and Asian migrations, post 1965. The course examines the roles of immigrants in shaping policy debates, citizenship rights, labor movements, and American culture, past and present. The course also considers migration patterns and policies in comparison to other major immigrant destinations.

# HIST 311 Documenting Durham and the New South (4 credits)

The course trains students to document and represent Durham past and present with digital media. Students learn how to digitize historical and cultural materials, research in archives and public records and present information through various forms including web pages, databases, maps, video and other media. In addition to producing digital representations of

historical materials, students learn more broadly how to think about and analyze the social impact of new representations of place and space.

#### HIST 312 Southeast Asia and the Rise of Global Trade (4 credits)

Southeast Asia, located at the center of the seaborne Silk Road, is one of the great global crossroads of economic and cultural exchange. For two thousand years it's been a magnet for merchants, missionaries, pilgrims, adventurers, and mercenaries from India and China, the Middle East, and eventually from Europe. Globalization is sometimes thought to be a feature of modernity, but in Southeast Asia global cultures have been mixing for millennia. This course begins with the peopling of Southeast Asia, the rise of global trading entrepot, and concludes in the 16th C. with the dawn of European colonization.

#### HIST 313 Southeast Asia from the Age of Imperialism to the Global Cold War (4 credits)

This course takes a comparative historical approach to contemporary global issues in various temporal and geographical contexts. Students will focus on issues that emerged in the modern era and may include such topics as terrorism and national security, environmental protection and degradation, resource distribution and trade, health and welfare, and cultural and religious diversity. Students explore the nature of historical change and continuity and will apply historical methods of research and analysis as they investigate the formation and development of particular global issues. The specific case studies and themes in the course will vary by term and instructor.

# HIST 314 Writing the History of War (4 credits)

This course examines the literary and visual representations of war and mass violence in comparative and historical perspective. Remembering war means remembering suffering and death, and discourses of mourning during and after war come in many forms. Students will identify how war generates complex and divergent narratives that shape collective memories of mass violence in the past and influence the use of militarized violence in the present.

## HIST 315 Why Be a Bandit? (4 credits)

Bandits and outlaws have historically played a unique role in popular imagination. In the Chinese classic Water Margin, outlaws flee tyrannical administrators but eventually make their peace with the emperor. Robin Hood occupies an equally ambivalent position between outlaw and elite roles. Seventeenth and 18th-century Atlantic pirates were feared, but their ships are viewed by scholars as laboratories for democratic experiment. Pirates, bandits and insurgents often occupy similar marginal spaces between illegality and social legitimacy today. This course will study this ambiguous status, through historical cases and ending with banditry and border violence in Central Africa and in North America.

# HIST 410 The Spice Race: How the Spice Trade shaped our World (4 credits)

Before the Industrial Revolution, the global economy was driven by spices, and other rare and exotic commodities, many sourced from Asia. The global competition to acquire and monopolize spices—the "Spice Race"—was a great engine for world history and economic development from c. 1250-1800. It made "spiceries", like Southeast Asia, centers of global trade and cultural exchange. This trade expanded the power of Asia states; drove European exploration; inspired scientific research; and became a key driver for the European colonization of Asia, and the world. The "Spice Race" provides a fascinating lens on our modern economic and political order.

# HIST 411 Seeing History from the Mountains and the Seas: Ethnographic histories of Asia (4 credits)

History is told from the perspective of nation-states and their people. This class reverses this practice, asking: "What does history look like from an outsider's perspective?" Asia is home to 2,500,000 square kilometers of mostly interconnected mountain lands. The upland people living there have long been outside of state control. On the opposite spectrum are boat-dwelling sea-nomads who rarely set foot on land, and follow migrating sea life across national boundaries. How do sea and mountain people understand history? Their own? And the nations around them? Our class will introduce and utilize ethnographic approaches to historical study and analysis.

# HIST 412 Global Labor History (4 credits)

What is the profile of the worker of the world? Though there are sophisticated social histories of the Global South, the overwhelming majority of works in labor history dwells on the figure of a white, male, free, waged worker of the Global North. This course challenges such a myopic conceptualization of the worker. Taking the world between 1700 CE and 2000 CE as the point of reference, it examines interdisciplinary approaches to study the social history of work and workers. It presents a far more diverse figure of the worker, and her/his subjectivity through the lens of a global understanding of institutions of control and oppression such as commerce, gender and race.

Courses with Course Subject: Institutions and Governance (INSTGOV)

INSTGOV 490 Senior Seminar: Advanced Topics (4 credits)

# **Courses with Course Subject: Integrated Science (INTGSCI)**

# **INTGSCI 101: Integrated Science 1 (4 credits)**

This course focuses on the concept of energy and its relevance for explaining the behavior of natural systems. The conservation of energy and the transformations of energy from one form to another are crucial to the function of all systems, including familiar mechanical devices, molecular structures and reactions, and living organisms and ecosystems. By integrating perspectives from physics, chemistry, and biology, this course helps students see both the elegant simplicity of universal laws governing all physical systems and the intricate mechanisms at play in the biosphere. Topics include kinetic energy, potential energy, quantization of energy, energy conservation, cosmological and ecological processes.

Prerequisite(s): MATH 101

## INTGSCI 102: Integrated Science 2 (4 credits)

This course focuses on the collective behavior of systems composed of many interacting components. The phenomena of interest range from the simple relaxation of a gas into an equilibrium state of well-defined pressure and temperature to the emergence of ever increasing complexity in living organisms and the biosphere. The course provides an overview of some fundamental differences between traditional disciplines as well as indications of how they complement each other some important contexts. Topics include thermodynamic (statistical mechanical) equilibrium, fundamental concepts of temperature, entropy, free energy, and chemical equilibrium, driven systems, fundamentals of biological and ecological systems.

Prerequisite(s): INTGSCI 101

Courses with Course Subject: Italian (ITALIAN)

# ITALIAN 25 Advanced Intermediate Italian (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Italian.

Courses with Course Subject: Japanese (JAPANESE)

#### *JAPANESE 23 Intermediate Japanese (4 credits)*

Credit for Advanced Placement on the basis of the College Board Examination in Japanese.

# **Courses with Course Subject: Latin (LATIN)**

### LATIN 25 Introduction to Literature (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Latin.

# **Courses with Course Subject: Literature (LIT)**

## LIT 102 Introduction to Literary Theory Writ Large (4 credits)

What are the philosophical, historical, political and aesthetic formations of literature? Can the genre such as the novel be universalized across time and space? What is the relationship between literature and society, arts and politics, form and content? Rather than exclusively focusing on Western literary theory, this course takes a global approach and includes a representative diversity of traditions and theorists of literature and aesthetics: Walter Benjamin (Germany); Alain Locke (US); Lu Xun, Wang Hui (China); Natsume Soseki, Karatani Kojin (Japan); Chikwenye Okonjo Ogunyemi (Nigeria, US); Gloria Evangelina Anzaldúa (Chicana, US), etc.. The aim is to pluralize our point of reference on how literature is defined and implicated in the process of colonialism, neocolonialism and postcolonialism.

# LIT 104 The American Romance of Self-Making (4 credits)

This course foregrounds the Protestant roots of the U.S. literary imagination. It introduces the preeminent form of America's diverse literatures, which is the narrative, or romance, of the struggle for self-determination, most often a novel or memoir focused on a protagonist's search for freedom, maturity, and/or bicultural virtuosity. The course begins with examples of the genre including: the Protestant pilgrimage story; its secularization by Franklin; its philosophical working out by Melville and Emerson; its leveraging of ecological attentiveness by Thoreau; its sentimentalization in the fallen women plots and captivity narratives; its political mobilization in the slave narrative and prison memoir; and its apotheosis in Whitman's "Song of Myself" and Dickinson's poems.

#### LIT 105 The Epic of America (the novel) (4 credits)

This course introduces a range of works from the US canon that engage the concept of travels in relation to the themes of race and slavery, gender and sexuality, and citizenship and empire. Through reading some great American novels, we will explore travels and mobility from pre-Civil War to modern America, and from the slave-holding south to multiracial and multicultural metropolises both within and beyond the US borders. By drawing connections between these great American novels, we will discuss how they collectively cross and challenge national, geographical, and political boundaries of the color line—and importantly—how they resonate with Duke Kunshan University's core concept of "rooted globalism."

#### LIT 106 American Otherness and Otherness in America (4 credits)

The United States of America is founded on the idea of universal equality with respect to moral worth and fundamental rights. This radical idea, which had no precedent in history, has always been fundamental to America's self-understanding and to its singular place in the community of nations. And yet, the concept of "otherness" has never been far from the surface in American political and cultural life. An official ideology of equality has never been able to eliminate real inequalities and exclusions that have produced, for some, feelings of entitlement or special distinction, and for many others, feelings of solitude, exclusion, or powerlessness. A sense of singularity, non-belongingness, apartness, or exceptionalness characterizes many of the most distinctive aspects of American culture. This tension between what America claims to stand for — a harmonious society in which everyone has equal moral worth and equal rights — and the reality of daily life for those who feel for whatever reason that they stand apart from the whole will be the subject matter of this course. This subject will be approached by reading foundational texts in which the ideology of equality is articulated, and by considering a wide range of other materials in which this ideology is explored, tested, or challenged.

# LIT 107 From Data to Narrative: A Workshop in Non-fiction Writing (4 credits)

In our daily lives we are overrun with data, endless bits of information about our environment, health, location, preferences and social contacts. Walter Benjamin has decried this as a modern condition of being bombarded with data, but with no ability or effort to synthesize it into the narrative form in which humans can process and intake it. This course will explore the genre of non-fiction writing as a means to effectively communicate various forms of data. Readings will include examples of leading non-fiction writers such as Sven Lindqvist in cultural studies and history, and Simon Singh in science. The course will also cover basic conventions of citation and reference. Students will practice researching and writing historical, biographical or other fact-based information into narrative form. During the semester, student will also workshop their own researched narrative piece.

#### LIT 108 Love and Dreams on the Chinese Stage (4 credits)

From the fourth century BCE onwards, the device of the dream has allowed Chinese writers, performers and intellectuals to explore social transgression and other liminal states of being. We will examine dreams in wide array of texts from Zhuangzi to the plays of Tang Xianzu and Dream of the Red Chamber in order to understand core humanistic concerns such as love (qing) and the futility of earthly desire and ambition. With a focus on kunqu, students will engage with Chinese drama (original or in translation) both in recording and by visiting live performances.

#### LIT 201 Asian-American Arts and Letters (4 credits)

This course examines the history of Asian-descent literature including fiction, memoir, poetry, drama) and, to a lesser extent, expressive cultures (film, martial arts, music) with special

emphasis on Chinese America. Topics include broad themes of cultural identity, memory and belonging, gender and class, as well as specific issues of the relationship between diaspora communities in the US and national cultures in Asia. Texts are placed within the context of the history of Asian American acclamation, focusing on tensions between cultural assimilation into mainstream America and the pressure to maintain distinctive cultural identities.

#### LIT 202 African American Literature and Culture (4 credits)

This course examines the history of African narrative, drama, poetry, and such expressive arts as the sermon, the political address, and popular music. Narratives are placed in the context of the history of slavery, emancipation and the continuing struggle for civil rights. Topics include: questions of self-identity and American citizenship; the reception of African American literature overseas; the construction of pan-African identities and politics; literature of the African American diaspora; and the concept of home. Students will gain a cross-cultural understanding of the African American experience and its ongoing significance in American life and politics.

#### LIT 203 Reading Empire: Anglophone, Francophone, Sinophone and Japanophone (4 credits)

We are familiar with categories such as Anglophone and Francophone that describe literature written in English and French outside of England and France, respectively. We are less, however, less acquainted with Sinophone and Japanophone literature as objects of study. What the various –phone literatures have` in common is the depiction and contestation against the imperial centers from the peripheries. From Achebe's *Things Fall Apart* to Duras's *The Lover*, from Yi Kwangsu's *Heartless* to Tashi Dawa's *A Soul in Bondage*, this course examines the histories, languages, and philosophies of literatures that challenge the normative and normalizing logic of empire beyond formal imperialism and colonialism.

#### LIT 204 Online Novels and the Chinese Public Sphere (4 credits)

Online literature constitutes the largest readership and a booming economy in China today. Popular genres include science fiction, urban leisure, martial arts, historical fiction and horror. Successful online novels have millions of followers and are often turned into games, TV dramas and feature films. Subscribers are free to comment on the websites and the fictions they host. How do we understand the proliferation and success of this online literature and its relation to the public sphere? By analyzing the content and the form of online literature in China, the class examines the popularity of online fiction and its socio-economic conditions.

## LIT 205 American Lyric Across Borders (poetry) (4 credits)

After Whitman and Dickinson's Romantic call to the world beyond U.S. borders, this course turns to the controversy between the rootedness of Frost, William Carlos Williams, and Langston Hughes and the internationalism of Stevens, Eliot, H.D. (including the Sino-philia of Pound), both of which can also be seen as belated forms of Romanticism. Possible attention to

later explorers of such issues as Robert Duncan, Gwendolyn Brooks, Sylvia Plath, and Frank O'Hara; to the populist challenge of song lyric (blues, tin pan alley, folk, rock, hip-hop); or to the problems of translation and translatability.

#### LIT 206 Early Literatures from Colonization to Revolution (4 credits)

Columbus and other narratives of European exploration, conquest, and settlement; the interplay of Puritan literature (Bradford, Winthrop, Wigglesworth, Mather, Bradstreet), Native oral traditions, Phyllis Wheatley's poetry, and early captivity narratives; the pre-revolutionary novel (Rowson, Foster, C.B. Brown); and the revolutionary texts (*The Federalist Papers*).

## LIT 207 The American Renaissance and Its Rivals (4 credits)

A course on the major antebellum prose writers (Emerson, Thoreau, Melville, Hawthorne), the storytellers of enslavement (Douglass, Jacobs, Equiano, Brown) and Native displacement (Child, Sedgwick), and the poetry (Whitman before and after the war, Dickinson, possibly late Melville) that ensued.

# LIT 208 From Cool Japan to the Korean Wave: Popular Culture from East Asia (4 credits)

The hegemony of American popular culture notwithstanding, cultural products from Japan and South Korea are becoming significant players in the globalization of culture. From the de-Disneyfied anime to the hybridized R&B K-pop, these cultural products challenge American cultural domination, and inspire alternate forms of aesthetics, participation and enjoyment. This course examines the historical formation of Japanese and Korean popular culture, focusing on their contested cultural meanings at the national, regional, and global scales. Some of the issues we will consider include: cultural imperialism, fandom, the role of the state and the development of cultural industry, representations of race and gender, capitalism and transnationalism.

#### LIT 209 Critical Inter-Asia: Rethinking Local and Global Connections (4 credits)

This course considers a variety of literary texts from the perspective of the nexus of cultures and societies in Asia. It emphasizes critical, transnational and interdisciplinary perspectives on two or more Asian cultures and their interactions in the world. In addition to providing the critical theoretical tools to analyze the production and reception of inter-Asian texts, the course will cover a representative variety of texts including history, literature, current affairs, cinematic, visual, and pop-cultures. By framing these texts in their local, regional, and global contexts, a comprehensive critical analysis will be developed.

## LIT 210 Robots and Monsters: Unruly Human Creations in World Literature (4 credits)

What if humans had the power to create intelligent life. What would they do with that power? What would such creatures be like? These questions have captivated the imagination of storytellers for thousands of years. Prometheus stole the power to create life from the Greek gods. The Rabbi of Prague brought a clay creature to life with magical incantations. Frankenstein accomplished it with science on the operating table. And computer programmers try to build such creatures with AI technology. In stories, the end is always the same: the creature gets out of control, it threatens its creator and needs to be subdued. In this course, we will read stories of human effort to bring to life their own creations. We will discuss the literary features of such fantastical creations as the Golem, Frankenstein's monster, Androids and AI. Over the semester we will come to appreciate the human desires and fantasies associated with this figure, and ask what these robots and monsters can tell us about our own humanity.

# LIT 211 Politics and Literature (4 credits)

In the past, the poet was regarded, not as an antipolitical bohemian nor as a political partisan, but rather as a wise teacher who could help us to understand the drama of human life as a whole and the drama of political life in particular. The goal of this course is to investigate the nature of politics and human nature by studying a number of masterpieces of classical literature. As we study these works, we will consider such themes as the equality of the sexes, democracy and aristocracy, science and politics, religion and politics, love and politics, and ambition and politics.

## LIT 291 Independent Study in Literature (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### LIT 301 The Realist Moment (4 credits)

This course focuses primarily on realism (Howells, James, Gilman, Harper, Johnson), naturalism (Dreiser, Norris, Crane), and regionalism (Twain, Jewett, Chopin, Chesnutt) during the rise of consumer-managerial capitalism, first-wave feminism, and Jim-Crow Reconstruction. Possible attention to early utopian fiction (Adams, Bellamy, Gilman, Howells) or the impact of journalism (Dreiser, Crane, Henry Adams, Jane Addams, and the muckrakers) on fiction.

# LIT 302 America's Novel Modernity (4 credits)

This course is focused on the fiction, primarily the novel, that distinguishes the American literary response to the phenomena of "modernity" in the 1920s and 1930s: modernization, urbanization, the rise of consumer and finance capitalism, the Harlem Renaissance and "New Negro" Movements, the anti-immigration and Indian citizenship acts, the press of ethnic upward mobility, and the European literary experimentation called "modernism," the worldentailing crash of the U.S. stock market. To be drawn from the works of: Stein, Cather, Wharton, Fitzgerald, Hemingway, Dos Passos, Larsen, Toomer, Schuyler, Hurston, Barnes, Hammett, Roth, McKay, Faulkner, DiDonato, Steinbeck.

#### LIT 303 The Literary Arts of the Cold War (4 credits)

This course focuses on the fictional, theatrical, cinematic, poetic, and new-journalist representation of the Cold War and its "Hot" manifestations (the Korean and, especially, the Vietnam War, as well as the violent turns in U.S. Radicalism). From the rise of postmodernism and the Beat era (Kerouac, Ginsberg, O'Connor, Williams, Miller) through treatments of the Civil Rights Movement, the New Left, and various manifestations of the Counter Culture (Eastern religions, the sexual revolution, communes, Afro-naturalism, Rowan and Martin's *Laugh-In*), especially the anti-War Movement and Black Protest movements, to whatever of the 1970s (belated Vietnam films, feminist impact, etc.) works for closure.

## LIT 304 The Center Stage of Ethnic and Women's Writing (4 credits)

Women's, ethnic, and especially ethnic women's writing from the breakthroughs of Walker, Morrison, Hong Kingston, Bambara, Silko, Joan Chase, and Paule Marshall to the glory days of Erdrich, Naylor, Alvarez, Cisneros, Anzaldúa, Jen, Kogawa, Adrienne Kennedy, Suzan-Lori Parks, and – of course – Morrison again, along with their male dissenters and allies, such as Ishmael Reed, Charles Fuller, Tony Kushner, Charles Johnson, Chang-Rae Lee, Oscar Hijuelos, Richard Rodriguez, David Henry Hwang, Junot Diaz, and Ron Hansen.

#### LIT 305 The U.S. and the Contemporary Global Imagination (4 credits)

This course treats issues of the globe in the U.S. and the U.S. in the globe, as imagined in both Maximalist fiction of various orders (DeLillo, Wallace, Silko, Butler, Delaney, Chabron) and the auto-ethnographic and multicultural contact novel (Morrison, Lee, Cole, Díaz, Shteyngart, Adichie, Hoessini, Hamid, Beatty, Whitehead) centered in the multicultural U.S.--as well as whatever global anglophone writing (Sebald, Mitchell, Coetzee), the graphic novel (Speigelman, Satrapi, Sacco, Eisner, Bechdel, the Hernandez brothers), or serial television (*The Sopranos, The Wire, Breaking Bad*) works for a particular semester.

## LIT 306 Melodrama East and West (4 credits)

This course examines melodrama as a genre in literature and as a mode of representation in film and other media. In examining representative works the course pays attention to key issues in cultural theory, including: gender construction, class formation, racial recognition, and national identity-building. The course places equal emphasis on texts from US and Chinese cultures and uses a comparative method to explore the politics of cross-cultural representation in both societies, leading to a critical understanding of how China is represented in US melodrama, and vice-versa.

## LIT 307 Digital Storytelling (4 credits)

This course introduces the theory, method, and practice of digital storytelling. Students will learn to analyze digital storytelling in various media forms and modes of production, and evaluate the cultural impact of new media narratives. They will explore digital storytelling affordances including text, video, audio, design, animation, and interactivity. Students will gain hands-on experience developing digital narratives and creating digital critiques. No specific digital media authoring experience is required.

#### LIT 308 American Icons (rhetoric and performance – pulpit/address/theater/music) (4 credits)

A study of the works and dramatized presence of any number of iconic figures on America's cultural stage, which varies each semester according to the expertise of the instructor. The course could have a pre-Revolutionary focus, treating semi-mythic figures such as Bradford, Wild Bill Hickock, Pocohantas, Morton, Adams and Hamilton. It might look at mid-19<sup>th</sup> century such as Andrew Jackson, Sitting Bull, Abraham Lincoln, John Brown, Fanny Fern, Thomas Dartmouth Rice, "Little Eva," "Stagger Lee," and "John Henry." Or it will focus on more recent icons, from Teddy Roosevelt, Harry Houdini, Bessie Smith, Louis Armstrong, Duke Ellington, Valentino, and Mae West in the early decades to Billie Holiday, Frank Sinatra, and Judy Garland (to cite only the singers) at mid-century to Kennedy, Malcolm X, and Martin Luther King in the sixties (to cite only the politicos) or even Madonna, Tupac, Gaga, Beyoncé and Kendrick Lamar (back to the musicians). A study of the interplay among their arts, their celebrity personae, and their impact on ethnic, national, and international scenes.

# Courses with Course Subject: Material Science (MATSCI)

## MATSCI 201 Fundamentals of Material Sciences (4 credits)

This is the introductory lecture class for sophomore students in Materials Science at Duke Kunshan University. This course is an introduction to topics fundamental to materials science: structure, bonding, and thermodynamics. Bonding is the foundation of structure, and the structure provides constraints on the thermo-dynamic properties of materials. These topics are

intimately related and are required for a full understanding of materials' synthesis, fabrication, and processing.

Prerequisite(s): INTGSCI 102; or CHEM 110 or 120, and PHYS 121

## MATSCI 202 Mathematical Method for Materials Science (4 credits)

This course focuses on providing students with mathematical knowledge to understand structure-property relationship in materials. The course will be based on "Advanced Calculus for Applications", which is a textbook designed for undergraduate students with interests in materials science and engineering. Topics include: Number Systems and Algebra of Complex Numbers, Elementary Complex Functions, Analytic Functions, Complex Integrals, Taylor Series, Laurent Series, Differential Equations, etc.

Prerequisite(s): MATH 201

## MATSCI 301 Materials Synthesis and Characterization (Lab) (4 credits)

This lab course is designed to expose student to synthesis and characterization methods commonly used in materials science. Solution based methods, chemical vapor deposition, solid-solid reaction, SEM, TEM, x-ray diffraction RAMAN, IR, and electrochemical characterization will be the topics with which students will have hands-on experience.

Prerequisite(s): MATSCI 201

## MATSCI 302 Electronic, Optical and Magnetic Properties of Materials (4 credits)

This course discusses the electronic, optical and magnetic properties of materials, and how the properties are related to their electronic and molecular structures. Specific examples of important materials will be discussed in the class, including materials for electronic devices, materials for electro-optical devices, optical fibers, solar cells and other devices. How the chemical composition and physical structure changes the properties at nanoscale will also be a major topic of discussion.

Prerequisite(s): MATSCI 201, PHYS 121, MATH 201

#### MATSCI 401 Mechanical Properties of Materials (4 credits)

The course will discuss the origin of mechanical properties in materials, mostly solid-state materials. Topics will include: continuum elasticity and plasticity, slip geometry and dislocation theory, Strengthening mechanisms in metals and alloys, thermal effects, creep, fracture and fatigue etc. This course will include basic mechanisms and engineering analysis.

Prerequisite(s): MATSCI 201, PHYS 121, MATH 201

Courses with Course Subject: Mathematics (MATH)

MATH 21 Introduction to Calculus I (4 credits)

Credit awarded on the basis of national/international examinations in mathematics such as

College Board, International Baccalaureate, British Advanced Level.

MATH 22 Introduction to Calculus II (4 credits)

Credit awarded on the basis of national/international examinations in mathematics such as

College Board, International Baccalaureate, British Advanced Level.

MATH 101 Calculus (4 credits)

This course covers the elements of basic calculus using introductory Newtonian physics both as a source of example problems and as the paradigmatic application of calculus to the description of natural phenomena. Newton's fundamental laws of motion are framed in mathematical terms involving derivatives, so calculus techniques are essential to the analysis and prediction of natural phenomena. The application of calculus to Newtonian physics also serves as a platform for analogous reasoning about models of social, political, and economic

systems.

Prerequisite(s): Familiarity with standard elements of algebra, geometry, and elementary functions (trigonometric, exponential, and logarithmic) at the high school level, or consent of

the instructor.

MATH 101H Calculus Honors (4 credits)

This course offers rigorous treatment of topics in MATH 101. Topics of this course include

limits, continuity, differentiation, integration, and related applications.

Prerequisite(s): Students are required to take DKU Math Placement Test and receive a "Honor

pass" on the test, or Consent of the Instructor

MATH 201 Multivariable Calculus (4 credits)

Main topics of this course include vectors and vector functions, the geometry of higher dimensional Euclidean spaces, partial derivatives, multiple integrals, line integrals, vector

fields, Green's Theorem, Stokes' Theorem and the Divergence Theorem.

Prerequisite(s): MATH 101

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# MATH 202 Linear Algebra (4 credits)

Systems of linear equations and elementary row operations, Euclidean n-space and subspaces, linear transformations and matrix representations, Gram-Schmidt orthogonalization process, determinants, eigenvectors and eigenvalues; applications.

Prerequisite(s): MATH101

#### MATH 205 Probability and Statistics (4 credits)

This course serves as an introduction to probability theory and statistics. It covers basic concepts of the probabilistic description of independent events, some types of probability distributions that frequently arise, some statistical measures used to characterize probability distributions, the central limit theorem, common types of processes and the distributions they generate, the statistics typically employed for testing the explanatory power of a model or hypothesis.

**Prerequisite(s):** MATH101

#### MATH 291 Independent Study in Math (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

## MATH 293 Research Independent Study in Math (2 or 4 credits)

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Students may repeat independent study courses.

**Prerequisite(s):** Consent of instructor required.

#### MATH 301 Advanced Introduction to Probability (4 credits)

Advanced introduction to basic, non-measure theoretic probability. Topics include random variables with discrete and continuous distributions. Independence, joint distributions, conditional distributions, generating functions, Bayes' formula, and Markov chains. Rigorous arguments are presented for the law of large numbers, central limit theorem, and Poisson limit theorems.

Prerequisite(s): MATH 201

# MATH 302 Numerical Analysis (4 credits)

Introductory course on numerical analysis. Topics include: Development of numerical techniques for accurate, efficient solution of problems in science, engineering, and mathematics through the use of computers. Linear systems, nonlinear equations, optimization, numerical integration, differential equations, simulation of dynamical systems, error analysis.

Prerequisite(s): MATH 201, MATH 202

# MATH 303 ODE and Dynamical Systems (4 credits)

Theory of ordinary differential equations with some of the modern theory of dynamical systems. Topics include differential equations and linear systems of DEs, the general theory of nonlinear systems, the qualitative behavior of two-dimensional and higher-dimensional systems, and applications in various areas.

Prerequisite(s): MATH 201, MATH 202

## MATH 304 Numerical Analysis and Optimization (4 credits)

This course covers Gaussian elimination, LU factorization, Cholesky decomposition, QR decomposition, Newton-Raphson method, binary search, convex function, convex set, gradient method, Newton method, Lagrange dual, KKT condition, interior point method, conjugate gradient method, random walk, and stochastic optimization.

Prerequisite(s): MATH 201, MATH 202, COMPSCI 201

#### MATH 305 Advanced Linear Algebra (4 credits)

This course covers pseudo inverse, inner product, vector spaces and subspaces, orthogonality, linear transformations and operators, projections, matrix factorization, and singular value decomposition.

Prerequisite(s): MATH 201 and MATH 202

## MATH 306 Number Theory (4 credits)

Divisibility properties of integers, prime numbers, congruences, quadratic reciprocity, number-theoretic functions, simple continued fractions, rational approximations; contributions of Fermat, Euler, and Gauss.

Prerequisite(s): MATH 201

## MATH 307 Complex Variable (4 credits)

Introduction to analysis of functions of complex variables. Topics include complex numbers, analytic functions, complex integration, Taylor and Laurent series, theory of residues, argument and maximum principles, conformal mapping.

Prerequisite(s): MATH 201, MATH 202

## MATH 308 Real Analysis (4 credits)

Topological structure of the real number system; rigorous development of one-variable calculus including continuous, differentiable, and Riemann integrable functions and the Fundamental Theorem of Calculus; uniform convergence of a sequence of functions.

Prerequisite(s): MATH 101 or 101H

#### MATH 401 Abstract Algebra (4 credits)

An introduction to the principles and concepts of abstract algebra. Abstract algebra studies the structure of sets with operations on them. The course studies three basic kinds of "sets with operations on them", called Groups, Rings, and Fields, with applications to number theory, the theory of equations, and geometry.

Prerequisite(s): MATH 202

#### MATH 403 Partial Differential Equations (4 credits)

Topics include heat, wave, and potential equations: scientific context, derivation, techniques of solution, and qualitative properties. Topics to include Fourier series and transforms, eigenvalue problems, maximum principles, Green's functions, and characteristics.

Prerequisite(s): MATH 303

#### MATH 404 Stochastic Modeling & Computing (4 credits)

Focusing on stochastic process and stochastic simulations. Topics include discrete-time and continuous-time Markov chains, Poisson processes and renewal theory, branching processes, generating random numbers and variates, Monte Carlo simulation, statistical analysis of simulation results, variance reduction techniques, etc.

Prerequisite(s): MATH 205

#### MATH 405 Methods for Data Analysis (4 credits)

Geometry of high dimensional data sets. Linear dimension reduction, principal component analysis, kernel methods. Nonlinear dimension reduction, manifold models. Graphs. Random

walks on graphs, diffusions, page rank. Clustering, classification and regression in high-dimensions. Sparsity. Computational aspects, randomized algorithms.

Prerequisite(s): MATH 202

#### MATH 406 Mathematical Modeling (4 credits)

Introduction to techniques used in the construction, analysis, and evaluation of mathematical models. Individual modeling projects in biology, chemistry, economics, engineering, medicine, or physics. Mathematical techniques such as nondimensionalization, perturbation analysis, and special solutions will be introduced to simplify the models and yield insight into the underlying problems.

Prerequisite(s): MATH 403, or consent of instructor

## MATH 408 Differential Geometry (4 credits)

A first course to differential geometry focusing on the study of curves and surfaces in 2- and 3-dimensional Euclidean space using the techniques of differential and integral calculus and linear algebra. Topics include curvature and torsion of curves, Frenet-Serret frames, global properties of closed curves, intrinsic and extrinsic properties of surface, Gaussian curvature and mean curvatures, geodesics, minimal surfaces, and the Gauss-Bonnet theorem.

Prerequisite(s): MATH 201, MATH 202

## MATH 409 Topology (4 credits)

Elementary introduction to topology. Topics include surfaces, covering spaces, Euler characteristic, fundamental group, homology theory, exact sequences.

Prerequisite(s): MATH 202

## MATH 410 Modeling Biological Systems (4 credits)

Students will determine the topics covered in this research seminar on mathematical methods for modeling biological systems based on their own research interests. Students will review mathematical methods of differential equations and probability, and discuss how to use mathematical techniques in development of models in biology. The seminar is highly interactive and students are expected to contribute to presentations and class discussions on individual research projects. In the first weeks of the course each student will work with the instructor to agree upon a substantial final individual student modeling project that the student will develop over the course of the class.

Prerequisite(s): MATH 201, MATH 202, BIOL 110

## MATH 450 Measure and Integration (4 credits)

Introduction to analysis of functions of real variables. Topics include Lebesgue measure and integration; L^p spaces; absolute continuity; abstract measure theory; Radon-Nikodym Theorem; connection with probability; Fourier series and integrals.

Prerequisite(s): MATH 308

## Courses with Course Subject: Media and Arts (MEDIART)

#### MEDIART 101 Introduction to Media Studies and the Arts (4 credits)

Media Studies and the Arts explores the cultural significance of the media in the contemporary world. It is a cross-disciplinary field that draws on communication studies, art history, literature, sociology, psychology and philosophy, among others. Particular attention is paid to new media and digital media including those enabled by the technological revolution of the internet age.

# MEDIART 103 Introduction to Moving Image Practice (4 credits)

Like any craft, making movies is something that takes time, study, and, more importantly, practice. Each film is a unique challenge. What works for one film may not work for another. This is what makes learning about filmmaking an ongoing process. This course includes reading, discussing, and studying of the fundamental elements of video production. Strongest emphasis is in the several short exercises to guide students towards a solid understanding of the building blocks of different types of video production. Student will learn to use digital video cameras and audio equipment, learn basic video editing, and create original work.

#### MEDIART 104 Introduction to Photography (4 credits)

An emphasis on how to see with the camera and ways of thinking about photographs. Class assignments accompanied by historical and theoretical readings, lectures, class discussions, and field trips. Course will use photography as a tool for exploring the local community. Learn digital techniques including camera function, Photoshop, ink-jet printing, audio capture and production of audio-visual slide shows. Discuss ethical issues that emerge as a result of digital photographic impermanence.

#### MEDIART 105 Introduction to Film Studies (4 credits)

This course is a wide-ranging introduction to the fascinating world of film and the cinema industry. Here we will look at the language and critical tools we use to understand and interpret films, while considering examples from a variety of geographical, historical, and theoretical backgrounds. Following a primarily historical trajectory, the course will allow students to develop an appreciation of cinema's role in visual culture throughout the 20th

century up to our present day. Understanding how movies function, how they become meaningful for their audiences, and how this relationship between moving images and viewers has evolved during the past 120 years, contributes to our further enjoyment of cinema in its various manifestations. At the same time, this deeper appreciation and knowledge allows us to come to grips with the ways in which movies have had an impact on the broader construction of society and human culture to date.

#### MEDIART 106 The Visual Culture of News, Past and Present (4 credits)

Does news affect us differently if we watch it on YouTube, on PerezHilton.com or on The Daily Show, or if we read it on The New York Times or as a blog post? Do we feel that certain kinds of news-cultural, political, satirical-is more important, or more informative? How did these differences play out in earlier news formats, like periodicals, pamphlets, or almanacs? This class will explore the visual culture of news from Early Modernity to the present by examining the formats and media it has adopted, the ways it designs the page/pamphlet/screen, how it incorporates images, and the relationship of all of this to what the news reports. Our goals in this class are to collectively explore the relationship between text, image, design, and medium.

# MEDIART 108 Love and Dreams on the Chinese Stage (4 credits)

From the fourth century BCE onwards, the device of the dream has allowed Chinese writers, performers and intellectuals to explore social transgression and other liminal states of being. We will examine dreams in wide array of texts from Zhuangzi to the plays of Tang Xianzu and Dream of the Red Chamber in order to understand core humanistic concerns such as love (qing) and the futility of earthly desire and ambition. With a focus on kunqu, students will engage with Chinese drama (original or in translation) both in recording and by visiting live performances.

#### MEDIART 109 Introduction to Visual Culture (4 credits)

This course offers an introduction to central themes in, and methodologies for, analyzing visual culture. Visual Culture is a transdisciplinary field of study that studies the (re)production, circulation, and reception of images as well as everyday practices of seeing and showing in contemporary culture. By focusing on the cultural and social roles of images, the course examines how images circulate through various media including art, design, advertising, video games, pop culture, and digital technologies. Exploring "ways of seeing" the visual culture, students will be able to critically read and understand the images and visuality we live with and within.

#### MEDIART 110 Audio Documentary (4 credits)

Recording techniques and audio mixing on digital editing software for the production of audio documentaries for radio, the web, and podcast. Various approaches to audio documentary work, from the journalistic to the personal; use of fieldwork to explore cultural differences and

histories of place. Stories told through audio focusing on a particular concern such as war and peace, death and dying, environmental change.

## MEDIART 202 Ideas, Imagination, and Creativity (4 credits)

What is creativity? How is creativity related to the artistic process? How can I learn through practice to be more creative? This course first introduces students to major theories about creativity and related fields of innovation and entrepreneurship. Students analyze examples of the creative process in the lives of key artists and creative practitioners. Finally, they also experiment with different creative strategies to help cultivate their own creativity.

#### MEDIART 204 The Photographic Essay (4 credits)

This course teaches the language of photography through the study of classic and contemporary photographic essays and through the completion of assigned photographic essays by the students themselves. Students will learn to make, choose, sequence, and pace their own images for class discussion and for digital projection. During the semester students will complete three assigned photographic essays of at least ten images each. Each essay will be on a particular theme or subject to be announced.

## MEDIART 205 Digital Imaging (4 credits)

With the increasing use of digital media, visual communication is becoming more and more important. This course helps students to express themselves visually and introduces different techniques of Digital Imaging using Photoshop and Illustrator. The focus is not only on retouching and manipulating images, but also on using the computer as a medium to create art and communicate ideas. Digital painting, collages, vector graphics, special effects, matte painting, Photoshop for video and interaction with other media are some of the techniques covered. Photoshop and Illustrator used to introduce single and serial images for print and web output.

#### MEDIART 206 Computer Graphics (4 credits)

This course offers an overview and history of computer graphics as well as an introduction to key software technologies and concepts. These include: coordinate systems and geometric transforms; drawing routines, antialiasing, supersampling; 3D object representation, spatial data structures, constructive solid geometry; hidden-surface-removal algorithms, z-buffer, A-buffer; illumination and shading models, surface details, radiosity; achromatic light, color specification, colorimetry, different color models; graphics pipeline; animation, levels of detail.

Prerequisite(s): Computer Science 201, or consent of the Instructor

# MEDIART 207 Creative Writing and Elements of Story (4 credits)

Stories and storytelling surround us. They have existed since pre-history and continue to fill an essential place in our lives. What goes into telling a story? This is a beginning creative writing course that focuses on igniting the sparks for ideas and shaping ideas into a story. We will emphasize the hands-on exploration of sources for inspiration, idea-formation, building ideas, work-shopping and refining them to form them into a script. We will study the fundamentals of story, structure, character development, genre, building scenes, dialogue, and how to utilize them to write a script for media output including the screen, a podcast, and the stage.

#### MEDIART 208 Comparative Media Systems and Chinese Mass Media (4 credits)

In a globalized media world that is bringing people together, countries still maintain their own media systems. These systems are closely tied to government types, economic structures and culture norms and standards. What are the differences and similarities between the world's different media systems? How does contemporary technology change the way that media systems function? How do countries with different media systems work with each other to disseminate information? The Chinese have played a pivotal role in the dissemination of information to its citizens over time. Currently, the Chinese read and watch news at a higher rate than any other country in the world. This course will explore the evolution of mass media and communication in China over time.

#### MEDIART 210 Media and Arts Practicum (4 credits)

For students of media, it is vital to have some skills in media production or art practice. This course will introduce students to some practical aspects of media and the arts. These might include: creative camera control and lighting; how to code a web page; how to write a news story; how to make a documentary, how to do interviews, how to edit media; cultivation of skills in theater, music or art, among others. An emphasis is placed on understanding and experimenting with contemporary technologies that enable digital communications.

#### MEDIART 211 Media, Arts, and Critical Theory (4 credits)

The course explores key issues in the study of digital media from its beginning to very recent developments. Central themes theoretical of the course generally immediacy/hypermediacy, interactivity, cybernetics, im/materiality of media, network, posthumanism, biomedia, ubiquitous computing, and the recent hype in the independent media industry. Building upon theoretical works that range across a host of disciplines, including literary studies, communication studies, film and media, philosophy, and science studies, the course proposes the development of a critical analytical framework for approaching new media practices and theories. The goal is to analyze what makes new media "new" by comparing them with earlier media practices, as well as to understand how the interactions among digital technologies, practices, and theories influence emerging and

changing spheres of our society. The seminar also examines different forms of visual art and literature that lead and reflect the sociocultural paradigm shifts of digital technologies.

## MEDIART 212 Editing for Film and Video (4 credits)

Two questions a film editor must always ask are: What shot comes next? And, why this shot and not that? In this course, students explore answers for these questions by studying and editing different genres, styles, and forms of film and video. The goal is achieved through expanding students' understanding of editing as both a viewer *and* as a working editor. To that end, in addition to classroom discussion, readings, and screenings of feature films and excerpts, students will complete several editing projects on digital video. These projects are designed to provide both real-world challenges to solve as well as opportunities to experiment. Knowledge of a video editing program is not necessary at the beginning of the class; by the end you should be extremely comfortable with Adobe Premiere Pro.

## MEDIART 301 Experimental Filmmaking (4 credits)

This course engages with poetic and experimental image-making, utilizing techniques that trace a historical trajectory from celluloid to digital. Students are exposed to exploration of cinematographic principles and cameraless experiments. Teaching methods include lectures, discussion, readings and screenings focusing on avant-garde film and digital traditions. Students are required to produce final projects deriving or departing from course materials.

# MEDIART 302 Contemporary Documentary Film (4 credits)

Our subject is the art, content, technology, and life of documentary film. We will study contemporary filmmaking approaches that fall under broad categorization of "documentary," and show how documentary filmmakers choose and interpret their subjects, themes, and points of view. We will analyze the form, technique, and impact of documentary filmmaking. In the process of considering issues of autonomy and power, politics and public policy, we will begin to define the role of documentary art in public dialogue. Although this course does not include instruction in film production, you may well be encouraged to try your hand at documentary filmmaking. In addition to class lectures and screenings, the course may feature guest filmmakers who will introduce their films and follow the screenings with question and answer sessions.

#### MEDIART 303 Documentary Photography and the Cultural Landscape (4 credits)

Emphasis on the tradition and practice of documentary photography as a way of seeing and interpreting cultural life. The techniques of color and black-and-white photography - exposure, development, and printing - diverse ways of representing the cultural landscape of the region through photographic imagery. Issues such as objectivity, clarity, politics, memory, autobiography, and local culture play in the making and dissemination of photographs. The

course will simultaneously consider image content, representations place, landscape, and culture through documentary image.

# <u>MEDIART 304 The On-Going Moment: Presentations of Time in Still and Moving Images (4 credits)</u>

Project-driven studio course exploring time through video and still photography. Management, presentation and trace of time discussed in relation to various forms of art, augmented by examination of concepts of duration, aura, silence and thought as they pertain to still and moving images. Individual and group projects investigate various manifestations of stillness and movement in video and photography, with and without sound. Slices of time in both media examined for their properties of continuity, discontinuity and fissure, with emphasis on rendering meaning in and through time and space.

**Prerequisite(s):** Consent of the instructor is required.

#### MEDIART 305 Producing Docu-Fiction (4 credits)

This course investigates hybrid, genre-defying films that question traditional definitions of documentary and fiction. Emphasis on experimental forms, documentary reenactment, mockumentary and dramatized "true stories." Students utilize both documentary and fiction production techniques, culminating in the production of a final video project.

## MEDIART 306 Foundations of Interactive Game Design (4 credits)

Surveys history, technology, narrative, ethics, and design of interactive computer games. Games as systems of rules, games of emergence and progression, state machines. Game flow, games as systems of pleasure, goals, rewards, reinforcement schedules, fictional and narrative elements of game worlds. Students work in teams to develop novel game-design storyboards and stand-alone games. Exploration of the interplay between narrative, graphics, rule systems, and artificial intelligence in the creation of interactive games. Programming experience not required.

#### MEDIART 307 International Communication (4 credits)

This course will examine the global effects of media, the flow of information, the controls countries impose on communication systems and the effects of Western dominance on world media systems. The course will introduce students to the key theories, concepts, and practices in the broadly defined international communication. Students will examine the giant media companies around the world and discuss the impact of ownership on media messages. The course will look at how advertising, music and news programs affect more than their intended audiences, and look at how technology is changing the global media picture.

# MEDIART 310 Screenwriting (4 credits)

This course introduces students to theory and practice of the process of writing for the screen. We explore visual storytelling and analysis of screenplays and movies in order to develop original stories into screenplay format. Students will learn to recognize and understand proper screenplay format and structure, understand how screenplay writing is a unique style of writing and why, understand character development and power relationships, and have a better understanding of the business of screenwriting. Through the actual writing of a feature length script, students gain hands-on practice on writing and presenting treatments, outlines, scenes, story planning, character development, communicating information, relationships between script and cinematic dimensions, as well as working with studios and editors.

#### MEDIART 311 Cinematography (4 credits)

Practice based investigation of cinematographic principles and visual storytelling techniques in motion picture production. Professional practice is informed and contextualized by screenings, readings, workshops, and in and out of class exercises towards the creation of original work in the context of the history of cinematography. Working with both film and video, students learn and apply fundamental techniques of composition, exposure, frame rate, focus pulling, point of view, camera placement and movement, lighting, and framing people and objects.

## MEDIART 312 Graphic Design in Motion (4 credits)

Motion Design is the creation of animated graphics using graphic design, typography, advertising, photography, animation sound and filmmaking. Students learn the latest technology such as After Effects and 3D softwares but it is the creative intent that motivates the acquisition of technical capabilities. We will learn how to work collaboratively with other students with different skill sets. Emphasis will be on design, conceptualization and the ability to communicate ideas. The course enables students to learn the language and principles of graphic design, to develop a method for solving design problems, to communicate ideas effectively and to create professional quality motion design such as title sequences, logo animation, news reel, that can be integrated into film, life performance or web, using the latest technology combining softwares like After Effects, editing software (Premier or Final Cut Pro) and 3D software, and by creating style frames and storyboards. Familiarity with Photoshop and Illustrator is helpful but not required.

**Prerequisite(s):** Consent of the instructor is required.

MEDIART 390 Junior Seminar: Advanced Topics (4 credits)

MEDIART 490 Senior Seminar: Advanced Topics (4 credits)

# **Courses with Course Subject: Military Science (MILITSCI)**

These credits cannot be counted toward the 136 credit requirement, but they may be counted toward the additional credit requirements for students from the Chinese mainland, Hong Kong, Macau, and Taiwan. (See section on Credits Required for Degrees in Part 3.)

## MILITSCI 101: Military Theory (2 credits)

A lecture course in the field of national defenses and security that includes the national defenses and security of China, international strategic environment, modernized and high-tech equipment, and military thinking.

## MILITSCI 102: Military Skills Practice (2 credits)

A physical practice course which includes formation training, common regulations for military study, physical training, combat training, tactical training, marching, orienteering, mapping, and first aid training. Closed by a military parade.

## **Courses with Course Subject: Music (MUSIC)**

# MUSIC 20 Introduction to Music Theory (Beginning) (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Music.

#### MUSIC 210 Chamber Ensemble (2 credits, CR/NC grading)

Music is said to be the universal language. This course is designed for students to utilize their knowledge of this language to further their understanding of this performing art and gain a deeper insight into group performance. Students will explore new or old repertoire with fellow musicians during the course of the semester under the guidance of the instructor, and will perform in various venues around Kunshan and Shanghai area. Students are required to join weekly rehearsals with assigned groups and all groups will perform in a concert at the end of the semester. This course will also invite guest musicians as coaches to help each individual group. Previous experience in learning and performing a musical instrument is recommended. Consent of the instructor is required. This course may be repeated for credit.

# Courses with Course Subject: Optimal Imaging and Image Processing (IMAGEPRO)

## IMAGEPRO 391 Independent Study in Optimal Imaging and Image Processing (2 or 4 credits)

Individual non-research directed study in a field of special interest arranged on a special topic by an instructor with related interests and expertise, under the supervision of a faculty member, resulting in a significant academic product. Consent of instructor required. Students may repeat independent study courses.

**Prerequisite(s):** Consent of the instructor is required

# <u>IMAGEPRO 393 Research Independent Study in Optimal Imaging and Image Processing (2 or 4 credits)</u>

Research project mentored by an instructor with related interests and expertise, and the major product of which is a substantive paper or written report containing significant analysis and interpretation of a previously approved topic. Course may be taken by junior and senior students who have demonstrated aptitude for independent work. Consent of the instructor required. Students may repeat independent study courses.

**Prerequisite(s):** Consent of the instructor is required

# Courses with Course Subject: Philosophy (PHIL)

#### PHIL 101 Introduction to Western Philosophy (4 credits)

This course focuses on the origins of the European philosophical tradition, with an emphasis on metaphysics, theory of knowledge, ethics and politics. The course reads primary texts of Plato, Aristotle, Lucretius and Epicurus and other key western thinkers in English translation. The course examines the significance of these key approaches to philosophy in the later development of the European philosophical tradition, and considers their relevance for the contemporary global context.

## PHIL 102 Introduction to Classical Chinese Philosophy (4 credits)

This course introduces the foundations of Chinese thought with a focus on the Warring States period (475-221 B.C.E.), a period in which schools of thought like Confucianism, Mohism, and Daoism originally flourished. Students will read selections from the most famous classical Chinese philosophy texts in English translation. The course emphasizes close reading of texts, with a view to understanding their key concepts and issues, as well as forms of argumentation. In so doing, students will think through the key questions that animated intense debate between key schools of philosophy, and examine how these key debates have influenced the development of Chinese culture right through to the present day.

## PHIL 103 Chinese and Mediterranean Philosophy (4 credits)

The early Mediterranean civilizations (Mesopotamia, Egypt, Greece, Rome) and dynastic China have been profoundly influential in the development of world civilizations, and in how human civilization is conceived. How do they compare in their traditions of thought about how one ought to live, theories of government and governance, and methods and aims in study of the natural world? This course offers a basic introduction to early Chinese and Western thought through examination of selected primary texts in English translation. As well as analyzing these approaches to philosophy in their historical and cultural context, the course debates their continuing relevance in a global context.

#### PHIL 105 History of Modern European Philosophy (4 credits)

Modern European philosophy centers on the theories of knowledge, morality and metaphysics of key thinkers of the 17th- and 18th-centuries, notably Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. Together, these thinkers brought to birth a distinctively European approach to humanism, in dialog with science and reason, that has resonated powerfully across the world. This course examines their key arguments by reading selected primary texts, and debates their continued relevance in the contemporary world.

## PHIL 106 Global Philosophy (4 credits)

The Global Philosophy course offers a gateway for students to critically engage with the diverse philosophical traditions that inform the making of the increasingly pluralistic modern world. The aim of the course is to cultivate deep appreciation of diversity and to help students develop a culturally sensible map of the world's philosophical traditions that will help them deal with the compelling challenges in this multicultural age.

#### PHIL 107 What's the Right Thing to Do? Ethics and Justice in the Modern World (4 credits)

This course examines classical and contemporary theories of justice in Western philosophical ethics and applies them to modern dilemmas that have dominated political and cultural conflict in the modern West. These topics include questions of economic justice in relation to capitalism and communism; the question of human rights as a supreme and universal value that cuts across all social and cultural contexts; the profound challenges of slavery, colonialism and racial justice that haunt American politics in the present day; the continuing quest for gender equality; and contemporary issues of gender politics including same-sex marriage and the recognition of transgender and nonbinary identities.

#### PHIL 108 Philosophy and Ethics of Artificial Intelligence (4 credits)

Recent progress in Artificial Intelligence, via machine learning techniques that leverage big data, has made breakthroughs in a variety of domains. While some believe AI is still nothing but a tool, others believe we are on the verge of a technological singularity – the invention of

an artificial superintelligence that will trigger exponential technological advancement that will change humanity in unpredictable ways. In this course we will begin with philosophical reflection on the nature of AI and then consider ethical issues that lie on a spectrum from highly speculative projections regarding the future of AI to highly practical issues that are being generated by actual AI applications being deployed today: internet usage, profiling, and autonomous vehicles among others.

## PHIL 109 Philosophy through Computer Science (4 credits)

In this class we will explore several classic philosophical issues by learning how to program in Python. This is made possible by the close affinity that is shared between a number of computational concepts and their philosophical counterparts. For example, the concept of recursion can help us think about the existence of God by way of infinity. Completing this class will give you rudimentary Python programming skills and the ability to critically engage several philosophical issues. The ideal student will have an interest in both disciplines but have no prior knowledge of either.

#### PHIL 110 Philosophy and Sport (4 credits)

Philosophical questions arise frequently in sporting contexts, and pursuing those questions can be profitable in both directions: on the one hand, emerging issues in sport often require philosophical engagement in order to make progress on a question of practical importance, while on the other hand, reexamining and deploying concepts and theories in the sporting context can helpfully reshape our thinking. The pivotal concepts at the core of this course are fairness and exploitation. We'll examine these concepts through a combination of great works in the history of philosophy, contemporary work in analytic philosophy, and recent sporting controversies

#### PHIL 111 Non-Human Animal Ethics (4 credits)

This course examines the morality of our treatment of nonhuman animals. We will start by considering the cognitive and emotional capacities of some nonhuman animals. After that, the course will be divided into 3 units. Unit 1 will cover ethical questions surrounding the use of animals for food. Unit 2, on animal companionship, will consider what moral responsibilities we have to our animal companions, and how they compare to the responsibilities we have towards our human friends. Finally, Unit 3, on animal captivity, will address moral issues associated with the human practice of using animals for the purpose of entertainment.

## PHIL 202 Problems in Philosophy of Science (4 credits)

This course examines the principal philosophical problems of scientific practice with a view to explaining what science is and how it works. Students will learn how science may be distinguished from pseudo-science, how and why scientific theories change, and whether science can ever give us a fully accurate description of reality. The course focuses on what

constitutes scientific explanation, how experimentation can confirm or deny scientific hypotheses, and the contrast between instrumentalist and realist conceptions of scientific theory. The course also examines the notion of scientific laws, and how these concepts may be challenged by the question of indeterminism that emerges in post-classical science.

## PHIL 204 Theory of Knowledge (4 credits)

Do we know anything at all? If we do, how do we know it? How does knowledge differ from opinion and belief? Perception is a major avenue to knowledge, but what is it and under what conditions can we trust it? Our perceptions are influenced by what we already believe about the world. Does this make our perceptions untrustworthy since our beliefs can often be wrong? These related set of questions, collectively understood as the basic problems of epistemology, have challenged thinkers across the world and over centuries. This course examines a variety of ancient and modern approaches to these questions.

## PHIL 205 Logic (4 credits)

Logic is the study of the conditions of good reasoning and clear communication. Logic is an indispensable tool for an indispensable feature of human life: entertaining, assessing and crafting arguments. This course is designed to equip students with some basic skills in distinguishing good arguments from bad ones by introducing them to formal systems of logic and rules of reasoning. The goals of this course focus on reaching proficiency in particular skills in deductive and inductive logic, largely through practicing their application. The skills cultivated in this class have a broad relevance to critical thinking generally, and so students will leave this course with preparation to extend principles of critical thinking into many domains, both academic and not.

#### PHIL 206 Climate Change Ethics (4 credits)

Climate change has come into focus as a defining problem of the 21st century, but the challenges it presents are not limited to the arenas of engineering, science, and economics. Climate change also represents a challenge for some of our key moral concepts, for our understanding of moral theory, and for our ability to enact morally sensible collective policies and construct morally responsible individual lives. This course will explore ethical dimensions of climate change, including questions concerning moral responsibility for climate woes, possible responses to problematic climate effects, and the implications of climate change for environmental ethics more generally.

## PHIL 301 Philosophy of Mind (4 credits)

This course is an introduction to the basic questions about mind: What is consciousness? Is the mind really like a computer or something quite different? Can thoughts, perceptions, feelings and intentions be explained in terms of events and processes in the brain and nervous system? How do we know there are minds other than our own? Although philosophers across the

world have considered these questions for many centuries, the contemporary study of mind is heavily dependent on more recent scientific discoveries in cognitive psychology, neuroscience and computer science. The course demonstrates how philosophy has rapidly developed through engagement with these sciences.

# Courses with Course Subject: Physics (PHYS)

#### PHYS 25 Introduction to Mechanics (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Physics C: Mechanics

# PHYS 26 Introduction to Electricity and Magnetism (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Physics C: Electricity and Magnetism

#### PHYS 101 Frontiers of 21st Century Physics

Frontiers of 21st Century Physics explore the major subdisciplines of modern physics and their (potential) applications in industry/research. Students learn why society invests so much in physics and what it gets in return, from the origins of electronic devices and novel materials tackling the energy crisis to the large-scale structure of our universe. Students will build up an understanding that modern technologies are developed based on physics, i.e., application of laser in autopilot, magnetic levitation, etc. This course serves as an introductory course to freshman students to give them a taste of modern physics and to inspire their interest in physics.

#### PHYS 121 Integrated Science - Physics (4 credits)

This course is about how to view the world from the perspective of classical mechanics, based on an understanding of the core concepts and theoretical laws. As a science foundation course, it helps students appreciate the elegant simplicity of the universal laws governing the complex systems surrounding us, and it teaches an important approach to identifying, formulating, and solving problems encountered in the physical world. The course begins with the core concepts of classical mechanics – time, space, mass, force, work, energy, momentum – and the physical laws that link them with each other. Students first learn Newton's laws and the universal law of gravitation as they apply to point mass systems. Subsequently, basic concepts of oscillation and waves, rigid body motion, fluid mechanics, thermodynamics and statistical mechanics are introduced, illustrated with real-life examples (e.g., physics of cooking, biosphere as a thermal engine) to help students integrate different science foundation courses by themselves. While

no previous knowledge of physics is required, some background is advantageous. Not open to students who have credits for both INTGSCI 101 and 102.

**Prerequisite(s):** MATH 101. Not open to students who have credits for both INTGSCI 101 and 102.

## PHYS 122 General Physics II: Electricity, Magnetism and Light (4 credits)

This course is the second of a series of two general physics courses that are highly interactive and illustrated with applications from different perspective of sciences and everyday life. Core topics: electric fields, circuits, magnetic fields, Faraday's law, Maxwell's equations, electromagnetic waves, properties of light, geometric optics, wave optics. Additional possible topics: optical instrumentation, quantum physics, selected applications.

Prerequisite(s): INTGSCI 102 or PHYS 121

# PHYS 134 Introductory Astronomy (4 credits)

How observation and scientific insights can be used to discover properties of the universe. Topics include an appreciation of the night sky, properties of light and matter, the solar system, how stars evolve and die, the Milky Way and other galaxies, the evolution of the universe from a hot Big Bang, exotic objects like black holes, and the possibility for extraterrestrial life. High-school-level knowledge of algebra and geometry is required.

Prerequisite(s): High-school-level knowledge of algebra and geometry

#### PHYS 201 Optics and Modern Physics (4 credits)

Introductory treatments of special relativity and quantum mechanics. Topics include: wave mechanics and interference; relativistic kinematics, energy and momentum; the Schrodinger equation and its interpretation; quantum particles in one-dimension; spin; fermions and bosons; the hydrogen spectrum. Applications to crystallography, semiconductors, atomic physics and optics, particle physics, and cosmology.

Prerequisite(s): MATH 201; PHYS 122

#### PHYS 301 Classical Mechanics (4 credits)

Newtonian mechanics at the intermediate level, Lagrangian mechanics, linear oscillations, chaos, dynamics of continuous media, motion in non-inertial reference frames.

Prerequisite(s): MATH 201; MATH 202; PHYS 122

# PHYS 302 Thermal and Statistical Physics (4 credits)

This course focuses on the basics of equilibrium thermodynamics and introduces the concepts of temperature, internal energy, and entropy using ideal gases and ideal paramagnets as

models. The chemical potential is defined and the three thermodynamic potentials are discussed with use of Legendre transforms. It will also cover topics including the power of thermodynamics in gases and condensed matter, phase transitions, probability theory, and quantum statistics.

Prerequisite(s): PHYS 201

## PHYS 303 Introduction to Biophysics (4 credits)

The application of physics theory and experimental techniques to biological systems can be used to answer complex questions. The biological systems examined can range in scale from single molecules, to organelles, cells, tissues and whole organisms and the types of physics applied can include chemical, mechanical, electrical and others. Students will be introduced to physical descriptions of a wide range of phenomena, from molecular and cell mechanisms to the function of the human brain. An additional introductory overview of frontiers in photobiophysics, neurophysics, bioinformatics and synchrotron-based biological spectroscopy will help students to broaden their views.

Prerequisite(s): INTGSCI 102 or PHYS 121; and BIOL 110

# PHYS 304 Electricity and Magnetism (4 credits)

Electrostatic fields and potentials, boundary value problems, magnetic induction, energy in electromagnetic fields, Maxwell's equations, introduction to electromagnetic radiation.

Prerequisite(s): MATH 202

#### PHYS 401 Quantum Mechanics (4 credits)

Introduction to the non-relativistic quantum description of matter. Topics include experimental foundations, wave-particle duality, Schrodinger wave equation, interpretation of the wave function, the state vector, Hilbert space, Dirac notation, Heisenberg uncertainty principle, one-dimensional quantum problems, tunneling, the harmonic oscillator, three-dimensional quantum problems, angular momentum, the hydrogen atom, spin, angular momentum addition, identical particles, elementary perturbation theory, fine/hyperfine structure of hydrogen, dynamics of two-level systems, and applications to atoms, molecules, and other systems.

Prerequisite(s): PHYS 201; MATH 202; and PHYS 301 is encouraged

## PHYS 402 Solid State and Soft Matter Physics (4 credits)

This course is intended to provide an introduction to the physics of solids and soft materials. It will discuss topics including properties of static (crystal structure) and dynamic (lattice vibrations) arrangements of atoms; electrons in solids; key features in metals, insulators and semiconductors; semiconductor devices; structure and assembly of a variety of soft materials

including liquid crystals, polymers, colloidal systems and surfactants; special properties of materials in nanoscale; etc.

Prerequisite(s): PHYS 401

## PHYS 403 Introduction to Nuclear and Particle Physics (4 credits)

Introductory survey course on nuclear and particle physics. Phenomenology and experimental foundations of nuclear and particle physics; fundamental forces and particles, composites. Interaction of particles with matter and detectors. SU(2), SU(3), models of mesons and baryons. Weak interactions and neutrino physics. Lepton-nucleon scattering, form factors and structure functions. QCD, gluon field and color. W and Z fields, electro-weak unification, the CKM matrix, Nucleon-nucleon interactions, properties of nuclei, single and collective particle models. Electromagnetic and hadronic interactions with nuclei. Nuclear reactions and nuclear structure, nuclear astrophysics. Relativistic heavy ion collisions.

Prerequisite(s): PHYS 401

#### PHYS 404 Nonlinear Dynamics (4 credits)

Introduction to the study of temporal patterns in nonequilibrium systems. Theoretical, computational, and experimental insights used to explain phase space, bifurcations, stability theory, universality, attractors, fractals, chaos, and time-series analysis. Each student carries out an individual research project on a topic in nonlinear dynamics and gives a formal presentation of the results.

Prerequisite(s): MATH 202 and PHYS 122

#### PHYS 405 Advanced Physics Laboratory and Seminar (4 credits)

Experiments involving the fields of electricity, magnetism, heat, optics, and modern physics. Written and oral presentations of results. Instructor consent required.

**Prerequisite(s):** Consent of the instructor is required

#### PHYS 406 Advanced Biophysics (4 credits)

Builds on and extends the core concepts introduced in Introduction to Biophysics. Advanced topics and recent developments in biophysics.

Prerequisite(s): PHYS 302 and 303

## Courses with Course Subject: Physical Education (PHYSEDU)

Each activity course listed below is graded on a credit/no credit basis. The maximum amount of credit that counts toward the 136 credit requirement is two credits, but additional courses may be taken without credit toward this number. (See section on Credits Required for Degrees in Part 3.) Students may repeat activity courses.

#### PHYSEDU 101 Basketball (0.5 credit)

This course is designed to develop fundamental basketball skills of beginner students, and enhance the skills of those students with some basketball background.

## PHYSEDU 102 Softball (0.5 credit)

This course introduces students the rules and emphasizes the development of fundamental skills and strategies for playing softball.

# PHYSEDU 103 Volleyball (0.5 credit)

This is an introductory course teaching the fundamentals of volleyball including passing, serving, setting and spiking. Students will learn rules, court strategy, and significant emphasis will be placed on total fitness and recreational skills.

## PHYSEDU 104 Fencing (0.5 credit)

This course is intended to provide students with the fundamentals of fencing, including footwork, bladework, bouting and refereeing. It will allow students to develop the ability to analyze a fencing bout, and promotes creativity in applying acquired skills in a fencing bout.

#### PHYSEDU 105 Soccer (0.5 credit)

This course is designed to enhance technical and tactical game knowledge and students playing ability. Students will engage in a variety of soccer training methods emphasizing fundamental/technical skills, tactical knowledge and playing ability.

#### PHYSEDU 106 Badminton (0.5 credit)

This course introduces the fundamentals and techniques used in badminton with theoretical emphasis on rules and playing etiquette.

#### PHYSEDU 107 Table Tennis (0.5 credit)

This course is designed to equip the students with the basic skills to be able to play recreational or competitive table tennis outside of class. This course will give students a chance to improve or learn how to play table tennis effectively.

#### PHYSEDU 108 Tennis (0.5 credit)

The primary aim of this course is to teach the students the fundamentals of tennis including the rules, game scoring, etiquette, and fundamental strokes, forehand, backhand, serve and volley. The course will also present various drills and games, and present singles and doubles tactics and strategies. The emphasis of this course is to give the students the working knowledge of tennis so they may enjoy it as a lifetime activity.

#### PHYSEDU 109 Tai Chi (0.5 credit)

Tai Chi is an ancient Chinese traditional martial art practiced worldwide. It is used as part of defense training, meditation, exercise program or for its various health benefits. This course aims to help students learn the basic forms of Tai Chi and to become comfortable in practicing independently.

# PHYSEDU 110 Pilates (0.5 credit)

Pilates is a method of exercise that consists of low-impact flexibility, muscular strength and endurance movements. Pilates' routine emphasizes proper postural alignment, core strength and muscle balance.

#### PHYSEDU 111 Yoga (0.5 credit)

This class will explore the practice and application of yoga and meditation and will introduce students to various breathing techniques and forms that additionally promote strength and flexibility. Together, these benefits may help students in promoting healthier lifestyle.

## PHYSEDU 112 Body Combat Fitness (0.5 credit)

Body combat fitness is an eclectic-based aerobics class that combines cardio and resistance training and utilizes components of kickboxing, boxing and dynamic conditioning drills using combat principles. This kind of aerobic workout uses principles of high intensity interval training (HIIT) to give all students regardless of fitness level a great workout and learn some of martial arts forms and techniques.

## PHYSEDU 113 Body Step Aerobics (0.5 credit)

Step aerobics is designed primarily to attain, improve and/or maintain healthy fitness level of students through their participation in the class. Students will also learn various fitness concept and principles and their application as part of the healthy lifestyle. The course will provide the tools to create and follow a personalized aerobics exercise regimen as part of the healthy lifestyle.

#### PHYSEDU 114 Jogging/Walking (0.5 credit)

This course emphasizes walking/jogging mechanics and physiological effects of cardiovascular activity and general benefits of exercise. This course provides the knowledge and skills necessary to improve cardiovascular endurance and fitness through walking and jogging.

#### PHYSEDU 115 Mixed Martial Arts (0.5 credit)

Mixed Martial Arts (MMA) is an eclectic martial arts based training class that incorporates learning of various martial arts forms and skills with conditioning training. This course will focus on beginner techniques, and in contrast to traditional mixed martial arts, it will not involve ground techniques or grappling. Therefore, the focus of this course is on learning fundamentals of various martial arts forms accompanied by conditioning training routines.

## PHYSEDU 116 Stick Stretching/Yoga (0.5 credit)

Stick stretching is a hybrid blend of traditional yoga poses, tai chi and soft martial arts, which is designed to improve mobility, flexibility, balance, strength, coordination and postural awareness. Hence, the focus of stick yoga is on spinal health and correcting body mechanic. Sticks are used to provide support, guide and leverage stretching, strengthening and balance forms.

#### PHYSEDU 117 Swimming (0.5 credit)

Swimming course is designed to teach variety of swimming strokes for students with little or no swimming experience. However, considering that swimming ability depends not only on basic strokes, but also being comfortable in the aquatic environment, this class will also emphasize correct breathing skills, water threading and survival floating.

## PHYSEDU 118 Taekwondo (0.5 credit)

Taekwondo is Korean martial art that emphasizes various forms of kicking. However, considering its name - Way (Do) of kicking (Tae) and punching (Kwon) - students will also learn various punching forms. This class is designed to introduce basic Taekwondo forms and techniques and prepare them for the yellow belt test given at the end of the class.

## PHYSEDU 119 TRX Suspension Training (0.5 credit)

TRX is an innovative suspension weight training used by various populations to improve strength, endurance, body tone and overall health and wellness. It is based on seven fundamental movements: push, pull, plank, rotation, hinge, lunge and squat, from which numerous variations and types of workouts are designed to target a specific goal. In this course, you will learn these fundamental movements, and how to create your own routines and adopt them to fit your own goals using TRX.

## PHYSEDU 120 Weight Training (0.5 credit)

In weight training course, you will learn various strength training concepts, recommendations, techniques, and programs through discussions, handouts, and hands on demonstrations. While some theoretical background will be provided before each class, majority of class time will be conducted in a fitness center and hands on experience with primary aim to complete a full workout. Considering weight training can be used for various purposes we will introduce goal-specific workout recommendations such as muscle gain, body toning, functional weight training, sport specific training, weight loss and general health. In addition, we will dispel various myths about weight training and workout safety in order to provide you with independence and comfort to make weight-training part of your healthy lifestyle.

# PHYSEDU 121 Integrated Fitness and Wellness (0.5 credit)

Integrated Fitness and Wellness course emphasizes learning concepts of fitness and wellness through participation in a range of physical activities offered on and off-campus. The course is designed to encourage students to attend different fitness, sports and recreational activities, and using concepts covered in class, learn how to create individualized fitness and wellness goals based on activities they enjoy and fit their lifestyle. In this class, there is no set class time and students are expected to participate in any three fitness activities per week lasting at least 45 minutes. Hence, students are welcome to attend any open fitness class offered on campus, go hiking, jogging, cycling or swimming with friends or play any sport throughout the week. You will use heart rate monitors to keep track of your activities, intensity, goals and participation. Students will have 1 discussion class every 2 weeks where theoretical concepts of fitness and wellness are class progress are discussed.

# PHYSEDU 122 Rowing (0.5 credit)

This course is an introduction to the sport of rowing. Students will learn about the fundamentals of rowing, the types of boats and events, equipment, rowing techniques and mechanics, boat handling and rigging. As part of the class students will row indoors and in open water shells. The goal of the course is for students to experience the wonderful world of rowing, becomes fond of the activity and essentially become independent recreational rowers.

#### PHYSEDU 123 Kendo (0.5 credit)

Kendo is a form of martial art that focuses on the use of bamboo sword as its integral part. Kendo integrates strategic thinking and methodology with physical agility and responsiveness, and as such is mentally and physically stimulating activity. Subsequently, students in this course have a unique opportunity not only to learn about Kendo as a physical activity, but also its significance in cultivating social and personal values in traditional China.

#### PHYSEDU 124 Spinning (0.5 credit)

Spinning, or indoor group cycling, is the stationary cycling program that simulates real cycling conditions to deliver high intensity workout. Spinning is low impact, full-body aerobic exercise that will generally improve cardiovascular fitness, boost energy, reduce stress, and tone upper and lower body. Hence, this activity is ideal for fitness novices and athletes to reach their goals. However, as a PE course this class has a teaching component which will allow each students to understand the physiology behind the workout and its benefits, and how to safely and effectively make individualized plans for better results.

## Courses with Course Subject: Political Economy (POLECON)

# POLECON 201 International Political Economy (4 credits)

This course is an introduction to international political economy, the study of how and why international economic policies are formed, and how the international economy influences domestic politics and economic performance. This is a survey course designed to introduce students to the leading theories and evidence-based research relating to international political economy (IPE). It first introduces some of the main theories of IPE, which is the study of how political forces impact the workings of the global economy and how the global economy — simultaneously — shapes politics. It then explores the history and contemporary workings of the international trade and monetary systems from an IPE perspective. Finally, it delves into specific topics that IPE can help shed light on, such as foreign aid, resources competition, and international environmental protection agreements.

# <u>POLECON 202 - The Politics of International Economic Relations: America in the World Economy (4 credits)</u>

Introduction to politics of international economic relations through an examination of persistent major debates and current events in world politics and global economy. Topics include politics of trade; politics of money and finance; foreign direct investment, multinational corporations, and global value chains; politics of foreign aid and economic development; and corporate social responsibility in a global economy. Examines how material interests, historical and socio-political context, and institutions at domestic and international

level shape a country's foreign economic policies. Special focus on U.S. foreign economic policy in comparative perspective.

## POLECON 301 Development (4 credits)

This course provides an overview of advanced contemporary work on the political economy of development. This is a survey course designed to introduce students to the leading methods, theories, and evidence-based research relating to development. It first addresses the very concept of development, presents the metrics that are used to measure it, and introduces important development figures. It then introduces key models and theories that have been presented to explain development. Finally, it delves deeper into contemporary questions and debates about the drivers of development.

Prerequisite(s): ECON 101

#### POLECON 302 China's Economic Transition (4 credits)

This course will provide a comprehensive overview of the Chinese economy and China's role in the world economy. China's current economic challenges will be given particular attention. Topics that will be addressed include: the Chinese economy before 1949; the socialist era, 1949-1978; economic reform and market transition; the role of state enterprises; foreign investment; foreign trade; China's role in the East Asian trade-production network; the Chinese financial system; Chinese monetary and exchange rate policy; China's role in global imbalances; the internationalization of the Yuan; and the housing market.

#### POLECON 490 Senior Seminar: Advanced Topics (4 credits)

#### **Courses with Course Subject: Political Science (POLSCI)**

#### POLSCI 20 American Government and Politics (4 credits)

Credit for Advanced Placement on the basis of the College Board examination in American government and politics

#### POLSCI 21 Comparative Government and Politics (4 credits)

Credit for Advanced Placement on the basis of the College Board examination in comparative government and politics

#### POLSCI 101 International Politics (4 credits)

The theory and practice of international politics and foreign policy; analysis of the various elements of national power and its impact on differing world views and foreign policy

behavior, the instruments of foreign policy, and the controls of state/nation behavior across different historical periods and from different national and analytical perspectives.

## POLSCI 102 Social Choice and Democracy (4 credits)

The central theme of this course is to examine the liberal conception of democracy as the aggregation of individual preferences. Students will explore and study questions such as: How can a collective (e.g., the electorate, legislature, collegial court, expert panel, or committee) arrive at coherent collective choices or judgments on some issues, on the basis of its members' individual preferences? Who decide whose preferences should be counted? Do voters have the freedom to choose? What methods are used to aggregate preferences? What are the theoretical properties of these methods? How easily can outcomes be manipulated or distorted? Are there widespread election frauds? Answers to these questions are utmost important for any democratic decision-making body. Social choice theory will be used as our theoretical framework for the analysis of combining individual opinions, preferences, interests, or welfares to reach a collective decision.

## POLSCI 103 American Ideas and the Idea of America (4 credits)

What is the story of the United States? What fundamental ideas of America have been formed as a nation and as an empire? Are there connections we can draw between the US today and its past? What relevance does the US have in China historically and in the present day? What place does the US have in the Chinese imagination? In this course, we address these questions by examining a variety of texts, ranging from important founding documents, political speeches, autobiographies, and travelogues to excerpts of American novels. Through class discussions, team projects, and role plays, we will discuss fundamental concepts of America, its past and present, and explore themes such as politics and religion, race and slavery, immigration and identity, women and economics, and education and citizenship. We will also consider how America is being perceived in the world specifically within the Chinese context.

#### POLSCI 105 Contemporary Political Ideologies (2 credits)

The goal of this course is to understand the fundamental alternative political ideologies or theories that have shaped our world and to consider which political theories may shape our world in the future. To accomplish this goal we will 1) Investigate the theories at the foundation of liberal democracy, capitalism, Marxism, fascism, and anti-liberal Islam; 2) Consider how each of these theories addresses such fundamental human questions as: What is the best form of government? What is the nature of human beings? 3) Study through close textual analysis the principal arguments both for and against each of these theories.

## POLSCI 106 Political Rhetoric, Crisis, and Leadership (2 credits)

This course engages in a series of case studies to evaluate the requirements of political rhetoric, especially during times of crisis. Examples are drawn from ancient Greek and Roman history,

the American founding, and the U.S. Civil War. Students will be able to identify how political leaders in various contexts use common logical and rhetorical constructions to negotiate political uncertainty and danger.

#### POLSCI 201 Political Institutions and Processes (4 credits)

The purpose of this course is to examine and understand issues related to political institutions and processes. The main topics that will be examined over the course of the semester include the central themes, theories, concepts, and questions of the contemporary study how policy-making processes vary across different institutional arrangements.

# POLSCI 202 U.S. Citizenship: History, Meaning and Conflict (4 credits)

What does it mean to be and to become an American citizen? What combination of political principles, cultural identity, and historical experience does and should constitute U.S. citizenship? This course explores the meaning of citizenship and nationhood in different historical contexts, amidst competing constitutional interpretations, and at the center of contemporary policy debates.

#### POLSCI 203 Civil Rights and Civil Liberties (4 credits)

This course examines the meaning rights and liberties in the American and global context. It considers competing justifications as well as specific legal and policy debates ranging from freedom of speech and the press, religion, sexuality, abortion, and discrimination.

#### POLSCI 207 Democratic Institutions in America (4 credits)

From the framing of the Constitution to the present day, the US has had unique political institutions and political culture, which have long arrested the minds of political theorists, philosophers, writers and academics. Drawing on multiple disciplines, such as sociology, history, philosophy, and literature, this course will explore America's democratic political structures as well as the various institutions that live alongside them. Students will examine the US Constitution and political system. They will look at the relation of the US political system to American culture, to race, to education, to capitalism, and to empire.

#### POLSCI 208 Political and Social Inequality (4 credits)

How do different groups with different levels of political power shape political outcomes? How do gender, racial, environmental, and social inequalities express themselves through the political system? What is a 'fair' level of inequality? How do different institutional designs shape and channel inequality? This class introduces students to readings, arguments, and concepts that begin to explore the answers to these questions.

## POLSCI 209 Democratic Erosion (2 credits)

The course responds to the widespread media coverage and commentary suggesting that democracies around the world are backsliding into authoritarianism by treating "the threat of democratic erosion as an empirical question, rather than merely a political one". The first week of the course focuses on definitions—democracy, democratic consolidation, democratic erosion. In each of the next six weeks, the following particular themes will be investigated: institutions, populism, the media, polarization, exclusion, and resistance.

#### POLSCI 210 International Relations in East Asia (4 credits)

This course helps students understand the interactions among states in East Asia since WW II. It surveys the major events, introduces theories from international relations related to the strategic balance, realism and constructivism, international political economy, decision-making, domestic politics, leadership and bureaucratic politics. Part III looks at China's and America's relationships with Asian countries while Part IV analyzes key issues, including the Korean nuclear crisis, the South and East China seas, and the future of the region. The course will include a simulation game, when students engage in crisis management, thereby enhancing their understanding of the dilemmas of foreign policy decision making.

#### POLSCI 211 Politics and Literature (4 credits)

In the past, the poet was regarded, not as an antipolitical bohemian nor as a political partisan, but rather as a wise teacher who could help us to understand the drama of human life as a whole and the drama of political life in particular. The goal of this course is to investigate the nature of politics and human nature by studying a number of masterpieces of classical literature. As we study these works, we will consider such themes as the equality of the sexes, democracy and aristocracy, science and politics, religion and politics, love and politics, and ambition and politics.

#### POLSCI 212 Pathologies of Modern Society: Foundational Ideas (4 credits)

This course introduces the ideas of 4 social theorists: Tocqueville, Marx, Durkheim, and Weber. Described as "the founding fathers" of modern social theory, these thinkers sought to understand modern society, and its pathologies, in order to improve human life. Their ideas – such as public opinion and democratic despotism, alienation and ideology, rationalization and disenchantment, and organic solidarity and anomie – are still used by social scientists today to analyze and frame social, economic, and political problems.

# POLSCI 221 US/China Relations (4 credits)

This course addresses the complex relationship between China and the United States including the two countries' foreign relations, trade, cultural exchanges, and images and (mis) representations of each other. The relationship between China and the United States is now,

and will likely continue to be, the most important international relationship of our era. In order to understand present and future challenges and opportunities more fully, this course will examine the long and tumultuous history of US-China relations from colonial America to the present with a historical approach. The course will explore the relationship in actual time and circumstance. Paying equal attention to Chinese and American perspectives, this course will discuss the relationship's diplomatic, economic, and military components, as well as social and cultural interactions.

# POLSCI 301 Program Evaluation (4 credits)

This course introduces students to the approaches used by social scientists to evaluate the implementation and impacts of public policies. Topics covered include reasons for and uses of program evaluations; the different kinds of information gained through implementation analysis and the integration of qualitative and quantitative research; statistical power and effect size; and cost-benefit analysis. The bulk of the course focuses on the techniques, advantages, and drawbacks of experimental and quasi-experimental designs.

Prerequisite(s): SOSC 102, and STATS 101 or MATH 205

#### POLSCI 302 Public Opinion (4 credits)

Examines nature and role of public opinion from a comparative perspective, providing a broad-based introduction to the dynamics of citizens' social and political attitudes. The goal of the course is to help students arrive at a more comprehensive understanding of forces that shape beliefs, attitudes, and opinions of the public, the means by which those views are publicly expressed, and the influence of those opinions on policy outcomes. The course will also offer an introduction to the design, implementation, and analysis of public opinion surveys and election polls with a special focus on cutting-edge survey experiments and online designs.

Prerequisite(s): SOSC 102, and STATS 101 or MATH 205

#### POLSCI 303 International Politics of East Asia (4 credits)

Course explores the economic, political, and security issues in East Asia. Examines respective theoretical and historical backgrounds of the region (Japan, North Korea, South Korea, Chinese mainland, Hong Kong, Macau, Taiwan, Southeast Asia). Focuses on issues surrounding the region, including globalization, economic interdependence, nuclear proliferation, territorial disputes, and terrorism. Utilization of some international relation theory and methodological tools for more systematic analysis of these issues. Readings will be drawn from international relations theory, political science and history.

# POLSCI 304 Revolutions and Foundings: A Comparative Perspective (4 credits)

This course examines the Founders of the American political order and compares them with the more contemporary founders of other political traditions. This course examines the political thought and careers of key protagonists in the American Revolution and constitutional Founding (such as George Washington, Thomas Jefferson, John Adams, Alexander Hamilton, and James Madison) and revolutionaries and founders in other modern settings (such as Mohandas Gandhi, Che Guevara, Nelson Mandela, Vaclav Havel, Mao Zedong, and Lee Kwan Yew).

#### POLSCI 305 American Capitalism in the World (4 credits)

This course examines American economic history and the global reach of capitalist markets. It explores patterns of commerce, the development of the regulatory state, business cycles and crises, the nature of the corporation and the changing of labor markets and the meaning of work. The course considers crises, contradictions, and competitive virtues and drawbacks associated with the modern American economy and highlights key trade-offs and lessons for democratic institutions, business, and culture.

# POLSCI 307 Political Economy of Institutions (4 credits)

Without paying attention to institutions, one cannot understand why some societies are wealthy and others poor; why some are innovative and others un-creative; or why some are politically stable and others in perpetual turmoil. As such, this course should be of direct interest to students of economic development, economic history, social inequality, and democratization, among other fields of social inquiry. The first half of the course delineates the subject and covers the social mechanisms that govern institutional transformations. Attention is paid to the pace of institutional transformations, latent change, social inertia, political revolutions, and links among beliefs and behaviors. The second half focuses on the social functions of institutions. Again, the emphasis is on pertinent analytical methodologies. The functions studied include: the control of free riding, credible commitment, redistribution, the provision of collective goods, coordination, protection of expectations, generation of common knowledge, governance, rent seeking, and the reduction of transaction costs.

#### POLSCI 308 Global Governance (4 credits)

This course provides an overview of the evolving architecture, processes and variable outcomes of global governance. Governance, at whatever level of social organization it occurs, refers to the systems of authoritative rules, norms, institutions, and practices by means of which any collectivity, from the local to the global, manages its common affairs. Global governance is generally defined as an instance of governance in the absence of government. There is no government at the global level: the UN General Assembly is not a global parliament, and Secretary-General Ban Ki-moon is not the president of the world. But there is governance, of variable effectiveness. The course is divided into four sections. The first briefly introduces

the subject. The second examines the core elements in the traditional architecture of global governance - its institutional and legal foundation. The third surveys emerging trends in that architecture. The fourth (and longest) section explores the key policy processes performed by/in/through global governance, addressing how and why they differ across different issue areas.

#### POLSCI 310 America in the World (4 credits)

This course examines the place of America in the wider world and the nature of American regional and global engagement. It explores how Americans have viewed and defined themselves in relation to numerous other nations and peoples examines the relation between ideology, politics, culture, and foreign policy.

# **Courses with Course Subject: Psychology (PSYCH)**

### PSYCH 101 Introductory Psychology (4 credits)

Broad survey of the field of modern psychology. The main goal of this course is to provide students with an introduction to the important topics, theories, research, and applications in psychology.

# PSYCH 105 Abnormal Psychology (4 credits)

This course provides a broad overview of abnormal psychology. Areas of focus include: Reviewing different theoretical perspectives for conceptualizing abnormal behavior; Approaches to the diagnosis and assessment of psychopathology; Major classes of psychopathology including how they are defined and treated; Current research, methods, and theories in the field of abnormal psychology.

Prerequisite(s): PSYCH 101

#### PSYCH 110 Mindfulness, Stress, and Health: Eastern and Western Perspectives (2 credits)

Mindfulness-based therapies are based in Eastern and Western philosophies, theories, and research. They have been shown to be significantly helpful for stress-related problems, mental health problems, and medical disorders. Mindfulness-based therapies are also revolutionizing the way that psychologists think about and treat human suffering. In this course, we will explore the theories, techniques, and research on mindfulness-based therapies from Eastern and Western traditions. A combination of lecturing, class discussion, and experiential exercises will be used to help students gain a well-developed understanding of this important area of psychological research and practice. Students will also acquire basic skills in how to use mindfulness-based techniques to reduce stress and distress.

# Courses with Course Subject: Public Policy (PUBPOL)

#### PUBPOL 101 Introduction to Policy Analysis (4 credits)

Basic concepts of analytical thinking including quantitative methods for assessing the probabilities of outcomes and appraising policy alternatives. Students learn how to define policy options, find sources of information; apply basic qualitative and quantitative measures (e.g. cost benefit analysis) to compare policy options.

# PUBPOL 102 - Introduction to the United States Health Care System (4 credits)

Overview of the key health policy issues in the United States. Topics include: (1) sources of morbidity and mortality; (2) access to health care; (3) financing of health care including an overview of how health insurance works, Medicare and Medicaid and why there are uninsured persons and to what effect; (4) quality of health care; (5) the role of innovation in both treating disease and influencing costs; (6) mental health, including why drug and alcohol treatment is generally considered to be a mental health service; (7) the role of non-profit versus for-profit ownership of health care facilities and to what effect; (8) long term care; and (9) the impact of social phenomenon such as income inequality, social class and culture on health care.

# PUBPOL 110 Introduction to Human Rights (4 credits)

This course introduces students to the field of human rights. The course has two primary purposes: to define and explore the key terms, concepts, foundations and theories of human rights; and examine alternative or competing definitions of rights using a case-based approach.

#### PUBPOL 120 Globalization and Corporate Citizenship (4 credits)

This course will critically examine the origins and diffusion of increasingly prevalent notions of corporate citizenship and corporate social responsibility from an anthropological perspective.

# PUBPOL 201 Climate Change Law and Policy (4 credits)

Climate Change is one of the major challenges facing humanity in the 21st century. Climate Change has been described as a "super wicked problem", which stems from the greenhouse gases emissions produced by virtually all human activities, has no simple solution and yet requires urgent and drastic action to be taken at the global level. In this course, we will examine the range of legal and policy responses to this "wicked problem" which have been proposed by experts, as well as those which have been concretely applied at the international level and different jurisdictions, especially in the United States, the EU, and China, three major emitters of greenhouse gases. We will look at various studies put forward by academics and think tanks, informed newspaper articles, as well as policy documents and law.

# PUBPOL 202 Global Disasters: Science and Policy (4 credits)

In this interdisciplinary course, students will examine the multifaceted aspects of "global" disasters. The first segment of the course will examine the science behind the disasters, discuss the range of meteorologic, hydrologic and geologic factors that cause disasters; explore how societies plan for and/or respond to the immediate and long-term physical, social, emotional and spiritual issues associated with survival; and present case studies of response, recovery and reconstruction efforts. In the second phase of the course, some of the most pressing and rapidly evolving economic calamities will be addressed. In the third segment of the course, the focus will shift to political "disasters" and how natural and/or economic events can destabilize a political system. Students will attend the lecture and labs components of the course and complete on-line quizzes to demonstrate understanding of the material presented. Additionally, they will prepare one research paper on a relevant topic, the results of which will be presented to the class.

# PUBPOL 209 The Politics of Environmental Crises (2 credits)

This course helps students understand what happens during and after a disaster in terms of politics and policy. It is structured around five themes: crisis detection; decision-making and coordination; crisis communication; accountability; and learning and policy change. During the course, we will apply each of these themes to case studies of environmental crises, for example oil spills and chemical leaks. Readings will be a combination of theory and case studies from around the world.

#### PUBPOL 210 Development and Africa (4 credits)

Addresses the vexed issue of economic development in Africa - its many failures, its occasional successes - from the early colonial period to the present.

# PUBPOL 211 Globalization and Public Policy (4 credits)

How the various aspects of globalization affect, and are affected by public policy at the international, national and local levels. Development of an analytic framework for thinking about globalization and its core concepts, major institutions and political dynamics; survey of a range of major policy areas affected by globalization; focus on a policy area of particular interest.

#### PUBPOL 212 Immigrant Dreams, U.S. Realities: Immigration Policy History (4 credits)

Immigrants and immigration policy in the United States from 1850 to the present, with focus on origins and power of immigrant exclusion during three waves of migration: Northern European and Asian migrations between 1850 and 1880, Eastern European, Latin American, and Asian migrations, 1880-1920, and Latin American, African, and Asian migrations, post

1965. Immigrant roles in shaping policy debates, citizenship rights, labor movements, and American culture, past and present.

# PUBPOL 213 Authoritarian Regimes (4 credits)

Examine the variety of ways in which authoritarian regimes operate. Study the emergence and persistence of authoritarian regimes, the institutions they adopt, leadership change, government/opposition relations, their potential for democratic transition as well as the theories that explain these outcomes.

#### PUBPOL 214 Globalization and History (4 credits)

Examination of globalization issues in a historical perspective. Reviews phenomena, institutions, e.g. empires, states, religion, corporation, and international agencies, and policies which enabled exchange of commodities, people, and cultures. Explores empirical evidence on growth and development for different world regions and historians' and social scientists' interpretations.

# PUBPOL 215 Law, Ethics and Responsibility (4 credits)

Examines the intersection of law and neuroscience, including the use of neuroimaging to determine if a witness is telling the truth; the implications of neuroscience for determining the mental competency of defendants, the insanity defense, the imposition of punishment on defendants. Considers the extent to which recent advances in brain science cause us to reevaluate fundamental legal concepts of "intent," "insanity," and responsibility; the ways in which neuroscience may be applied to these and related issues; and the inherent limitations and incongruities of applying brain science to legal questions.

#### PUBPOL 216 Civic Participation and Public Policy (4 credits)

Overview of patterns in Americans' engagement in and disengagement from civic life. Theories of why people do (and do not) participate. Differences across lines of gender, race, ideology, generation, and class. Role of American interest groups and social movements in policy change. Influence of public policies (e.g., federal tax laws, participation requirements, programs such as AmeriCorps) on civic and political participation. Implications for equality, voice, and the health of American democracy.

#### PUBPOL 217 Enterprising Leadership (4 credits)

The central goal of this course is to provide students with analytical competence, enterprising leadership identity, and personal agency important to exercising leadership in organizations, in communities, and in life. The course explores the many facets of leadership and leadership development including the processes by which people affect change in a variety of roles and situations. Leadership within a framework of ethics, values, and innovative action are

emphasized as a basis for contributing to the process of making good things happen without reliance on formal authority.

### PUBPOL 218 Ethics in an Unjust World (4 credits)

The course considers the question, "How can we fix poverty?" It begins by exploring the nature of poverty through a variety of descriptive metaphors (for example, poverty as a "trap" or a "disease"). It then considers the word "we," and in doing so introduces several basic understandings of ethics (deontology, utilitarianism, virtue ethics, etc.) Finally it considers the word "fix" and offers three models for responding to poverty: working for, working with, and being with.

### PUBPOL 301 Political Analysis for Public Policy-Making (4 credits)

How and why do policies come about? What is the role of media, non-governmental organizations, and politicians? Why do some issues attract the attention of policymakers while others do not? What are the obstacles for policy change? Some of the questions will be answered in this course. This course will examine the political aspects of public policy from an explicitly comparative perspective. Public policy making is not a rational, straightforward process, but is heavily shaped by processes, institutions, and actors. During the course, we will identify relevant official and non-official actors, contextual factors, and particular processes, ultimately learning how these shape public policy.

Prerequisite(s): PUBPOL 101

#### PUBPOL 303 Policy Choice as Value Conflict (4 credits)

Public policy should be informed by evidence and facts, but it cannot be determined by them. People disagree about public policy not only because they disagree about empirical matters but also because they hold different understandings of familiar political concepts and they assign different weightings to competing political values. This course aims both to illustrate these general propositions and, more importantly, to introduce the tools and techniques with which one can construct and critique reasoned arguments about the political concepts and values that underpin policy choice. The course will be divided into four sections, each of which focuses on a set of contemporary policy disputes whose resolution depends upon clarifying and justifying our understanding of an underlying political concept and its associated values. The four concepts whose policy implications we shall explore are: democracy, justice, liberty, and rights. Readings are mostly works of contemporary political philosophy.

Prerequisite(s): PUBPOL 101

# PUBPOL 304 Microeconomic Policy Tools (4 credits)

Development and application of analytical economic tools in a policy environment. Emphasis on application of economic methods in a variety of policy settings and developing testable hypotheses that might be used to guide economic policy. Analytical topics include willingness to pay, derived demand, multi-market interactions, comparative advantage, investment analysis, and decision making under uncertainty. Applications include tax analysis, including incidence, effective protection, shadow pricing, introduction to government expenditures, labor market policy, examples of regulation and pricing externalities.

Prerequisite(s): PUBPOL 101

# PUBPOL 305 - War and Public Health in Africa (4 credits)

An inquiry into the nature of contemporary war in sub-Saharan Africa and its human cost. Uses public health as a parameter to assess the impact of organized collective violence on people's lives. Link between war and public health established and measured with respect to civilian deaths, gender based violence, physical and psychological trauma, mental disorders, malnutrition and famine, and the spread of epidemic diseases, inter alia HIV/AIDS. Special attention is given to rape as "a weapon of war", to the trafficking of human beings in war zones, the child soldier phenomenon, and to death counts as a vector of humanitarian or political advocacy.

# PUBPOL 306 International Development and Poverty (4 credits)

What factors account for the persistence of poverty in some countries? Is it always going to be the same way – i.e., will poor people remain poor within the foreseeable future – or can something be done to reduce poverty (or at least alleviate its most painful consequences)? Academics and policymakers have come up with alternative formulations as they have attempted to deal with poverty over the last 50 years. This class provides students with an overview of social and economic development in developing countries since the early 1950s. What problems do residents of developing countries face, what kinds of solutions have been advanced to deal with these problems, how have different solutions fared in practice, and what needs to be done now and in future? The course traces how development practice has evolved in the theoretical literature, and students use this knowledge to investigate what needs to be done now and in future.

Prerequisite(s): GLHLTH 101

#### PUBPOL 307 Market Power and Public Policy (4 credits)

The purpose of antitrust laws is to control how firms attain and maintain their market position, presumably for the betterment of consumers, or at least for the benefit of society. Using a rigorous set of tools from microeconomic and game theory, this class will investigate the underpinnings of policies meant to deal with market power broadly defined, such as antitrust

laws, the regulation of public utilities, the regulation of financial markets, and anti-dumping rules.

Prerequisite(s): ECON 202

### PUBPOL 308 Managing the Oceans to Solve Global Problems (4 credits)

This course highlights the importance of the oceans in addressing central development and environmental problems facing the world, including poverty, hunger, access to energy, climate change, and biodiversity loss. The fundamental role the oceans could play in helping to solve these problems depends on public policies created to manage them. The course will expose students to the important laws and policies that make the resources and services provided by the ocean resilient and sustainable, and explore challenges of protecting corals, regulating fishing and pollution, and helping climate refugees.

#### PUBPOL 309 War and Public Health in Africa (4 credits)

An inquiry into the nature of contemporary war in sub-Saharan Africa and its human cost. Uses public health as a parameter to assess the impact of organized collective violence on people's lives. Link between war and public health established and measured with respect to civilian deaths, gender based violence, physical and psychological trauma, mental disorders, malnutrition and famine, and the spread of epidemic diseases, inter alia HIV/AIDS.

# PUBPOL 310 Family Rights and Human Rights (4 credits)

Explores relationship between state, family formation, and individuals. Surveys regulation of sexuality, reproduction, adoption, immigration, and incarceration with focus mainly on U.S. and past 200 years.

#### PUBPOL 311 Economic and Political History of the European Union (4 credits)

The idea in the wake of WW II of a common Europe is still a long way from fulfilling its intended goals, with numerous challenges remaining. This multi-disciplinary course deciphers the complexities of the EU, predicts its future given its demographic, social and economic makeup, and analyzes the EU's institutions and the way they function. It examines its agricultural and industrial policies as well as investigates its monetary and economic policies. From its original six members to today's twenty-seven, the course addresses the question of the future of the EU, which in spite of multiple differences, has created a unique political and economic model.

#### PUBPOL 312 News as Moral Battleground (4 credits)

Ethical inquiry into journalism and its effect on public discourse. Issues include accuracy, transparency, conflicts of interest and fairness. Topics include coverage of national security, government secrecy, plagiarism/fabrication, and trade-offs of anonymous sourcing.

# PUBPOL 315 Economics of the Public Sector (4 credits)

Applies tools of intermediate micro economics to the public sector. Develops economic justifications for government intervention into the economy and examines and evaluates various government policies and programs. Provides a solid foundation for applied benefit cost analysis.

Prerequisite(s): ECON 201 or PUBPOL 304

# PUBPOL 410 Counterterrorism Law and Policy (4 credits)

This course explores the novel legal and policy issues resulting from the United States' response to 9/11 attacks and the threat posed by modern terrorist organizations. Topics include preventative/preventive war; detention, interrogation, and prosecution of suspect terrorists; domestic surveillance; and government secrecy and public access to information.

# **Courses with Course Subject: Religious Studies (RELIG)**

#### RELIG 101 Comparative Religious Studies (4 credits)

The category of "religion" is arguably a Western concept that is applied to Eastern traditions of thought and practice such as Confucianism, Daoism, Buddhism, and Hinduism. What are the differences, and as well as the similarities that might be hidden by the broad application of this concept, if we compare these traditions of thought and practice with the Abrahamic religions of Judaism, Christianity and Islam? How do ethical values get related to conceptions of human salvation or enlightenment and the ultimate source of the natural order? Is there a conception of free will that exists across these traditions? Is there a distinction between the realms of the secular and the sacred that runs across these traditions?

#### RELIG 102 Prophets and Priests (4 credits)

This course studies the relationships among charismatic authority, priestly tradition, religious institutions, and state power. It uses as a case study the historical context of Palestine in the first century CE and examines the social and political context for the emergence of the Christian movement inspired by the teaching of Jesus of Nazareth. Topics include the nature of authority, religious resistance to state power, the concept of divine law, and popular sects. Other religious contexts may also be included in order to offer a comparative perspective.

#### RELIG 103 Law and Revelation (4 credits)

This course focuses on the concept of religious law, the traditions of jurisprudence that emerge in religious societies, and their relationship to the modern nation state. It introduces students to the Islamic concepts of Qur'an, Sharia, and Figh (jurisprudence) with a view to

understanding how divine laws function in human societies. Topics include concepts of divine revelation, sacred texts, law codes, legal institutions and modern forms of fundamentalism. Other religious traditions may also be included by way of comparison.

#### RELIG 104 Myth and Nation (4 credits)

This course studies the role of religion in establishing the founding mythology of peoples and nations. It introduces students to the Jewish tradition by way of example, and considers the role of the foundational mythology of the Jews in multiple forms of Judaism from early Israelite religion to modern Zionism. The course leads to an examination of the experience of holocaust, the quest for Jewish statehood and its impact upon the political situation in the Middle East. In so doing the course develops broad theoretical approaches in religious studies that can serve wider interests in understanding the relationship between nation, state, ethnicity, and religious belonging. Other religious contexts may be introduced by way of comparison.

#### RELIG 105 Gods and People (4 credits)

This course introduces the Hindu concepts of darsan (vision of the gods) and dharma (path) so as to explore how religious visions, as represented in art, architecture and mythology, engage the social and material reality of religious practitioners' daily lives. In so doing it exposes the cultural power of religious frameworks to structure normative hierarchies of gender, class and race. Students gain a functional understanding of religious cultures that may be applied to other traditions and contexts by way of comparison.

#### RELIG 106 Religion and Leadership (4 credits)

Different religions have portrayed leaders in different ways, through stories, exemplars and which attributes of leaders and followers are emphasized or downplayed. Drawing upon a wide variety of resources in religious studies, history, philosophy, psychology, sociology, and cultural studies, this course will examine how a wide variety of religions depict leaders and leadership, highlighting both the differences and the similarities across religions and within religious traditions. The course will also draw upon research on leadership, cultural values, and norms to systematically compare and contrast how religion shapes perceptions of leadership. Applications explored will include religion-based portrayals of gender, race ethnicity, and age in assessing leaders. Also considered will be whether these portrayals make specific religious lenses more or less amenable to leadership development in different contexts (for example where innovation is important or where co-leadership is essential).

# RELIG 107 Readings in Religious Literature (4 credits)

This course introduces students to a variety of religious literature and sacred texts from across the world. Students learn how to read and interpret these texts and in this way come to reflect on the nature of religion and its function in human societies. In addition discussing

fundamental theological questions about the nature of existence, the course will also examine the practical ways in which religions shape the embodied lives of religious practitioners across the world.

#### RELIG 201 Confucianism, Daoism and Buddhism (4 credits)

These traditions of philosophical and religious thought and practice have long viewed within Chinese culture as compatible and perhaps complementary. Confucianism is centered on how to live well in the human social world, and Daoism on returning harmony between humanity and the natural world. Buddhism is focused on the problem of suffering and its relation to the way we conceive of our selves. The course will trace the origins of Confucianism and Daoism in ancient China; the introduction of Buddhism from India; and later evolution of Confucianism that involves incorporation of certain elements of Daoism and Buddhism.

# RELIG 202 Modern Buddhism (4 credits)

An examination of Buddhism in Asia, Europe, and the United States from the mid-nineteenth century to the present. The course emphasizes how global exchanges resulted in the emergence of Buddhism in the United States and Europe, and the transformation of Buddhism in Asia. The course takes a number of case studies in the transformation of Buddhism including the emergence of humanistic Buddhism in modern China; the American encounter with Japanese Zen; and the relationship between Buddhism and ethnic militarism in Imperial Japan, Sri Lanka and Myanmar. In all cases the course examines how Buddhism transformed in response to the emergence of new global contexts.

#### RELIG 203 Judaism, Christianity, and Islam (4 credits)

In contrast to the Chinese concept of the "three traditions", Islamic tradition came to define the overlapping identity of Jewish, Christian and Islamic peoples by the concept of "the people of the book". This course offers an introduction to the three traditions of Judaism, Christianity and Islam by focusing on the concept of the sacred text as the written revelation of God. Comparisons between the Jewish Torah, Christian gospels and Islamic law, and the practices of scribes, commentators, and textual scholars illuminate the similarities and also differences between the three great monotheistic traditions of the world.

# RELIG 204 The Problem of Evil (4 credits)

This courses explores the problem of evil for Eastern and Western religious thought and discusses several attempts to confront the reality of evil, to square that with one's worldview, and to find a way of living with that worldview. This courses examines theological, philosophical, psychological, and popular cultural conceptions and responses.

# RELIG 302 Religious and Philosophical Thought on the Environment (4 credits)

This course explores the ways in which a variety of religious traditions across the world have shaped fundamental conceptions of humanity's place within nature, including the kinds of environmental ethics that arise from these conceptions. The course examines the foundational texts and practices of selected world religions and considers how these texts and practices are being used by contemporary religious leaders to shape religious responses to current ecological challenges, such as environmental pollution, global climate change, and the factory farming of nonhuman animals.

#### **RELIG 303 The Human Condition (4 credits)**

Exploration of the problem of the human condition for Eastern and Western religious thought. This courses examines theological, philosophical, psychological, and popular cultural conceptions and responses. It explores how traditions of religious thought have conceptualized the basic problem of the human condition, whether as the consequences of karmic bonds, the general condition of human ignorance, or a lack of proper moral training. At the same time the course offers a framework for understanding religious movements as positing solutions to the problems they identify, whether conceptualized as salvation, liberation, perfection, or immortality.

# RELIG 304 Ethics in Religious Perspective (4 credits)

This course examines how and why religious traditions propose ethical norms, their continued significance in the contemporary world, and recent attempts to foster a more inclusive, global approach to ethics. Whether formulated in divine laws, ritual formulas or monastic codes, religious traditions have asserted their authority and identity by specifying what they regard as the ultimate norms for human conduct. These norms were formulated in the last Axial period around 2,500 years ago and reflect the values and interests of those societies. The course examines the continuing impact and relevance of these norms on contemporary life, and pays particular attention to attempts to shape global ethical norms especially in relation to global issues such as climate change.

# **Courses with Course Subject: Social Science (SOSC)**

#### SOSC 101: Foundational Questions in Social Science (4 credits)

People everywhere ponder and debate fundamental questions: What does it mean to be human? How is society to be ordered? What is a moral life? Our ancestors asked such questions as well: it is likely that those questions lie at the origins of humanity itself. They also provide the foundations for much of the most important research in the social sciences today. This course examines the ways in which social scientists from a diversity of disciplines

approach these fundamental questions. Study material for the course will include foundational texts from across the social sciences, as well as cutting-edge research from the present day. This course will not attempt to answer these vast questions, or provide neat solutions for students: rather, we want to excite students about the social sciences and whet their appetites for further study.

# SOSC 102: Introduction to Research Methods (4 credits)

This course provides students with an understanding of research designs and research methods used in the social sciences. Students will learn about the scientific method, research methods and design, measurement, and ethical issues. Topics include quantitative and qualitative approaches, as well as mixed methods.

**Prerequisite(s):** SOSC 101 or consent of the instructor

#### SOSC 110 Innovation and Creativity (2 credits)

The overall goal of this course is to develop the creative mind-set of students and assist them to engage in innovation-driven activities through hands-on projects. There will be three core facets to the course: first, students will gain basic knowledge regarding the concepts and processes that lies at the heart of creative and innovative thinking styles. Second, students will learn various tools to unlock creativity within themselves and others and improve the flexibility and originality of their thinking. They also will explore alternative methods of innovative problem solving. And third, students will apply what they learned for designing innovative products or services through collaborative teamwork. Students will work with outside organizations/companies/entrepreneurs/designers to create innovative solutions to identified challenges.

#### SOSC 203 The Social, Political, and Economic Implications of Immigration (4 credits)

The regulation of labor immigration is among the most important and controversial public policy issues in high-income countries, but these issues have implications for understanding the social, political, and economic structures of all nations. Many countries in Europe and North America, including the UK and the US, have experienced very rapid increase in labor immigration over the past 20 years. In China, immigration, return migration, and internal migration have shaped much of its development. This course attempts to understand the determinants of immigration and how nations approach this critical social issue.

# SOSC 301 Religion and Community in America (4 credits)

The U.S. has been characterized as a "nation with the soul of a church." This unpacks that statement and explores the distinctive role that religious belief and institutions have played in American life. This course examines religious figures and movements, the role religion plays in politics and public life, the cultural contours of religious popular and social movements, the

racial, ethnic and gendered dimensions of religious life, and the nature of individualism and social solidarity in the U.S.

### SOSC 313 Decision Making Under Uncertainty (4 credits)

This course is about the techniques available to improve decision-making and limit mistakes. Methods include game theory, social choice theory, statistics and econometrics and computational modeling. The goal of the course is not to develop mastery, but to help students become better readers of research in the social sciences, while simultaneously providing them with a better sense of the options available as they pursue further course work and expertise in the social sciences.

Prerequisite(s): MATH 101, and STATS 101 or MATH 205

# Courses with Course Subject: Sociology (SOCIOL)

#### SOCIOL 104 Love, Marriage, and Family in Comparative Perspective (4 credits)

This course explores the process of family transformation in contemporary East Asia and the U.S. from a comparative perspective. It introduces different concepts, theories, and frameworks to explain the slow but noticeable family changes in East Asian societies and some distinct characteristics in the US. It will draw literature from sociology, demography, anthropology, and economics to study love, passion, marriage, cohabitation, mate selection, same-sex couples, and divorce across social contexts.

### **SOCIOL 105 Theory and Society (4 credits)**

This course exposes students to major classical and modern social theorists from the Enlightenment to the present. The course pays particular attention to theories seeking to follow models of the natural sciences and those seeking a more critical and interpretive understanding of modern society. Topics also include examining how sociological theory relates to other modern currents, such as conservatism, socialism, existentialism, anticolonialism, feminism, post-modernism.

#### SOCIOL 110 Sociological Inquiry (4 credits)

This course introduces you to the world of sociology. Sociologists study the social relationships, social interactions, and the influence of structural forces upon us. In this course, students will be exposed to various concepts and theories to address the sociological questions. This course is a broad survey course covering a wide variety of sociological topics. The course will focus on the relationship between individual and society, important social institutions in our society, and various social inequalities.

# **SOCIOL 111 Contemporary Social Problems (4 credits)**

Social problems both reflect and generate social change; this course provides a comparative analysis of the major social problems that have propelled social and cultural dynamics across historical periods, nations, and social groups by gender, race/ethnicity, and social class. The course explores the origins and implications of deviant behavior, social conflict and inequality, human progress and social change. Because studying social problems often involves specialize research methods, this course also investigates issues such as the unique inductive and deductive processes and related analysis methods that have developed in this field.

#### SOCIOL 180 Society, the Self, and the Changing Natural World (4 credits)

This course is an exploration of the changing and contrasting perceptions of social, themselves, and the natural world that people develop over the life course. It investigates how our perceptions are conditioned by the times we live in and reigning assumptions of our societies. The course covers a range of related topics including the exploration of perceptions of the self through the arts, the changing role of women in society, and the examination of science and society conflicts.

#### SOCIOL 202 Sociology of Culture (4 credits)

The terms "culture" and "cultural" have a wide range of meanings: objects, genres, actions (especially conventional), mental representations, and even complex institutional structures are all part of culture. Many sociologists argue that culture is not its object, rather it is an approach; it is about shared meaning and permeates all of social life. This course will allow students to engage in and contribute to this conversation in an effort to develop their understanding of culture and related changes in social processes over time. This course exposes students to the unique approaches the sociologists take to understanding culture and introduces them to many of the major theorists of culture. By the end of the course, students will have a basic toolkit for understanding society culturally.

#### SOCIOL 204 Identity, Action, and Emotion (4 credits)

Sociologists and social psychologists have made significant strides in recent decades using mathematical models to describe how people import cultural meanings into social interactions. This course explains how people maintain identities in role relationships and group interactions, and it explores a theory of how people perform normal institutional roles, respond to odd situations, and try to feel good about themselves. Students will learn to use computer simulations to model self, identity and emotional processes. They will leave the course knowing how to think scientifically about routine and unexpected parts of everyday life.

# SOCIOL 205 Gender, Work, and Organizations (4 credits)

Research and theories on gender issues in the organization of work are central to inquiry across the social sciences and in sociology, in particular. The socio-historical causes of gender segregation in the workplace and the contemporary consequences for wages and occupational status have permeated research and have been central to policy discussions as well. This course studies how gender interacts with work and complex organizations such as businesses, not-for-profits, and government agencies. It looks at how women have changed their roles in many societies and asks why progress has been slower in others. It uses case studies of specific work organizations with gender-related problems in group projects and presentations.

# **SOCIOL 211 Social Inequality (4 credits)**

Variations in the structure of inequality over time and across nations shape the way people behave, the interactions they have every day, and the challenges they will face across the life course. Inequality shapes and is shaped by educational institutions, economic development, work institutions, and state welfare programs. This course explores the nature, forms, and socioeconomic bases of inequality and social stratification. It pays particular attention to age, gender, race, ethnicity, class, region, and family as dimensions of inequality. The course pays particular attention to the degree to which people are able to change positions in the social structure over time.

# SOCIOL 301 Race, Ethnicity, and Citizenship (4 credits)

Race, ethnicity, and citizenship structure interactions and social change in all countries, and they also condition the forms of interaction that determine global processes and well-being. This course provides a critical framework to access origins, manifestations and evolution of race, ethnicity and citizenship. The course reviews and addresses the origins of and theoretical orientations of race, ethnicity and citizenship as constructs with social and political implications. It examines different ethnographies as well as quantitative studies to pinpoint how social scientists actually examine and draws conclusions about race, ethnicity and citizenship.

# Courses with Course Subject: Spanish (SPANISH)

#### SPANISH 25 Advanced Intermediate Spanish (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Spanish.

# **Courses with Course Subject: Statistics (STATS)**

# STATS 20 Basic Statistics and Quantitative Literacy (4 credits)

Credit for Advanced Placement on the basis of the College Board Examination in Statistics (Score of 5).

# STATS 101 Introduction to Applied Statistical Methods (4 credits)

This course will introduce students to common statistics used in social science research articles and the media with the goal of making them informed and critical consumers of research results reported by various sources. Students will gain understanding of the conceptual basis and purpose of different statistics, as well as the formulas for deriving them. The relationship of statistical analysis to other components of the research process will be explicated. The course will be taught using team-based learning with an emphasis on the application of new concepts, knowledge, and skills in the classroom. Application activities will include interpreting statistics presented in tables and graphics in research articles and the media, critiquing conclusions drawn from statistics, and using statistical software, such as SPSS or Stata, to conduct statistical tests and generate tables and graphics. *Not open to students who have credits for MATH 205*.

#### STATS 102 Introduction to Data Science (4 credits)

As an introductory course in data science, this course will show students not only the big picture of data science but also the detailed essential skills of loading, cleaning, manipulating, visualizing, analyzing and interpreting data with hands on programming experience.

#### STATS 210 Probability, Random Variables and Stochastic Processes (4 credits)

This course covers probability models, random variables with discrete and continuous distributions, independence, joint distributions, conditional distributions, expectations, functions of random variables, central limit theorem, stochastic processes, random walks, and Markov chains.

Prerequisite(s): MATH 205

#### STATS 301 Statistics (4 credits)

An introduction to the concepts, theory, and application of statistical inference, including the structure of statistical problems, probability modeling, data analysis and statistical computing, and linear regression. Inference from the viewpoint of Bayesian statistics, with some discussion of sampling theory methods and comparative inference. Applications to problems in various fields.

Prerequisite(s): MATH 201 and MATH 205

# STATS 302 Principles of Machine Learning (4 credits)

This course covers maximum likelihood estimation, linear discriminant analysis, logistic regression, support vector machine, decision tree, linear regression, Bayesian inference, unsupervised learning, and semi-supervised learning.

Prerequisite(s): COMPSCI 201, STATS 210

Pre or Co-requisite(s): MATH 304, MATH 305

#### STATS 303 Statistical Machine Learning (4 credits)

This course covers statistical inference, parametric method, sparsity, nonparametric methods, learning theory, kernel methods, computation algorithms and advanced learning topics.

Prerequisite(s): STATS 302

# STATS 304 Bayesian and Modern Statistics (4 credits)

This course covers Bayesian inference, prior and posterior distributions, multi-level models, model checking and selection, and stochastic simulation by Markov Chain Monte Carlo.

Prerequisite(s): STATS 302

# STATS 401 Data Acquisition and Visualization (4 credits)

This course introduces the principles and methodologies for data acquisition and visualization, along with tools and techniques used to clean and process data for visual analysis. It also covers the practical software tools and languages such as Tableau, OpenRefine and Python/Matlab.

Prerequisite(s): STATS 302

#### STATS 402 Interdisciplinary Data Analysis (4 credits)

This course covers interdisciplinary applications of data analysis for social science, behavioral modeling, health care, financial modeling, advanced manufacturing, etc. Students are expected to solve a number of practical problems by implementing data algorithms with R during their course projects.

Prerequisite(s): STATS 302

# STATS 403 Deep Learning (4 credits)

This course covers neural network, deep belief network, Boltzmann machine, convolutional neural network, recurrent neural network, and deep learning applications for speech, image, video, etc.

Prerequisite(s): STATS 303

# STATS 404 Probabilistic Graphical Models (4 credits)

This course covers Bayesian network, Markov random field, Gaussian graphical model, message passing, generalized linear model, expectation-maximization, factor analysis, state space model, conditional random field, variational inference, approximate inference, Dirichlet process, kernel graphical model and spectral algorithm.

Prerequisite(s): STATS 303

# Courses with Course Subject: Third Language (TLANG)

# TLANG 191 - Independent Study in Third Language 1 (4 credits)

This is a guided independent study course in which learners will learn basic skills in the target language. The specific goals and other aspects of the course (e.g. materials, learning methods) to be determined through discussion between the learner and instructor, but normally learners in this course will learn how to introduce themselves, manage daily interactions, and deal with daily life issues; in other words, the course will cover the amount and type of material normal for a first semester language course. The target language must be one which faculty in the Language Learning Studio are able to speak and can provide coaching for. This course is for students whose Third Language track students, i.e. those whose English and Chinese language proficiency is such that they need no further study of these languages.

# TLANG 192 - Independent Study in Third Language 2 (4 credits)

In this guided independent study course students will master the skills and language knowledge normally covered in a second semester language course. While the specific goals and other aspects of the course (e.g. materials, learning methods) will be determined through discussion between the learner and instructor, normally learners in this course will learn how to carry on social conversation about themselves and their lives. The target language must be one which faculty in the Language This is a guided independent study course in which learners will learn basic oral and/or written skills for managing common social interactions in the target language. The specific goals and other aspects of the course (e.g. materials, learning methods) to be determined through discussion between the learner and instructor, but essentially the course will cover the amount and type of material normal for a second-level

language course. The target language must be one which faculty in the Language Learning Studio are able to speak and can provide coaching for. This course is for Third Language track students.

**Prerequisite(s):** TLANG 191 or equivalent.

#### TLANG 291 - Independent Study in Third Language 3 (4 credits)

In this guided independent study course students will master the skills and language knowledge normally covered in a third semester language course. While the specific goals and other aspects of the course (e.g. materials, learning methods) will be determined through discussion between the learner and instructor, normally learners in this course will learn how to communicate about topics such as school life, work, travel and so forth. The target language must be one which faculty in the Language Learning Studio are able to speak and can provide coaching for. This course is for is for Third Language track students.

**Prerequisite(s):** TLANG 192 or equivalent.

#### TLANG 292 - Independent Study in Third Language 4 (4 credits)

In this guided independent study course students will master the skills and language knowledge normally covered in a fourth semester language course. While the specific goals and other aspects of the course (e.g. materials, learning methods) will be determined through discussion between the learner and instructor, normally learners in this course will learn how to communicate about topics such as one's country and community, social issues, and so forth. This is a guided independent study course in which learners will learn basic oral and/or written skills for talking about topics such as school life, work, travel and so forth. The specific goals and other aspects of the course (e.g. materials, learning methods) to be determined through discussion between the learner and instructor, but essentially the course will cover the amount and type of material normal for a second-level language course. The target language must be one which faculty in the Language Learning Studio are able to speak and can provide coaching for. This course is for Third Language track students.

**Prerequisite(s):** TLANG 291 or equivalent.

#### **Courses with Course Subject: US Studies (USTUD)**

#### **USTUD 210 American Musicals (4 credits)**

This course examines the history of American musicals, focusing on the period from Show Boat to Sondheim with attention to poetics, aesthetics, and politics. It demonstrates how the American musical has functioned as a popular representation of key themes such as immigration, race and gender and sexual diversity. Students will learn to identify historical and cultural references, and place the evolution of the musical in its proper social and historical context, including the significance of Broadway and New York in the popular

American cultural imagination. Students learn to interpret music as text and understand the relationship of musical theater to other musical forms such as blues, jazz, pop and rock.

# <u>USTUD 301 The Western Across Boundaries (4 credits)</u>

This course studies the film genre that has, for better and for worse, defined what it means to be an American for Americans themselves and for the rest of the world. It places these films in the historical context of the American westward expansion, and the genocide of native Americans. It examines these films through the myths of the American pioneer, rugged individualism, heroic masculinity, and drama of the American landscape. By focusing on the concept of crossing boundaries, the course analyzes the concept of the frontier, the representation of frontier communities including Chinese and Irish immigrants, Hispanic peoples and native Americans.

**USTUD 390 Junior Seminar: Advanced Topics** 

**USTUD 490 Senior Seminar: Advanced Topics** 

# Courses with Course Subject: Written and Oral Communication (WOC)

# WOC 110 Should We Care About Endangered Languages (2 credits)

This course examines the issue of endangered languages, in particular whether or not it is important to be concerned about the decreasing number of languages in the world. Through studying this issue, staking out positions, and making cases for those positions, students will build their ability to present clear and effective arguments in papers and oral presentations.

#### WOC 190 Special Topics in Writing (2 credits)

This is a theme-based writing seminar course through which students strengthen their creative or expository writing skills through exploration of a topic chosen by the instructor. This course is open to all undergraduate students.

#### WOC 205 Writing about Endangered Languages (4 credits)

Through study of endangered languages, this course will help students improve their ability to research an issue by using library resources in multiple languages, and to write a well-grounded and persuasive course paper in which students make a case for their position on this issue; students will also improve their ability to make their case through a well-informed and persuasive oral presentation. Last but not least, through study of this issue, students will learn more about the role of languages in today's globalizing world.

Prerequisite(s): EAP 102B or equivalent or consent of the instructor

# WOC 206 Debating Scenarios for Sustainable Futures (2 credits)

This course will focus on the fundamentals of argumentation, refutation, and value and impact analysis. Rather than allowing debates to end with a winner, however, students will also explore the importance of reconciliation with consensus-building tasks that generate alternative solutions by considering all stakeholder perspectives and suggesting amicable resolutions to these debates.

**Prerequisite(s):** EAP 101B or equivalent or consent of the instructor

#### WOC 290 Special Topics: Writing across Cultures (4 credits)

This is a theme-based writing seminar course that has an emphasis on cross-cultural inquiry. It provides guided practice in intellectual reading and writing of the sort expected in courses across the academy and in civic and professional life beyond the university. The specific theme of the course will vary according to instructor. This course may be repeated for credit if the course content of the two courses is different.

This course is open to all undergraduate students, but for EAP-track students the prerequisite is EAP 102. For EAP-track students, this course can be counted toward completion of their 4 EAP course requirement.

Prerequisite(s): EAP 102B or equivalent or consent of the instructor

# Part 11: Academic Calendar 2019-20

(NOTE: CALENDAR SUBJECT TO CHANGE)

# Fall 2019

| August 13                  | Tuesday. International students (Class of 2023) move-in.   |
|----------------------------|--|
| August 14                  | Wednesday. Chinese students (Class of 2023) move-in.   |
| August 17                  | Saturday. New graduate students move-in.   |
| August 23-24               | Friday-Saturday. Returning graduate students move-in.  |
| August 24-25               | Saturday-Sunday. Returning undergraduate students move-in.                                       |
| August 26                  | Monday. Undergraduate and graduate classes begin.  |
| August 29                  | Thursday. Drop/add ends for first 7-week undergraduate session.                                  |
| September 8                | Sunday. Drop/add ends for graduate classes.  |
| September 13               | Friday. Mid-Autumn Festival - No classes   |
| September 26               | Thursday. Last day to withdraw with a W grade for first 7-week classes.                          |
| September 28-29            | Saturday-Sunday. No classes scheduled.   |
| September 30               | Monday. All classes continue.  |
| October 1-7                | Tuesday – Monday. Chinese National Day Holiday – <b>No classes.</b>                              |
| October 17                 | Thursday. First 7-week undergraduate session ends.   |
| October 18-20              | Friday-Sunday. Undergraduate reading period.   |
| October 21-25              | Monday-Friday. First 7-week undergraduate session final examinations. Graduate classes continue. |
| October 28                 | Monday. Second 7-week undergraduate session begins.  |
| October 31                 | Thursday. Drop/add ends for second 7-week undergraduate session.                                 |
| November 28                | Thursday. Graduate classes end; Last day to withdraw with a W grade for second 7-week classes.   |
| November 29-<br>December 3 | Friday-Tuesday. Graduate reading days.   |
| December 4-6               | Wednesday-Friday. Graduate exams.  |
|                            | 1  |

| December 12    | Thursday. Second 7-week undergraduate session ends.    |
|----------------|--|
| December 13-15 | Friday-Sunday. Undergraduate reading period.           |
| December 16-20 | Monday-Friday. Undergraduate final examinations.       |
| December 21    | Saturday Noon. Residence halls close for Winter Break. |

# Spring 2020

| January 2               | Thursday. Residence halls reopen at 9AM.   |
|-------------------------|--|
| January 6               | Monday. Undergraduate classes begin.   |
| January 9               | Thursday. Drop/add ends for first 7-weeks undergraduate session.                                 |
| January 13              | Monday. Graduate classes begin.  |
| January 23              | Thursday. Drop/add ends for graduate classes.  |
| January 24 - 30         | Friday-Thursday. Spring Festival – Chinese New Year – <b>No classes</b>                          |
| February 3              | Monday. All classes resume.  |
| February 13             | Thursday. Last day to withdraw with a W grade for first 7-week classes.                          |
| February 27             | Thursday. First 7-week undergraduate session ends.   |
| February 28-<br>March 1 | Friday-Sunday. Undergraduate Reading Days.   |
| March 2-6               | Monday-Friday. First 7-week undergraduate session final examinations. Graduate classes continue. |
| March 9-13              | Monday-Friday. Mini-term week for undergraduate students. Spring recess for graduate programs    |
| March 16                | Monday. Second 7-week undergraduate session begins and graduate classes resume.                  |
| March 19                | Thursday. Drop/add ends for second 7-week undergraduate session.                                 |
| April 4                 | Saturday. Qing Ming – Tomb Sweeping Day.   |

| April 16    | Thursday. Last day to withdraw with a W grade for second 7-week classes.             |
|-------------|--|
| April 23    | Thursday. Graduate classes end.  |
| April 24-27 | Friday-Monday. Graduate Reading Days.  |
| April 28-30 | Tuesday-Thursday. Graduate exams.  |
| April 30    | Thursday. Second 7-week undergraduate session ends.                                  |
| May 1       | Friday. International Labor Day Celebration – May Day – <b>No classes</b>            |
| May 1-3     | Friday - Sunday. Undergraduate Reading Days.   |
| May 4-8     | Monday - Friday. Undergraduate final exam period.                                    |
| May 8       | Friday. Graduate commencement.   |
| May 9       | Saturday Noon. International freshmen students and all sophomore students check out. |

# Summer 2020 (Tentative)

| May 9      | Saturday. Military Training for Chinese mainland freshmen students starts.                             |
|------------|--|
| May 22     | Friday. Military Training ends.  |
| May 25     | Monday. Summer 7-week session starts (Chinese mainland and HMT students only).                         |
| June 25    | Thursday. Dragon Boat Festival – <b>No classes</b> .   |
| July 13    | Monday. Last day of Summer 7-week session classes. Classes meet on a Thursday schedule.                |
| July 14-15 | Tuesday-Wednesday. Summer 7-week exam period.  |
| July 16    | Thursday Noon. Chinese mainland and HMT students check out and residence halls close for summer break. |

# Part 12: Useful Contacts

- Chancellor's Office: chancellorsoffice@dukekunshan.edu.cn
- Registrar: DKU-registrar@dukekunshan.edu.cn
- Office of Undergraduate Studies: ugstudies@dukekunshan.edu.cn
- Office of Undergraduate Advising: advising@dukekunshan.edu.cn
- Office of Study Abroad: DKU-studyabroad@dukekunshan.edu.cn
- Residence Life: residencelife@dukekunshan.edu.cn
- Student Activities: activities@dukekunshan.edu.cn (including sports/athletics inquiries)
- Student Health: campushealth@dukekunshan.edu.cn
- CAPS: counselingappointment@dukekunshan.edu.cn
- Career Services: careerservices@dukekunshan.edu.cn
- Undergraduate Admissions: ug-application@dukekunshan.edu.cn
- Financial Aid: ug-finaid@dukekunshan.edu.cn
- Student Finance: DKU-bursar-ug@dukekunshan.edu.cn