#### Writing Lab I

Course Type:	core
Category:	WL
Instructor:	Li Xuezhen
Grade:	11
Semester:	1
Pre-requisite:	None
Description:	In this course, students will learn the concepts of effective reading and writing techniques. The aim is to improve their reading efficiency and academic writing by focusing on vocabulary, sentence structure and logical reasoning. Through peer work and hands-on exercises, students will develop craft and voice with careful attention to argumentation and audience. In the meantime, they will obtain a higher level of reading comprehension and vocabulary. Students who have TOEFL score above 110 (including 110) or IELTS score above (8 including 8) can apply for an exemption.
Objectives:	Students will: know basic reading & Writing tasks in diverse language tests. learn skills to read more accurately and efficiently. deepen familiarity and experience with the writing process: prewriting, drafing, revising, editing and publishing. enhance argumentative and analytical writing skills.
Assessment:	Student handbook & responsibility 20% In-class vocab quiz 20% Mid-term exam 30% Final exam 30%

## Writing Lab II

Course Type:	elective
Category:	WL
Instructor:	Li Xuezhen
Grade:	11
Semester:	2
Pre-requisite:	None
Description:	In this course, students will learn the concepts of effective reading and writing techniques. The aim is to improve their reading efficiency and academic writing by focusing on vocabulary, sentence structure and logical reasoning. Through peer work and hands-on exercises, students will develop craft and voice with careful attention to argumentation and audience. In the meantime, they will obtain a higher level of reading comprehension and vocabulary. Students who have TOEFL score above 110 (including 110) or IELTS score above (8 including 8) can apply for an exemption.

Objectives:	know basic reading & Writing tasks in diverse language tests. learn skills to read more accurately and efficiently. deepen familiarity and experience with the writing process: prewriting, drafing, revising, editing and publishing. enhance argumentative and analytical writing skills.
Assessment:	Student handbook & responsibility 20% In-class vocab quiz 20% Mid-term exam 30% Final exam 30%

#### Genetic Engineering Lab

Course Type:	club
Category:	biology
Instructor:	Tang Lingfang
Grade:	11, 12
Semester:	2
Pre-requisite:	Biology course in Grade 10
Description:	Genetic engineering lab is a club course supplying students with opportunity to construct genetic modified organisms such as bacteria to solve real-life big problems. The aim of this course is not only allowing students acquire recombinant DNA technology at high school, but also improving their humanity concern by using recombinant DNA technology to protect environment and improve human welfare. In the past academic years, students have tried to insert plastic- decoding gene into E.coli to solve the increasing plastic pollution problem, to insert lethal gene to ease mosquito problem, to insert coenzyme 10 gene to produce anti-aging drug, et. al. This course is suitable for students who have strong interest in genetic engineering of biology, especially for those who want research project experience for majority choosing and college application.
Objectives:	After taking this course, students should be equipped with: The ability of recombinant DNA technology operation and application. Research project experience of solving big problems to prove their academic level and humanity concern.
Assessment:	25% Lab recording 30% Participation and responsibility 30% Experimental operation 10% Final presentation 5% Final report

#### Ecological Studies: Field Research Methods and Analysis

Course Type:	elective
Category:	biology
Instructor:	Alex Sicurella
Grade:	11, 12
Semester:	2

Pre-requisite:	Full-year Microscopic and Macroscopic Biology or Biology in Action
Description:	This course is designed to provide insights into practices and core topics related to the field of Ecology. Throughout the course we will explore the essential concepts and ideas related to Ecology with a specific focus on the ways that ecologists collect and analyze data. By the end of the course you will have a better understanding of Ecology and will gain first- hand experience in ecological study design. The course will be built upon activities, presentations, and discussions related to the concepts we will address throughout the semester. You will be given sections from several textbooks which will provide specific content knowledge needed for in class sessions. You will be expected to complete assigned readings in a timely manner, and regularly provide evidence of completing the readings through either the submission of notes or chapter discussions. We will have 2 major projects in the course, where we will connect what we have learned in the course to field research, these projects will be considered the formal assessments of the course instead of tests or quizzes. The first will be a guided research study in which you will be specific research question to investigate, and the second will be an open research study which you will decide upon your own research question. Both projects will be group projects, but you will have individual components to complete.
Objectives:	By attending the course, students will be able to: - Learn the fundamental concepts of Ecology - Practice research methods essential for field research - Gain familiarity the collection and analysis of ecological data
Assessment:	Participation and Effort: 25% Assignments & Presentations: 30% Field Research Project 1: 20% Field Research Project 2: 25%

#### **Animal Behavior**

Course Type:	elective
Category:	biology
Instructor:	Alex Sicurella
Grade:	11, 12
Semester:	1
Pre-requisite:	Full-year Microscopic and Macroscopic Biology or Biology in Action

Description:	Animal Behavior is a semester long elective course for Senior 2 and Senior 3 Dalton students. The overall objective of the course is to learn the core concepts and practices of biological research through the field of Animal Behavior. The course will explore content such as: the causes and consequences of behaviors including predation, foraging, migration,
	and mating behavior. The class has a project-based learning focus, with a strong emphasis on scientific research skills and communication. Throughout the semester students will participate in designing and completing a research study related to animal behavior in order to practice their research skills and learn from experience. There are three typical class settings, which include: discussion/presentation, activity/lab work, and research project work. The objective of discussion/presentation is to give students opportunities to understand the core concepts animal behavior and allow them to improve their speaking skills. Activity/lab work is intended to help students gain an understanding of the core concepts of scientific research and is useful for providing students a chance to apply their understanding of the
	content. Lastly, research project work is a core component of the class due to the time required to complete the project. During research project work time, students will gain an understanding of research practices, and can collaborate and receive guidance on their projects. This course is intended to provide students interested in pursuing Biology in the future by giving them practical experience in carrying out scientific research and scientific writing.
Objectives:	After taking this course, students should be equipped with: - an understanding of animal behavior, and the ability to analyze the causes and consequences of different animal behaviors - the ability to communicate scientific research and concepts through speaking and writing - the capacity to manage time and workload with group members to complete a research study
Assessment:	Effort and Participation 15% Presentations 20% Assignments 25% Research Study Project 40%

# Advanced Biology II HL

Course Type:	elective
Category:	biology
Instructor:	Zhang Weibo
Grade:	11, 12
Semester:	2
Pre-requisite:	Advanced Biology I HL

Description:	The course provides help for taking AP Biology exam. This is a high-level biology course that aims to provide students with a deep understanding in all major aspects of biology. Students will then connect the learning to real-world questions through multiple field trips, inquiry lab projects, professional seminars, student presentation and discussion. This course is suitable for students who are interested in pursuing a biology related career.
Objectives:	Students will: acquire deep understanding and scientific explanation of biological phenomenon and the underlying mechanisms develop solid practical skills to solve scientific problems build good scientific communication skills reinforce an interest in nature and the living things
Assessment:	

#### Environmental Science II

Course Type:	elective
Category:	biology
Instructor:	Tang Lingfang
Grade:	11, 12
Semester:	2
Pre-requisite:	Environmental Science I
Description:	The course provides help for taking AP Environmental Science exam. The Environmental Science is an interdisciplinary course covers environmental related topics from biology, chemistry, geology, geography and environmental studies. The aim of this course is to help students develop the ability of preventing, identifying, analyzing, and solving natural and human-made environmental problems by teaching them with the scientific principles, concepts, and methodologies about environmental science. This course is suitable for students who are interested or will be majored in biology, geology or any other subjects that require environmental science background. This course will differ from the Environmental Science course in content. Lecture classes will end at the end of April, before AP Environmental Science Test. The remained teaching hours will be scheduled for field trip (the schedule could be modified according to situation then).
Objectives:	After taking this course, students should be equipped with: The awareness of environmental protection. The principles, concepts and methodologies required to identify, analyze or propose solutions to environmental problems. The experience of applying environmental science knowledge to solve real life problems.
Assessment:	Assessments include the following areas, which will determine the overall course grade: 20% class performance 30% weekly quiz 35% review test 15% environmental protection project

#### **Biology Contest Club II**

Course Type:	club
Category:	biology
Instructor:	Zhang Weibo
Grade:	11, 12
Semester:	2
Pre-requisite:	Currently taking Advanced Biology II HL
Description:	The club course provides help (additional to Advanced Biology HL I course) for taking AP Biology exam and academic biology contest (USABO, USACN, BBO, etc.) This is a high-level biology course that aims to provide students with a deep understanding in all major aspects of biology. Students will then connect the learning to real-world questions through practice including multiple field trips, inquiry lab projects, professional seminars, student presentation and discussion. This course is suitable for students who are interested in pursuing a biology related career.
Objectives:	Students will: acquire deep understanding and scientific explanation of biological phenomenon and the underlying mechanisms develop solid practical skills to solve scientific problems build good scientific communication skills reinforce an interest in nature and the living things
Assessment:	The course will be evaluated with the following dimensions: Class participation 30% Proiects 70% Total 100%

#### Biology in Action (Formally Biology-Third Science)

Course Type:	core
Category:	biology
Instructor:	Alex Sicurella
Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	Did not take full-year Microscopic and Macroscopic Biology

Description:	Attention: Semester 1 is for Grade 11, 12. Semester 2 is for Grade 10.  Biology in Action is a semester-long course with a focus on investigating current and important topics in Biology. We will use a top-down approach to identify the resources and knowledge needed to better understand the topic. The goal is to help you go beyond simply gaining an understanding of the core concepts by developing a personal connection to the subject. This is a different approach to teaching and learning Biology, and therefore we will be exploring various forms of learning to investigate the different topics we encounter. The course is a project-based learning class, which means that we will have many short projects and activities that will require time both inside and outside of the classroom. Discussion, presentations, and writing (mostly informal) will be common practices throughout the class. We will also engage in scientific practices such as experimentation and modeling. Overall, by taking this course you should gain a deeper understanding of the subject and a sense of how you can apply Biology to your life.
Objectives:	After taking this course, students should be equipped with: Students will understand, explain and evaluate some of the core concepts in Biology. Students will develop their ability to apply knowledge of biology Students will gain insight into scientific practices. Students will cultivate skills in logical and creative thinking.
Assessment:	Students will get to individually choose the percent each category is worth towards their total grade. This allows for students to have ownership and increased responsibility over their overall grade. The total percentage will have to equal to 100%. Effort and Participation: 15-30% This includes participation in discussion/class activities, the completion of assignments in a timely manner, and general effort put towards the class as whole. Presentations: 15-30% Presentations are a common practice in the class, and will occur throughout the 3 units. Students will have a standard rubric for all the presentations throughout. Assignments: 15-30% This is made up of assignments given on teams that are not specified as unit projects/presentations. These assignments will vary in form, and assessment style, but will typically have a rubric specific to the assignment. Unit Projects: 25-40% Each unit will have a specific unit project associated with it. These unit projects include the following: Article Writing Creative Project

#### Biology Contest Club I

Course Type:	club
Category:	biology
Instructor:	Zhang Weibo
Grade:	11, 12
Semester:	1
Pre-requisite:	Currently taking Advanced Biology I HL

Description:	The club course provides help (additional to Advanced Biology HL I course) for taking AP Biology exam and academic biology contest, e.g., USABO, USACN, BBO. The club course aims to provide students sufficient practice opportunities to reflect on their learning in Advanced Biology I HL course with several major aspects of biology, including the chemistry of life, the cell, and genetics. Students will then connect the learning to real-world questions through practice. This course is suitable for students who are interested in pursuing a biology related career.
Objectives:	Students will: acquire a deep understanding and scientific explanation of biological phenomenon and the underlying mechanisms develop solid practical skills to solve scientific problems build good scientific communication skills reinforce an interest in nature and the living things
Assessment:	The course will be evaluated with the following dimensions: Class participation 50% Tests 20% Assignment 30% Total 100%

#### Biomedical Lab

Course Type:	club
Category:	biology
Instructor:	Doctors from Peking University Third Hospital and Dr. Tang Lingfang
Grade:	11, 12
Semester:	1
Pre-requisite:	Have taken at least one biology course with B or above.
Description:	This course offers an opportunity for students to biomedical research to solve real life medical problems at Peking University Third Hospital. The aims of this course are helping students understand how modern biomedical research achievements could be applied to improve human health, develop scientific competency of thinking and inquiry, build up research foundation for their IRP, and finally contribute to biomedical research and human welfare in the future. With the instruction from doctors there, students will experience complete research process from designing experiment, carrying out experiments, analyzing data to presentation and defense. Labs will include DNA extraction, primer design, PCR amplification, agarose gel electrophoresis, sequence alignment, mouse oocytes collection and culture and microinjection, etc.
Objectives:	After taking this course, students should: Understand the working mechanism and/or basic practice skills of Assisted Reproductive Technology (ART), Preimplantation Genetic Screening (PGS), Preimplantation Genetic Testing (PGT), X-linked recessive inheritance R),etc. Understand Cutting-cdge biomedical techniques, such as DNA Sequencing Technology, Whole-Genomic- Amplification (WGA), In vitro fertilization (IVF), Preimplantation genetic diagnosis (PGD), etc. Promote Relative high level of scientific thinking and inquiry ability.

overall course grade: 25% Lab recording 30% Participation and responsibility 30% Experimental operation 10% Final presentation 5% Final report
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#### Environmental Science I

Course Type:	elective
Category:	biology
Instructor:	Tang Lingfang
Grade:	11, 12
Semester:	1
Pre-requisite:	Any biology or chemistry course in grade 10
Description:	The course provides help for taking AP Environmental Science exam. The Environmental Science is an interdisciplinary course covers environmental related topics from biology, chemistry, geology, geography and environmental studies. The aim of this course is to help students develop the ability of preventing, identifying, analyzing, and solving natural and human-made environmental problems by teaching them with the scientific principles, concepts, and methodologies about environmental science. This course is suitable for students who are interested or will be majored in biology, geology or any other subjects that require environmental science background.
Objectives:	After taking this course, students should be equipped with: - The awareness of environmental protection The principles, concepts and methodologies required to identify, analyze or propose solutions to environmental problems.
Assessment:	Assessments include the following areas, which will determine the overall course grade: $20\%$ class performance $40\%$ weekly quiz $20\%$ midterm exam $20\%$ final exam

#### Microbiology Laboratory

Course Type:	elective
Category:	biology
Instructor:	Zhang Weibo
Grade:	11, 12
Semester:	1
Pre-requisite:	Full-year Microscopic and Macroscopic Biology or Biology in Action

Description:	Microbes are the most abundant organisms in this planet. They are not only surrounding us, but they are also on us and even within us! They can be pathogens, crop fertilizers and bioengineering tools. They influence us much stronger than we ever thought. But many of us know little about them. In this course, students are encouraged to ask microbiology- related questions originated from their life experiences. The course offers them a flexible research platform to explore and explain open questions like a real microbiologist by doing scientific and engineering practices using disciplinary ideas, crosscutting concepts and professional skills they learnt from this course.
Objectives:	By attending the course, students will: - master basic microbiology lab skills and research methods know lab safety rules and emergency treatment skills be capable of building knowledge communities to educate people and promote people's daily living conditions.
Assessment:	Grading Item Points Class performance 20 Lab technique 10 Survey of Environmental Microorganisms 20 Fermented Food/Drink Project 20 Unknown Project 20 Community Contribution 10 Total 100

#### Biochemphysics Principles of Life

Course Type:	elective
Category:	biology
Instructor:	Tang Lingfang
Grade:	11, 12
Semester:	2
Pre-requisite:	At least one biology course and one chemistry course
Description:	Biochemphysics Principles of Life is an interdisciplinary semester course which has successfully published four academic papers in the past two years. The course aims to help students develop interdisciplinary thinking to explore the scientific principles and mechanisms under biological phenomena by combining the knowledge of biology, chemistry and physics. Different life phenomena will be explored in three units. After that, students will need to choose one interested topic to re-organize and summarize what they've learned in class to write an academic paper. They can also add their own thinking and more findings to the paper, and outstanding papers will be chosen to try publication. In that way, not only students' interdisciplinary problem-solving ability will be developed, but also their academic level will be improved and proved.
Objectives:	After taking this course, students will: Develop interdisciplinary thinking and problem-solving ability. Acquire the experience of multi-disciplinary learning, which is required for many fields during college application. Improve and prove their academic level by finishing a professional academic paper, and some of them may get the opportunity to publish their paper.

Assessment:	Assessments include the following areas, which will determine the overall course grade: 30% Class performance; 40% Academic paper; 15% Presentation; 15% Quizzes and exams.
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#### Advanced Biology I HL

Course Type:	elective
Category:	biology
Instructor:	Zhang Weibo
Grade:	11, 12
Semester:	1
Pre-requisite:	Students should satisfy one of the following prerequisites: B+ or above in full-year Microscopic and Macroscopic Biology HL; A or above in full-year Microscopic and Macroscopic Biology SL; Approval of teacher
Description:	This is a high-level biology course that aims to provide students with a deep understanding in all major aspects of biology, including the chemistry of life, the cell, genetics, mechanisms of evolution, evolutionary history and biodiversity, plant and animal form and function, and ecology. Students will then connect the learning to real-world questions through professional seminars, student presentation and discussion. This course is suitable for students who are interested in pursuing a biology related career.
Objectives:	Students will: - acquire a deep understanding and scientific explanation of biological phenomenon and the underlying mechanisms - develop solid practical skills to solve scientific problems - build good scientific communication skills - reinforce an interest in nature and the living things
Assessment:	The course will be evaluated with the following dimensions: Class participation 30% Tests 30% Assignment 20% Discussion/Presentation 20% Total 100%

## College Application and Transition III

Course Type:	core
Category:	сср
Instructor:	College counselors
Grade:	12
Semester:	2
Pre-requisite:	College Application and Transition III in semester 1
Description:	The purpose of College Application and Transition 2 is to help students get well prepared for the college life abroad.

Objectives:	After taking this course, the students will: have a better understanding of the culture and law of the destination country form a vivid picture of what to do upon arrival of destination country learn the resources their target university to support their cultural adjustment read the books about academic writing and college life comprehend the importance of mental health and self-protection awareness
Assessment:	Students will be assessed comprehensively. Assessments include class discussion, class performance, assignments and feedback. Evaluation Criteria:Pass/Fail Attendance and Class Performance -50% Participation, Discussion and Feedback-50%

# Career and College Planning II

Course Type:	core
Category:	сср
Instructor:	College counselors
Grade:	11
Semester:	2
Pre-requisite:	Career and College Planning II in semester 1
Description:	Career and College Planning 2 aims to help students further and broaden what they' ve already explored in CCP 1 to gain a deeper understanding of their future major, college and career choices; to connect high school courses, college majors and future career directions in a fun way through real-world employment data, and to effectively and precisely set future personal goals, understand the admissions process in different destinations, and ultimately find their "fit" college and major.
Objectives:	After taking this course, students should be equipped with: awareness of the importance of short- and long-term planning selection of academic and extracurricular activities and standardized test plans a deeper understanding of how colleges admit students and key planning elements for different destinations a clear academic pathway and how to develop individual study plan based on the pathway a clear picture of college major options based on career choices, especially those new, interdisciplinary, and unfamiliar ones an understanding of what fit means between the individual and the university essential school research skills especially on those special programs colleges offer different types of admissions and application strategies and finally make a preliminary list of schools college application process and how applications are reviewed a clear self-concept and know how "who am I would impact my self-expression in all materials such as interviews and college essays

Assessment:	Assessments may include class activities, group presentations, personal research tasks, mock interviews, activities list and college essays. The instructor will offer frequent feedback regarding student work and performance. Students will be assessed based on the Pass/Fail scale: Pass = more than $60\%$ ; Fail = less than $60\%$ Assessments in the following areas will determine the overall course grade: $30\%$ =
	Attendance and Class Engagement 30% = Major, College, and Career Research 40% = College Essay, Activities List, and Mock Interview

# Career and College Planning II

Course Type:	core
Category:	сср
Instructor:	College counselors
Grade:	11
Semester:	1
Pre-requisite:	Career and College Planning I
Description:	Career and College Planning 2 aims to help students further and broaden what they' ve already explored in CCP 1 to gain a deeper understanding of their future major, college and career choices; to connect high school courses, college majors and future career directions in a fun way through real-world employment data, and to effectively and precisely set future personal goals, understand the admissions process in different destinations, and ultimately find their "fit" college and major.
Objectives:	fter taking this course, students should be equipped with: awareness of the importance of short- and long-term planning selection of academic and extracurricular activities and standardized test plans a deeper understanding of how colleges admit students and key planning elements for different destinations a clear academic pathway and how to develop individual study plan based on the pathway a clear picture of college major options based on career choices, especially those new, interdisciplinary, and unfamiliar ones an understanding of what ft means between the individual and the university essential school research skills especially on those special programs colleges offer different types of admissions and application strategies and finally make a preliminary list of schools college application process and how applications are reviewed a clear self-concept and know how "who am I' would impact my self-expression in all materials such as interviews and college essays

Assessment:	Assessments may include class activities, group presentations, personal research tasks, mock interviews, activities list and college essays. The instructor will offer frequent feedback regarding student work and performance. Students will be assessed based on the Pass/Fail scale:
	Pass = more than 60%; Fail = less than 60% Assessments in the following areas will determine the overall course grade: 30% = Attendance and Class Engagement 30% = Major, College, and Career Research 40% = College Essay, Activities List, and Mock Interview

#### College Application and Transition III

Course Type:	core
Category:	сср
Instructor:	College counselors
Grade:	12
Semester:	1
Pre-requisite:	Career and College Planning II
Description:	The purpose of College Application and Transition 1 is to help students complete their college application by themselves and accept the right one from the offers they receive.
Objectives:	After taking this course, the students will: complete all the college applications by themselves and accept one o ffer clearly know what they need to do BEFORE and AFTER they apply
Assessment:	Students will be assessed comprehensively. Assessments include class discussion, class performance, assignments and feedback. Evaluation Criteria:Pass/Fail Attendance and Class Performance -50% Participation, Discussion and Feedback-50%

#### Nutrition and Health: You are What You Eat

Course Type:	elective
Category:	chemistry
Instructor:	Li Junzi
Grade:	11, 12
Semester:	2
Pre-requisite:	Any core chemistry or core biology course
Description:	This course introduces both the theoretical and practical aspects of purchasing and preparing food. Dealing with diet and health in everyday life, learners study the nutritional value of basic foods and develop the skills required to produce a balanced meal. Learners are encouraged to put their knowledge into practice in order to produce creative and enjoyable dishes.

Objectives:	After taking this course, students should be able to: Interpret what the scientific facts tell us about nutrition and heat; Understand why we eat what we eat; Explain the nutrition standards and guidelines; know global health concepts through multidisciplinary speakers dedicated to improving health through their unique training; Provide both scientific knowledge and application of nutrition related to exercise, health, and sports; Explain the relationship between diet and health Put their knowledge into practice; Evaluate one's own diet.
Assessment:	25% Unit 1 Reading books and articles Lecture (quiz and examinations) Presentations 25% Unit 2 Meal plan Application assessment 25% Unit 3 Survey and interviews Reports 25% Unit 4 Assessments Labels analysis

# Physical Chemistry II: Thermodynamics HL

Course Type:	elective
Category:	chemistry
Instructor:	Li Junzi
Grade:	11, 12
Semester:	2
Pre-requisite:	C+ or above in Physical Chemistry I HL. Fundamental mathematical skills are also required.
Description:	This course provides help for taking AP chemistry exam. This Physical Chemistry course is designed to be the equivalent of the general chemistry course for first year college students. The purpose of this course is to prepare the student to seek credit and / or register in second year college chemistry courses or in other courses where general chemistry is a prerequisite. Physical chemistry is the subject that underlies all chemistry and increasingly biology, engineering, and medicine. The backbone of this course is chemical principles about reaction and energy, including thermodynamics, equilibrium and electrochemistry. The students will know better how this universe drives as well as how scientists and engineers improves efficiency of batteries (2019 Noble Prize).

Objectives:	The course is structured around the fundamental ideas in physical chemistry, including: 1. thermodynamics 2. Equilibrium 3. Applications of thermodynamics (Electrochemistry) Students will also participate in investigative laboratory experiments, which incorporate science and engineering practices with important concepts and knowledge learned in lecture. We emphasize the in depth understanding of a topic, rather than breadth of topics. After taking this course, students should be equipped with: use representations and models to communicate scientific phenomena and solve scientific problems use mathematics appropriately to solve quantitative problems and to use mathematical calculations to describe chemical reactions and physical changes engage in scientific questioning to extend thinking or to guide investigations plan and implement data collection strategies in relation to a particular scientific question perform data analysis and evaluation of evidence work with scientific explanations and theories.
Assessment:	Students will be assessed through various forms, include quizzes, exams, class discussion, laboratory practices, and projects. 20% Homework 10% Quizzes 10% Chapter test 20% Laboratory/Projects 10% Mid term exam 20% Final exam 10% Participation Reading & Homework Read the assigned chapters and make mindmaps. Working through the assigned problems will facilitate your learning of the course material and will also develop your problem-solving skills. It is your responsibility to do (at least) the assigned homework in order to master the material covered. The more problems you do, the more you will learn. Quizzes & Examinations Four practice exams for AP before May. All material is directly related to class notes, the readings, homework problems in the textbook and question lists uploaded on teams. The best preparation for all the exams is to be able to independently work through the assigned homework problems. Laboratory practices and notebook Each student will complete a series of labs in this semester. All students are required to have a lab notebook, also pre- lab handouts and subsequent lab reports must be finished for each lab.

#### Physical Chemistry I: Chemistry Reaction and Kinetics HL

Course Type:	elective
Category:	chemistry
Instructor:	Li Junzi
Grade:	11, 12
Semester:	1
Pre-requisite:	Students must satisfy one of the following prerequisites: B+ or above in Senior 1 full-year chemistry HL; A or above in Senior 1 full-year chemistry SL; Approved by teacher

Description:	This course provides help for taking AP chemistry exam. This Physical Chemistry course is designed to be the equivalent of the general chemistry course for first year college students. The purpose of this course is to prepare the student to seek credit and / or register in second year college chemistry courses or in other courses where general chemistry is a prerequisite. Physical chemistry is the subject that underlies all chemistry and increasingly biology, engineering, and medicine. The backbone of this course is chemical principles about reaction and energy, including thermodynamics, equilibrium and electrochemistry. The students will know better how this universe drives as well as how scientists and engineers improves efficiency of batteries (2019 Noble Prize).
Objectives:	After taking this course, students should be able to: Use representations and models to communicate scientific phenomena and solve scientific problems Use mathematics appropriately to solve quantitative problems and to use mathematical calculations to describe chemical reactions and physical changes Engage in scientific questioning to extend thinking or to guide investigations Plan and implement data collection strategies in relation to a particular scientific question Perform data analysis and evaluation of evidence Work with scientific explanations and theories.
Assessment:	25% homework 20% lab 40% exam (3% pre-class quiz, 6% after-class quiz, 6% chapter test, 10% mid-term and 15% final) 10% project 5% peer learning Reading & Homework Read the assigned chapters and make mindmaps. Working through the assigned problems will facilitate your learning of the course material and will also develop your problem-solving skills. It is your responsibility to do (at least) the assigned homework in order to master the material covered. The more problems you do, the more you will learn. Quizzes & Examinations One midterm (Week 10) and one final exam (Week 20). All material is directly related to class notes, the readings, homework problems in the textbook and question lists uploaded on teams. The best preparation for all the exams is to be able to independently work through the assigned homework problems. Laboratory practices and notebook Each student will complete a series of labs in this semester. All students are required to have a lab notebook, also pre-lab handouts and subsequent lab reports must be finished for each lab.

# Chemical Science and Technology: From Principle to Application

Course Type:	elective
Category:	chemistry
Instructor:	Zhao Huiru
Grade:	11, 12
Semester:	2
Pre-requisite:	S1 full-year Chemistry or Chemistry third science

Description:	A curriculum that prepares individuals and groups to apply scientific principles and technical skills to the operation of chemical experiments and exploration of scientific problems in the chemistry lab, as well as in daily life. This course provides students not only with a wealth of theoretical knowledge and skills, but also help to improve their scientific literacy through project-oriented learning experience.
Objectives:	After taking this course, students will acquire: Knowledge integration and application skills; Qualitative and quantitative calculation and analysis skills; Differentiation and generalization skills; Inquiry, investigation, inferring and interpretation skills; Operation and demonstration skills; Comparing and evaluation skills; Macro identification and micro discrimination literacy; Evidential reasoning and model cognitive literacy; Change concept and balance ideology literacy; Scientific attitude and social responsibility literacy; Scientific inquiry and innovation awareness literacy.
Assessment:	Grading Item Points Class performance 10 Quiz for the theory of knowledge 20 Experimental skills for projects 30 Lab report 20 Demonstrations and Presentations 20 Total 100

## Chemistry Contest Club I: Microstructure

Course Type:	club
Category:	chemistry
Instructor:	Li Junzi
Grade:	11, 12
Semester:	1
Pre-requisite:	Strong Chemistry and math background in Junior School
Description:	Students who take Physical Chemistry HL I are highly recommended to take this club course which provides critical support for preparing AP chemistry exam and multiple international chemistry contests. General chemistry topics will be taught including lab skills and designing experiments. The first term will mainly cover the knowledge of microstructure and the second term will focus on macroscopic performances of chemical reactions. The topics are interconnected with each other and thus students are required to acquire and apply the knowledge to explain and to predict some chemical phenomenon.
Objectives:	Upon completion of the club course, students are expected to be better at: Building the network of chemistry with all topics involved and able to apply it to solve problems. Being self-critical and autonomous. Formulating and analyzing complex problems. Designing experiments with scientific methodology. Presenting logically a series of chemistry phenomenon with understanding of their underlying mechanisms.
Assessment:	The course will be graded (P/F) based on the following items: Home work 20% Lab 20% Test 50% Presentation and Project 10%

# Inquiry-Guided Chemistry Laboratory

Course Type:	elective
Category:	chemistry
Instructor:	Zhao Huiru
Grade:	11, 12
Semester:	1
Pre-requisite:	S1 full-year Chemistry or Chemistry third science
Description:	Inquiry-Guided Chemistry Laboratory is a course aiming to help students developing the ability to discover, analyze, and solve chemical problems, and cultivating scientific spirit via accomplishing experimental success by practicing experimental device, applying experimental methods, collecting and processing data analysis. The course will apply project-based learning by encouraging students to investigate the various factors affecting the flavor of coffee during the processing from a bean to a cup of coffee.
Objectives:	After taking this course, students will acquire: Apply their knowledge and understanding to developing basic chemical experimental skills and methods and connect to what they experience in real world Illustrate a concept or a process by mastering first-hand experience followed by further operation, discussion or analysis Conduct further investigations by group collaboration, including proposing research questions, searching for reference, performing experiments, making predictions, analyzing the data and ultimately resolving an actual problem.
Assessment:	Class performance 10 Ouiz in form of paper 10 Ouiz in form of basic operation 10 Operation skills 20 Experimental report 20 Presentation and demonstration 20 Final project 10 Total 100

#### Chemical Universe (Chemistry Third Science)

Course Type:	core
Category:	chemistry
Instructor:	Zhao Huiru
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	Did not take any chemistry course in grade 10.
Description:	Chemical Universe (Chemistry Third Science) aims to help students get a general picture about chemistry in art, history, life, environment and technology. This course is divided into five themes to understand how chemistry affect the human civilization.

Objectives:	After taking this course, students will acquire: Understand the basic concept of Chemistry Understand the basic ideas of Chemistry Be able to know the simple network of chemistry in different topics Be able to formulate and analyze simple scientific problems. Be able to recognize some common chemistry phenomenon with understanding of their behind mechanisms.
Assessment:	Grading Item Points Reading documents and literature review 30 Presentation and Demonstration 20 Homework 20 Test 20 Class performance 10 Total 100

# 中国艺术 I:考古与物质文化 HL

Course Type:	elective
Category:	cla
Instructor:	黄晓鹃
Grade:	11, 12
Semester:	1
Pre-requisite:	高一 CLA 必修课程成绩平均 B 及以上
Description:	作为CLA 学科文化方向的选修课程,本课程除了介绍中国艺术史的基本研究方法和主要理论视角,也会带领大家着重探究不同时期的重要视觉艺术作品,既关注艺术品通过媒材、形式及母题所表现的物质特性,也致力于还原和重建艺术品所处的原初历史文化情境。此外,不同于一般意义上的通史课程,本课程更强调从全球艺术中的视角来理解中国古代艺术。在欧美学术界和大众文化中,"中国艺术(Chinese Art)"一词作为一个特论,实际上仅仅在19世纪的欧洲和北美才开始得到广泛的机图。实际上仅仅在19世纪的对质和形式来分类和研究的"中国艺术传统"中,中国艺术的的对质和形式来分类和研究的"中国艺术传统"内。在20世国艺术的对质和形式来分类和研究的"中国艺术传统"西方中心"的对点和世界被无可避免地突化,这种"西方中心"的对点和一步深化,这种"西方中心"的对点和一个特别,这种"西方中心"的谓中国艺术观又转而影响了本土艺术界和思想文化,对于中国艺术观对转而影响了本土艺术界和思想文化,对于中国艺术观角,当今的艺术史研究有同时期中,艺术诞生的语境完全不同,艺术史研究入门也很难采用统一的发展。本课程并非通常意义上的具关注名家名作的艺术史课程,而是会从什么是"中国艺术"这一看似简单的问题出发,致励学生打破习见的思维定势,尝试去理解视觉图像背后的社会文化历史脉络。鉴于中国艺术史实际上涵盖了相当大的范畴,时间上的跨度也超过了七千年,从新石器时代的制陶和玉器文化一直延伸到在当代国际艺术界颇为有影响的影像、装置和行为艺术。本课程依据历史时代和主题分为前后衔接而又各自独立的两部分,第一部分的主题是"考古与物质文化",主要关注从新石器时期晚期到10世纪以前的中国艺术与文化。第二部分的主题是"图像与视觉文化",主要关注10世纪到20世纪的中国艺术与文化。

Objectives:	经过本课程第一部分的学习后,学生应能够:- 从整体上了解和认知古代中国的物质文化和视觉文化- 从多角度体验和分析重要的视觉艺术作品,完成多种类型的艺术写作- 认识到中国艺术创作和艺术品流通的多元社会文化背景- 了解中国艺术研究领域的多元化和动态性,初步理解主要的研究理论和视角- 认识到古代艺术文化的延续性和生命力,用策展的方式讲述当下这个"读图时代"里"中国艺术的故事"
Assessment:	各项评分占比: 课堂活动 20% 课堂参与 10%; 小组活动 10% 小测与考试 12% 观展 8% 阅读、写作与交流: 20% 期中+期末探究与设计 40%.

#### 中外文化交流与丝绸之路

Course Type:	elective
Category:	cla
Instructor:	黄晓鹃
Grade:	11, 12
Semester:	2
Pre-requisite:	完成中文通识学科必修课程
Description:	中国的自然地理环境虽然相对封闭,东面和南面是大海,西面是沙漠、高山,北面是戈壁、森林,不利于与外界的沟通。然而中国自古以来并没有自我封闭,通过陆路和海上丝绸之路,两千多年来一直与外部广大世界有着广泛的联系和频繁的交流。在这样一个持续不断的中外文化交流的过程中,中华文明一方面对世界其他地区的文明产生了不可估量的影响,另一方面也积极汲取和吸收来自其他文化的养分。而在东西方文化交往的历史进程中,丝绸之路无疑起着极其重要的作用。
Objectives:	学生在这门课上将:了解与丝绸之路相关的历史背景和地理知识,理解我们对于丝绸之路的认识是如何通过各种文本和物质 的史料而形成的 理解历史上不同国家和地区的人们之间的联结和来往,认识到贸易和文化是如何互相影响的。能够把丝绸之路上发生的文化和商贸的交流放到具体的历史语境中大理解,同时要能认识到不同文化与 社会之间互相依赖的关系,以及贸易往来给双方或多方带来的好处
Assessment:	阅读、写作和课堂参与(30%) 小测(10%)课堂展示<15%期中活动(25%) "丝绸之路上的前世今生":学生可以任选一个丝绸之路上的人物(商人、僧侣、公主、士兵、乐人、画匠等),在课上所了解的的史实基础上,加以合理的想象和创作,为自己创造一个非同寻常的"前世"身份。期末探究(20%)任选丝绸之路上的一个节点,围绕跟这个节点密切相关的文字、图像或实物史料及一位历史人物,完成一张研究性的海报。

## 环境人文:后疫情时代对人与自然关系的再思考

Course Type:	elective
Category:	cla
Instructor:	黄晓鹃
Grade:	11, 12
Semester:	1
Pre-requisite:	完成中文通识必修课程
Description:	本课程旨在让学生对环境人文这一新兴的跨学科研究领域有初步的认知,并在全球疫情之下重新审视人与自然的关系。与环境科学不同,环境人文研究倾向于从文化层面来讨论环境问题,尝试把此前在生态哲学、生态批评、文化地理学、文化人类学、政治生态学甚至是环境经济学等学科中业已存在的交集或是横向联系通过新的理论框架加以整合。20世纪60年代以来愈演愈烈的环境危机促使人们开始从根本上深入反思人与自然的关系,而过去二三十年以来环境科学的飞速发展也使得对文化研究中对于环境问题的关注有可能超越传统人文学科的界限,吸纳更多的科学发现和研究方法。我们在这门课上会从自然写作和以自然为主题的文学作品出发,了解人类历来是以什么样的态度对待自然,也会对"自然"这一概念本身进行深入探究。在广泛的阅读和讨论的基础上,我们将试图回答以下问题:"自然"这一抽象的概念在中国历史文化语境中是如何形成和构建的,经历了怎样的发展和演变?在"后疫情"的中国社会中,如何理解各种关于"自然"和"环境"的话语中所体现的矛盾和冲突?我们也会分专题来探讨各种典型的环境问题,理解文学和文化研究领域是如何具体应对我们所面临的"环境危机"的。
Objectives:	完成本课程之后,学生能够 了解环境人文研究的核心理论、概念和研究视角; 就有关环境的复杂观点进行合理的阐释和深入的交流; 对自然、文化、政治、经济和科学之间多层次的、有着深刻历史洲源的关系有较为全面的理解; 认识到对"可持续发展"和"环境正义性"的理解可以具有多种立场(环境的、社会的、多物种的);
Assessment:	课堂参与 20% 课堂展示 10% 阅读与写作 30% 个人及小组合作探究项目 40% 尝试为道院的毕业生制定一个"Environmental Literacy"的合格标准,并完成一份行动计划书。 选取课上涉及的任意主题,小组合作设计完成一节面向道院其他学生(或是全体附中师生)的环境教育课 程或是一项公众活动。

# 中国艺术 II:图像与视觉文化 HL

Course Type:	elective
Category:	cla
Instructor:	黄晓鹃
Grade:	11, 12
Semester:	2
Pre-requisite:	高一 CLA 必修课程成绩平均 B 及以上

Description:	作为CLA 学科文化方向的选修课程,本课程除了介绍中国艺术史的基本研究方法和主要理论视角,也会带领大家着重探究不同时期的重要视觉艺术作品,既关注艺术品通过媒材、形式及母题所表现的物质特性,也致力于还原和重建艺术品所处的原初历史文化情境。此外,不同于一般意义上的通史课程,本课程更强调从全球艺术史的视角来理解中国古代艺术。在欧美学术界和大众文化中,"中国艺术(Chinese Art)"一词作为一个特定的概念,实际上仅仅在19世纪的欧洲和北美才开始得到广泛的认可和使用。在这个主要以艺术品的材质和形式来分类和研究的"中国艺术传统"中,中国与"西方艺术传统"的差异被无可避免地突出甚至是放大了。在20世纪初期之后,随着中外交流的进一步深化,这种"西方中心"的中国艺术观又转而影响了本土艺术界和思想文化界人士对于"何谓中国艺术观又转而影响了本土艺术界和思想文化界人士对于"何谓中国艺术"的认识和理解。得益于社会建构、后殖民主义和全球史的研究视角,当今的艺术史研究者基本可以达成以下共识:由于不同文明、不同地域、不同民族和不同时期中,艺术诞生的语境完全不同,艺术史研究入门也很难采用统一的方法和路径。本课程并非通常意义上的具关注名家名作的艺术史课程,而是会从什么是"中国艺术"这一看似简单的问题出发,鼓励学生打破习见的思维定势,尝试去理解视觉图像背后的社会文化历史脉络。鉴于中国艺术更实际上渐盖了相当大的范畴,时间上的跨度也超过了七千年,从新石器时代的制陶和玉器文化一直延伸到在当代国际艺术界颇为有影响的影像、装置和行为艺术。中国艺术系列荣普课程依据历史时代和主题分为前后衔接而又各自独立的两部分,第一部为代第一学期课程:中国艺术口的主题是"考古与物质文化",主要关注从新石器时期晚期到10世纪以前的中国艺术与文化。第二部分(第二学期课程:中国艺术口的主题是"图像与视觉文化",主要关注10世纪到 20世纪的中国艺术与文化。
Objectives:	经过本课程第二部分的学习后,学生应能够: 从整体上了解和认知古代中国的物质文化和视觉文化 从多角度体验和分析重要的视觉艺术作品,完成多种类型的艺术写作 认识到中国艺术创作和艺术品流通的多元社会文化背景 了解中国艺术研究领域的多元化和动态性,初步理解主要的研究理论和视角 认识到古代艺术文化的延续性和生命力,以文创设计的形式来再现自己对古代中国物质文化和视觉文化的理解
Assessment:	各项评分占比: 课堂活动 20% 课堂参与 10%; 小组活动 10% 小测与考试 12% 观展 8% 阅读、写作与交流: 20% 期中+期末探究与设计 40%.

# 网络文化关键词与语言学基础理论

Course Type:	elective
Category:	cla
Instructor:	田诗棋
Grade:	11, 12
Semester:	1
Pre-requisite:	完成中文通识学科必修课程

Description:	本课程为中文通识学科面向道尔顿学院高二、高三年级同学开设的一门语言学方向的选修课,作为一门主要讲 授语言学基础理论及其应用的课程,与另一门语言学方向的课程《认知语言学》形成了一个由浅入深、由"本体"到"交叉"的序列。由于"语言学(Linguistics)"对于高中生而言是一门相对陌生的学科,因此本门课程借助网络流行语这类 特殊的"社会方言"作为切入点,通过对网络流行语的关注、收集、分类、研究等,深入浅出地讲解语言学的本质、功能、系统性特征、词汇学基础和语义学基础等重要理论,并结合与网络流行语相关的传播问题,讲解 并分析语言学中重要的语言接触原理等。在方法上,主要引入语料库语言学法及语言本体分析法,引导学生学 会将语言本身作为一种独立的研究对象,借由科学的方法对其进行分析,并在跨学科方面做出一些自主的探究与尝试。
Objectives:	经过本课程的学习后,学生应能够:了解网络文化流行语来源、分类、结构及影响;掌握网络文化流行语的分析方法;理解基础的语言学理论;掌握语言学分析的基础方法 初步掌握语料库的获取与应用方法;通过网络流行语词义"湖源 训练完成古代汉语词义"训话"的能力迁移:通过精细化的语言学分析提升语言表达的准确性;初步掌握借由语言了解和分析特定文化、社会现象的基本方法:
Assessment:	本课程的成绩将由以下方面构成: 课堂参与 10% 阅读、交流与写作 15% 测验 10% Presentation 30% Project 35%

# 现当代中国文化与社会

Course Type:	elective
Category:	cla
Instructor:	宋炜晴
Grade:	11, 12
Semester:	1
Pre-requisite:	完成中文通识学科必修课程
Description:	本课程为中文通识学科面向道尔顿学院高二、高三年级同学开设的一门文化方向的选修课。本课程以人类学的 视角介绍文化研究的相关概念、研究方法、经典著作及主要研究领域和议题等等,帮助学生掌握一定社科研究 概念与方法的基础上,重新思考日常生活中的"常识",将我们通常认为的习以为常"陌生化";同时,将学 生所认为的陌生"熟悉化",打破我们与"他者"之间的二元对立,从而拓宽学生的跨文化视野,增加其认识、分析问题的角度和对文化多样性的理解包容能力,促进学生对于人、社会、文化的深入思考
Objectives:	经过本课程的学习后,学生应能够: 了解文化的多元性,从人类学角度理解不同文化的基本特征和组成部分 掌握参与式观察与访谈的民族志田野调查方法,并能够将其作为一种有效工具应用于社科类研究 了解文化研究的相关理论概念,并能够将其运用到对文化现象/群体的分析中 能够以民族志的形式呈现个人对于文化与社会的深入恩考

Assessment:	本课程的成绩将由以下方面构成:课堂参与 10% 阅读、交流与写作
	35% 測验 8% Socratic Seminar 12% Projects 35%

## 中国先锋诗歌研读

Course Type:	elective
Category:	cla
Instructor:	田诗棋
Grade:	11, 12
Semester:	2
Pre-requisite:	完成中文通识学科必修课程
Description:	本课程为中文通识学科面向道尔顿学院高二、高三年级同学开设的一门文学方向的选修课,在高一中文通识必修课程的基础上,从学生已有学习经验的多种文学体裁中摘出"诗歌"这一类"语言的极致艺术形式"作为精读对象。本课程将引导学生体验"诗"这类具有代表性的文学作品从"古典"到"现代"的转变,进而引导学生关注并讨论中国文化环境由传统古典主导到西方文化引入的转变。同时,通过了解中国先锋诗歌的发生与流变,还可以引导学生关注并讨论中国社会在现代性思潮影响下的生存境况。本课程将通过形式多样的朗诵分享、主题研讨、项目制探究及创作体验等学习项目,帮助学生逐步建立起对诗歌这种文学样式在中国现当代发展的大致脉络并初步掌握以先锋诗歌为线索的新诗语言、意境及理论自觉的"破译"方法,通过文学阅读培养对不同形式的"美"的感知。
Objectives:	通过本门课程的学习,学生应该能够: 熟悉中国先锋诗歌发生及流变的过程; 熟悉中国百年新诗的历时演变过程; 了解西方思潮影响下的诗歌演化路径; 深入了解古诗与新诗在"经验与意象"、"节奏与诗意"等方面的差异及其背后的社会形态变化动因; 掌握欣赏及解析先锋诗歌作品的技术方法; 获得对诗意语言的审美感知能力; 学会使用当代文学的独特样式(本课程中主要指新诗)记录与表达自身独特的情绪与体验;
Assessment:	Responsibility 10% Midterm Exam 10% Final Exam 10% Assignments 20% Presentation 15% Socratic Seminar 5% Final Project 30%

# 认知语言学

Course Type:	elective
Category:	cla
Instructor:	田诗棋
Grade:	11, 12
Semester:	2
Pre-requisite:	完成中文通识学科必修课程

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Description:	本课程为中文通识学科面向道尔顿学院高二、高三年级同学开设的一门语言学方向的选修课。作为《网络文化关键词与语言学基础理论》这门语言学基础课程的拓展,本门课程专注于当今最重要的语言学研究范式之一的认知语言学,适合对语言与认知之间的关系感兴趣的同学进行深入学习。语言是人类独有的复杂符号系统,其庞大而精密的层级体系支撑起了人类的信息传递、人际互动及思维活动等重要功能。其中,由于思维与语言之间存在着本质性的强关联和相互影响,因此,认知科学对于人类大脑运作模式的研究成果将作为我们分析语言对象的重要方法。从认知科学的角度研究语言系统的生成原则,也将帮助学生建立起语言与思维模式之间的直接关联,学会通过语言透视普遍思维模型,进而以科学方法与人类社会其它科学与人文层级进行关联与延伸思考。本门课程的学习将成为其跨学科思考与研究的一次重要案例。
Objectives:	通过本门课程的学习,学生应该能够:。了解认知语言学的理论框架,理解并掌握认知语言学中的几类重要理论体系(原型及范畴、范畴化层次、主体与背景等);运用认知语言学各类理论分析具体语言现象;培养对日常生活中各类语言及其内在规律的敏感度,学会将分析语言系统作为理解人类其它复杂系统的一种有效途径 掌握语料库的获取与应用方法,学会将语料库作为一种有效工具应用于其它社科类研究
Assessment:	Responsibility 10% Midterm Exam 10% Final Exam 10% Assignments 15% Presentation 20% Socratic Seminar 5% Final Project 30%

## Writing Apprenticeship

Course Type:	elective
Category:	elα
Instructor:	Brodi Andrew Craddock
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	Capable writing skills
Description:	The best way to learn is to teach. The writing apprenticeship course aims to take able writing students and transform them into amazing writing teachers. Students will find a younger student or peer and design and deliver a series of 1-1 lessons to help improve their writing. They will need to provide them with effective learning activities and qualitative feedback on their work, as well as measuring their progress (quantitatively and qualitatively) to see if their help is really helping. Students will need to build a portfolio of evidence of their teaching over the course. If you are kind, patient and have good written expression this could be the course for you! Students can expect to brush up their writing skills, learn how to distinguish 'good' writing from 'bad' and check for common errors. Additionally, they will learn and practice the fundamentals of pedagogy, such as scaffolding and giving feedback. At the end, a reflexive essay will allow students to evaluate their experience as a tutor and the efficacy of their intervention strategies.

Objectives:	A. To consolidate students' academic writing skillset. B. To become an effective writing tutor. B1. To learn the fundamental principles of pedagogy. B2. To develop the interpersonal skills to establish effective working relationships and growth environments. B3. Learn how to be reflexive in their practice as mentors.
Assessment:	20% Individual responsibility and participation (ongoing) 10% Lesson observations and mentee surveys (formative) 40% Portfolio of lesson planning documentation, learning materials and self-evaluation (summative) 30% Reflexive essay (summative)

#### Spanish I

Course Type:	elective
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	11, 12
Semester:	1
Pre-requisite:	ELA 1
Description:	Spanish 1 is a course designed to cover the basics of the language for students to learn the foundations and acquire the fundamental knowledge to understand and start speaking in Spanish. Students will review the grammar and vocabulary typical of first-year Spanish courses all within a stimulating cultural context.
Objectives:	Students will: Students will be able to speak, describe, compare, react about daily Fife situations. Students will expand their knowledge about grammar and vocabulary. Students will have a better understanding of Hisp anic cultures.
Assessment:	20% Responsibility 20% Reading Comprchension 20% Writing 20% Speaking 20% Listening

# Philosophical Understanding and Analysis: Female Authors HL

Course Type:	elective
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	11, 12
Semester:	2
Pre-requisite:	ELA 1

Description:	The course explores the foundational work of women philosophers. During this semester, we will read selected material from one female philosopher, engaging on an in-depth exploration of the philosophical themes presented in it, placing them in the context to understand the author's dialogue with phenomenology and its consequences to create diverse thoughts. We will reflect in the material's relevance and address possible criticism to theoretical issues and how to understand it in modern times. Guiding questions: How do we read philosophical texts? How do we understand philosophical ideas? How do we identify the main arguments?
Objectives:	Students will: develop close reading skills reading selected materials, understand philosophical context and influences make connections between their own reality and diffferent cultures, develop higher order thinking skills and multi-disciplinary knowledge, be proficient with college-level literary analysis and essays forms, have textual and contextual experience with relevant readings.
Assessment:	10% Responsibility 10% Reading Comprchension 25% Writing 25% Language and Conventions 30% Speaking and Listening

# ELA 3 Science Fiction: Visions of the Future in Literature and Film

Course Type:	core_elective
Category:	elα
Instructor:	James Paul Evans
Grade:	12
Semester:	1, 2
Pre-requisite:	ELA1,ELA2

Description:	Science Fiction is a massive genre in scope and possibilities, which gets considerably less attention in academia than others. For this reason, I have decided to teach a course on it! Sci FI's potential to tackle topics that resonate with the present is limitless, whilst its capacity to transport the reader or viewer is equally as powerful. This course will give students a chance to employ their existing analytical and critical skills, tackling the themes and elements of Science Fiction on a deeper, more insightful level than they would in the past. Sci-Fi as a genre has always had the dual ability to provide escapism and reflection, its visions of future technology and human advancements echoing back to the real world. It raises questions of ethics, identity, and consequence through the lens of imagined futures and realities. So, let's explore them! Students will study iconic texts in literature (Do Androids Dream, Left Hand of Darkness) and film (Blade Runner, 2001), as well as existing essays on the genre to provide further insight. They will compare and contrast these texts in their own work and consider them through the lens of several distinct topics that regularly appear in Sci-Fi. Examples could include identity, what it means to be human, corporate greed or the role of technology in human evolution. This course will also provide assistance in film literacy, giving students a chance to study film with the same aptitude and insight as they do literature. Students will analyze scenes, learn important terminology for future use and experience cross-medium analysis by comparing literature to film within the context of Sci Fi.
Objectives:	Students will be able to: Understand, explain, and evaluate works of fiction with the additional context of genre. Further develop both written and verbal communication skills. Develop analytical skills for both literature and film texts, as well as how to distinguish and compare the two. Develop a deeper understanding of the topics and themes that can appear in science fiction texts, as well as other genres/mediums, and how they can be discussed on a deeper, more considerate level. Cultivate skills in crafting a variety of engaging, academic, and polished forms of writing. Engage with texts on a deeper, more literate level and convey/discuss their own unique opinions with clarity.
Assessment:	Assessments in the following areas will determine the overall course grade: $25\% = \text{Reading}$ ; $40\% = \text{Writing}$ ; $25\% = \text{Speaking}$ and Listening; $10\% = \text{Responsibility}$ Types of Assessments: reflections, annotations, essays, discussions/seminars, group projects, short stories/creations. Some work will be weighted more than others, depending on the size or importance of the assignment. Grading System — I will be using rubrics to grade student work. It will generally follow the 10 point grading scale $10 = \text{Excels } 8 = \text{Proficient } 7 = \text{Approaching } 5 = \text{Needs Work } 0 = \text{Not Submitted}$

#### Creative Writing

Course Type:	elective
Category:	elα

Instructor:	James Paul Evans
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	ELA 1
Description:	This course aims to give students a chance to develop their own creative ideas and techniques in an open, constructive environment. They will study existing short works by acclaimed writers, as well as texts on writing itself, and employ their analytical skills in order to build up their own portfolio of original writing. We will investigate further options for creative work, exploring potential mediums/approaches over the course of the semester. This course aims to open up possibilities for inspiration and fine-tune existing interests for every student, not just through reading texts but through constructive, sophisticated group conversation and self-analysis. Over the semester students will have a great opportunity to grow their own distinct voices through discussion and shared critique as a class, developing skills in not just writing but public speaking and self-improvement. In making their own original work, this is also a chance to recall and reflect on existing knowledge. Students can use whatever topics and works have struck them throughout their education to further zone in on their interests and passions. This is an unconventional Liberal Arts course, but a great opportunity to personalize and develop your own unique voice and style. A chance to get creative and cultivate existing skills in preparation for a different potential path of university study.
Objectives:	Students will be able to: Create and self-critique their own original writing with a newfound understanding and skill. Present, discuss and share their work with others in a productive, supportive setting. Further enhance their critical skills with existing texts and employ what they have learned in their own work. Develop communicative, constructive skills with their peers and teachers. Work on a journal, representing their own creative journey - inspirations, ideas, mediums, drafts and final products. Produce a final piece of creative writing, culminating a creative path that is sho wn through the rest of the semester.
Assessment:	Assessment in the following areas will determine your overall course grade: 25% = Reading 40% = Writing/Journal 25% = Speaking and Listening 10% = Responsibility Types of Assessments: reflections, annotations, short stories, various creative works, presentations, semester-long journal project. Some work will be weighted more than others, depending on the size or importance of the assignment. Grading System - I will be using rubrics to grade student work. It will generally follow the 10 point grading scale- 10= Excels 8=Proficient 7=Approaching 5=Needs Work 0= Not Submitted

## ELA 3 Power & Ambition in Literature

Course Type:	core_elective
Category:	elα

Instructor:	Toby Eichas
Grade:	12
Semester:	2
Pre-requisite:	ELA 1, ELA 2
Description:	The English language has the potential to be very powerful, and a common topic of literature is often the dynamics of power. This course will focus on an examination of language and the specific structures, characters, and motivations dealing with power in short stories, poetry, drama, and novels.
Objectives:	Through their examination of specific literary works, students will: gain a deeper understanding of power dynamics between / among characters. better recognize power structures in literary works. develop vocabulary. improve reading comprehension. work individually and in groups to develop their understanding of literary concepts. practice expressing literary analysis in written form.
Assessment:	35% Written assignments 35% Reading assignments (Check Tests) & notes 15% Social contribution 15% Individual responsibility

#### Drama Club

Course Type:	club
Category:	elα
Instructor:	Lloyd Jason Tillison
Grade:	11, 12
Semester:	1
Pre-requisite:	None
Description:	'Clue' is a play based on a cult classic film which itself is based on a murder mystery board game. The play is a light- hearted comedy which includes elements of mystery and suspense. In this club, students will practise their dramatic skills through various types of activities and work towards staging a production of the play. In the process of staging the production, students will be engaged to think creatively about costume, props and setting and to plan elements of the production themselves. As well as thorough readings and run-throughs of the play itself, students will engage in different dramatic exercises designed to improve performance ability and confidence.
Objectives:	Improve performance ability and confidence Improve English speaking ability Understand a play's script and functions of a script Creatively think about staging a play Plan and execute all the elements of a production of a play
Assessment:	Final dramatic performance Staging planning and execution Character study assignment Mini-performances

#### Spanish II

Course Type:	elective
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	11, 12
Semester:	2
Pre-requisite:	Spanish 1
Description:	Spanish 2 is the continuation of Spanish 1. Students will review the grammar and vocabulary typical of first-year Spanish courses, adding more vocabulary and topics that the first semester. In this course, students will acquire essential Spanish through abundant opportunities to interact in the language in meaningful ways.
Objectives:	Students will: Students will be able to speak, describe, compare, react about daily life situations. Students will expand their knowledge about grammar and vocabulary. Students will have a better understanding of Hispanic cultures.
Assessment:	20% Responsibility 20% Reading Comprehension 20% Writing 20% Speaking 20% Listening

# The Golden Age of Russian Literature Short Stories, Great Novels, Poetry and Theatre HL

Course Type:	elective
Category:	elα
Instructor:	Werner Kiel
Grade:	11, 12
Semester:	1
Pre-requisite:	WCC, ELA 1

Description:	This is a READING INTENSIVE course that offers a deep dive into important works of literature in 19th century Russia, including poetry, theatre, short stories and a few great novels. Ample attention will be paid to big names such as Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy and Chekhov. We will read, discuss and critique original works (in English translation), learn about its historical and political contexts, the main literary schools and intellectual debates of the era and relevant concepts from literary theory. Each week we will be working from one major text, which will also be supplemented by important texts of literary theory and history to illustrate important concepts that are useful for developing a framework for analysis. Students are encouraged to adopt an interdisciplinary approach based on their own personal interests, analyzing literary works from the perspective of art, philosophy, history, political science etc. Note: in order to keep the amount of reading manageable for students, we will work as much as possible with short stories and excerpts from bigger novels.
Objectives:	To familiarize ourselves with and critically reflect on some key texts of Russian literature; To engage criticially with philosophical and theoretical notions and concepts of Russian culture; To understand the disruptions and continuities in 100 years of Russian literature To develop skills for writing blog entries, book reviews and literary analyses, and oral skills for giving presentations and participating in discussions on the interpretation of important literary works; To acquire a basic knowledge of Russian literature, its historical and political contexts, important intellectual debates of the era and relevant literary concepts; To apply basic concepts from literary studies (including metaphor, metonymy, synecdoche, focalization, plot/story) and specific concepts from Russian literary theory (skaz, fabula/syuzhet); To become better readers
Assessment:	The following assessments will take place during the course: 1. Read and write: weekly 400-word blog entries (30%) 2. Speaking: student presentation and leading the discussion (20%) 3. Speaking: overall participation in class discussions and Socratic seminars (10% 4. Creative projects (40% Examples of projects: Make a short video (10-15 minutes') on a specific literary work; Make a podcast (individually or in pairs) in which you critically discuss a literary work Direct and put on stage a Russian theatre play (for example Gogol's "The Government Inspector) Compare a novel and its film adaptation: what is being emphasized and what is left out in the film? An academic essay of 2000 words max. in which you analyze a Russian piece of literature.

#### Drama Club

Course Type:	club
Category:	elα
Instructor:	Lloyd Jason Tillison
Grade:	10, 11, 12

Semester:	2
Pre-requisite:	None
Description:	'And Then There Were None' is a play adaptation of a 1939 novel by the prolific writer Agatha Christie. The story is a murder mystery with many elements of suspense which is sure to keep the audience gripped. The play features building tension as the audience tries to figure out who the true murderer is as characters disappear one by one. In this club, students will practise their dramatic skills through various types of activities and work towards staging a production of the play. In the process of staging the production, students will be engaged to think creatively about costume, props and setting and to plan elements of the production themselves. As well as thorough readings and run- throughs of the play itself, students will engage in different dramatic exercises designed to improve performance ability and confidence.
Objectives:	Improve performance ability and confidence Improve English speaking ability Understand a play's script and functions of a script Creatively think about staging a play Plan and execute all the elements of a production of a play
Assessment:	Final dramatic performance Staging planning and execution Character study assignment Mini-performances

# The Power of Multiple Narrative Perspectives HL

Course Type:	elective
Category:	elα
Instructor:	Chen Linling
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	A for ELA 2 or ELA 1

Description:	The Sound and The Fury is a masterpiece by William Faulkner, who won Nobel Prize for Literature in 1949. This course explores how the author successfully tells a story four times while readers do not feel redundancy. This experimental effect is made possible by using multiple narrative perspectives. Through the perspectives of a grown-up idiot, a suicidal Harvard University student, a failed businessperson, and a heartwarming black servant, four narrator's struggles with their family's collapse vividly unfold. In this course, students examine how multiple narrative perspectives not only offer an in-depth look into narrator's thoughts, actions, and motivation, but also create a broad panorama of the society narrators live in. Students are encouraged to keep a writing journal as the story progresses. Through group work, students will watch a film adopted from the novel and try to compare how the novel and the movie use different perspectives. Students will also work in groups to do research on American social changes, especially about gender, race, and technology in the 1920s, then they present their findings in the form of a poster or an infographic. The class also includes fun activities such as contests about characters'
	name or timeline of the story, and creative writing practices such as rewriting stories using perspectives from another gender, race, or social class. At the end of the course, students will have a firm understanding of narrative perspectives and extend it to their future writing practices.
Objectives:	After taking this course, students will: Understand narrative perspective and its relation to content, plot, and narrative structure; Gain a firm understanding of The Sound and the Fury's plot and its experimental use of time; Have a clear picture of the Roaring Twenties in USA; Draft formal academic papers based both on secondary research and their o wn original research; Empo wer themselves with a new perspective to examine stories because stories are not reflections of reality but are selective versions of it. told from a chosen perspective:
Assessment:	Students will be assessed both formally and informally on assigned texts. Assessments may include quizzes, presentations, class discussion, essays, and intensive reading analysis. Students' participation is also assessed and reflected in their responsibility score. The instructor will offer frequent feedback regarding student work and performance. Students will be assessed based on the following four-point scale: $4 = \text{excels}$ ; $3 = \text{proficient}$ ; $2 = \text{approaching}$ ; $1 = \text{needs work}$ ; $0 = \text{not submitted}$ Assessments in the following areas will determine the overall course grade: $20\% = \text{Reading}$ ; $35\% = \text{Writing}$ ; $30\% = \text{Speaking and Discussion}$ ; $15\% = \text{Responsibility}$

# Greek Mythology HL

Course Type:	elective
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	11, 12

Semester:	1
Pre-requisite:	ELA 1
Description:	Since the beginning of time, people have gathered around fires to tell stories of angry gods, harrowing journeys, cunning animals, horrible beasts, and the mighty heroes who vanquished them. Mythology and folklore have provided a way for these colorful stories to spring to life for thousands of years. Mythology and Folklore: Legendary Tales will illustrate how these famous anecdotes have helped humans make sense of the world. Beginning with an overview of mythology and different types of folklore, you will journey with age-old heroes as they slay dragons, outwit gods, defy fate, fight endless battles, and outwit clever monsters with strength and courage. You'll explore the universality and social significance of myths and folklore and see how these powerful tales continue to shape society even today.
Objectives:	Students will: Identify characteristics of myths, folklore, folktales, and fairy tales Describe the different types of myths Identify the purposes of myths Compare the different types of folklore: legends, and fairy tales Explain the communal importance of myths and legends Identify how myths and legends are used to explain the natural world Understand that myths are the basis of cultural activities in a society Identify the mythological themes in each culture's mythological system Describe the role linguists play in finding the origin of a myth or legend Explain the purposes of urban legends in today's society Recognize the superstitions that are still around today
Assessment:	10% Responsibility 10% Reading Comprehension 25% Writing 25% Language and Conventions 30% Speaking and Listening

## Art and Social Commentary: Traditional & Urban Art

Course Type:	elective
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	11, 12
Semester:	1
Pre-requisite:	None

Description:	Art is not only a creative expression, but also the forming of something pleasing to the eyes, ears, and minds of people. Art can also be, as this course will show, used to challenge our understanding of the world in which we live and our roles in it. Art has the social function of making us think about what is really going on in the world. Artists can use art to reflect, translate, and facilitate the understanding of diverse social issues. In this course, we will focus on understanding how art can help to implement or promote change, how it can enlighten people about specific issues, and how it can appeal to their sense of justice. We will do this through the analysis of different forms of art (paintings, sculptures, etc.). The driving questions of this course will be: how can art be a powerful and persuasive tool to shape the minds of people? How does art use rhetorical means to provide commentary on issues in a society?
Objectives:	Students wil: analyze and compare events during different periods of time to make informed, creative decisions about social issues, use different forms of art to convey concerns about social and ethical issues, use different forms of art to understand social and ethical issues, understand, explain, and evaluate events related to modern social, cultural, and economic matters of the world, be able to infer about the underlying issues of a specific society or region and apply it to their own reality, be able to articulate, advocate and justify positions on an issue or text confidently and believably, using art forms as a foundation to shape their opinion. be proficient with college-level literary analysis and essays forms
Assessment:	20 % Responsibility 25% Writing 25% Language and Conventions 30% Speaking & Listening

# ELA 3 Selective Readings of English and American Poetry

Course Type:	core_elective
Category:	elα
Instructor:	Chen Linling
Grade:	12
Semester:	1, 2
Pre-requisite:	ELA 1, ELA 2
Description:	This course covers a variety of English and American poetry of 19th and 20th century to enable students to understand and appreciate poetry with enjoyment. It intends to ignite students' interest in poetry with a book named Love That Dog which not only chronicles how a boy learns to draft poems, but also illustrates his growing admiration for words and images. Next, the course introduces students to the beauty of poetry from three dimensions: "sound, sense, and imagery." In this process, intensive reading and analysis of poems will be conducted in group discussions and presentations. Students are also expected to organize several poetry recitals and try out composing sonnets and imagist style poems.

Objectives:	After taking this course, students will: understand what the term "poetry" means; identify the essential elements of poetry "sound, form, sense, imagery;" develop the ability to analyze and appreciate poetry in English; engage students in poetry reading by reading aloud and reciting their favorite poems; further hone their English Writing skills; develop reading and appreciating poetry as a pastime to enrich their life.
Assessment:	Students will be assessed both formally and informally on assigned texts. Assessments may include quizzes, presentations, class discussion, essays, and composition of poems. Students' participation is also assessed and reflected in their responsibility score. The instructor will offer frequent feedback regarding student work and performance. Students will be assessed based on the following four-point scale: $4 = \text{excels}$ ; $3 = \text{proficient}$ ; $2 = \text{approaching}$ ; $1 = \text{needs}$ work; $0 = \text{not}$ submitted Assessments in the following areas will determine the overall course grade: $20\% = \text{Reading}$ ; $33\% = \text{Writing}$ ; $32\% = \text{Speaking}$ and Discussion; $15\% = \text{Responsibility}$

#### ELA 3 Romanticism in Literature

Course Type:	core_elective
Category:	elα
Instructor:	Lloyd Jason Tillison
Grade:	12
Semester:	1, 2
Pre-requisite:	ELA1,ELA2
Description:	Romanticism is a movement in literature and the arts beginning in the 18th century which emphasized inner emotions, connection with nature and individualism. Over the course of this elective, students will gain a deep understanding of various core texts of the Romanticism movement. By studying novels, poetry and films the students will be able to analyse the elements of Romanticism which can be found in a text as well as focusing on the themes and ideas presented in the texts themselves. This unit will include an in-depth study of poetry with creative writing exercises designed to demonstrate understanding of the movement. As well as these, there will be other creative activities, as well as written literary analysis and spoken assignments.
Objectives:	By learning through the course, students will be able to: Understand the Romanticism literary movement. Identity key themes and features of Romantic texts. Deeply analyse Romantic literary texts. Read, perform and analyse classic Romantic poems. Write creative pieces in the Romantic style. Identify Romantic elements in films. Broaden literary horizons with a wide range of texts. Improve reading, writing, comprehension and speaking ability in English.
Assessment:	Creative writing Literary analysis essay Poetry reading Socratic seminars Ouizzes Presentations Posters Film review

#### Journalism in the 21st Century

Course Type:	club
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	None
Description:	Attention: Grade 10 (eligible for semester 2 only) Journalism should engage and inform. This course will teach students how to write compelling feature articles, interviews, opinion columns and different pieces to develop a media outlet, specifically a magazine. This class will foster a workshop environment in which students can build appreciation and skill sets to cultivate their journalism abilities. Students will learn how to interest readers in significant, research-based subjects by writing about them in the context of non-fiction stories, developing and following a structural arc from beginning to end.
Objectives:	To understand the meaning of journalism To explore the differences between facts and storytelling How to use facts to write news and research stories To introduce a writing process that carries a story from concept to publication To introduce tools for finding and framing interesting features. How to write a pitch to sell a story How to create, organize and manage a media outlet (magazine)
Assessment:	10% Reading Comprehension 30% Writing 20% Language and Conventions 30% Speaking and Listening 10% Responsibility Group Project: Magazine Students will be asked to create, organize, and write a Magazine. Requirements: 2 articles One interview One opinion column Orriginal design and concept Different sections

#### ELA 3 Gothic Literature

Course Type:	core_elective
Category:	ela
Instructor:	Lloyd Jason Tillison
Grade:	12
Semester:	1, 2
Pre-requisite:	ELA1,ELA2

Description:	Mystery, horror, suspense, the supernatural. These are all key features of the Gothic literary genre which originated in the 18th century and the legacy of which continues to influence popular culture today. This course will be an in-depth study of the Gothic genre with focus on key texts from a wide span of time. By analyzing novels and films, students will gain an understanding of the elements which make up the Gothic genre as well as the societal fears which fueled these works. Through the study of more modern Gothic works, students will understand the legacy of the genre and its manifestations in popular culture. There will be creative assignments, including a Gothic short story, as well as literary analysis and spoken assignments.
Objectives:	Understand the Gothic genre. Identify key themes and features of Gothic texts. Deeply analyse Gothic literary texts. Understand the cultural impact and legacy of the Gothic genre. Write creatively in the Gothic style. Identify Gothic elements in films. Broaden literary horizons with a wide range of texts. Improve reading, writing, comprehension and speaking ability in English.
Assessment:	Creative writing Literary analysis essay Presentations Research projects - author background study Quizzes Posters Creative piece — multimedia Seminars Film review

# Secular Mindfulness and Reflective Journaling

Course Type:	elective
Category:	elα
Instructor:	Li Xuezhen
Grade:	11, 12
Semester:	2
Pre-requisite:	ELA1
Description:	Mindfulness, which was originated from the East, has been popularized in the West as a secular practice to combat modern-day stress and for mental well-being. However, people from different perspectives may have different definitions and foci of mindfulness practice.
Objectives:	In this course, students will Compare and contrast different definitions of mindfulness and try developing a working definition for the course on a poster. Explore the mindfulness techniques provided by Mindfiulschools.org and document their personal experience and reflection in a journal. Examine and critically appraise the scientific evidence on mindfulness and its effects with infographic presentation. Practice note-taking skills with listening materials such as The Mindful Day by Laurie J. Cameron and create a personal daily routine to embed mindfulness practice into every day life. Design and carry out an authentic community project to disseminate their personal findings and experience of secular mindfulness practice and journaling.

Assessment:	Students will be expected to actively particijpate in class discussions and contribute to group discussions. Both formative and summative
	assessments will count to the total grade. 20%-Responsibility score 40%-Formative assessment 40%-Summative assessment

# ELA 3 Literary Analysis: Female Authors

Course Type:	core_elective
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	12
Semester:	1
Pre-requisite:	ELA1,ELA2
Description:	In this course, we will explore and study literary work written by diverse female authors. We will focus on understanding how literature has helped women to find their own voice and tell their own stories.  Through the analysis of different reading and materials, we will analyze the path women have built in literature to fully understand their present-day situation in the world. Driving questions: how does literature has helped in portraying women with different roles? How does literature help to construct a reality where women have a voice in society?
Objectives:	Students will: develop close reading skills reading selected materials, understand the mutural constitution of theory and fiction, though the study of women and female writers, make connections their own reality and different cultures, develop higher order thinking skills and multi-disciplinary knowledge, be proficient with college-level literary analysis and essays forms, have textual and contextual experience with relevant readings, have an introduction about the historical context and concerns regarding the role of women, understanding of the wider structural perception and their impact on literature.
Assessment:	10% Responsibility 10% Reading Comprehension 25% Writing 25% Language and Conventions 30% Speaking and Listening

#### English Liberal Arts 2

Course Type:	core
Category:	elα
Instructor:	James Paul Evans, Toby Eichas, Declan Dobson-Smyth
Grade:	11
Semester:	1, 2
Pre-requisite:	ELA 1

Description:	Senior 2 English Liberal Arts explores a variety of fiction and nonfiction texts in order to examine the central themes of the class. You will utilize close reading strategies, analytical thinking, group discussion, and presentation skills for the purpose of strengthening skills established in Senior 1 ELA. This year, the goal is confidence and autonomy in your English skills. You will craft a variety of engaging, academic and polished forms of writing. Ultimately, this course will expose you to several forms and styles of writing in order to develop your own reading, thinking, and writing processes and habits. We will prepare you for the expanded challenges of Senior 3 ELA modules and their university-level skills.
Objectives:	After taking this course, students should be able to: Explain and evaluate texts through a variety of critical lenses. Further develop both written and verbal communication skills, building on skills from Senior 1 ELA & WCC. Strengthen skills in analytical thinking and reflective discourse. Cultivate skills in crafing a variety of engaging, academic and polished forms of writing.
Assessment:	Students will be assessed both formally and informally on assigned texts. Assessments may include quizzes, exams, class discussion, a variety of essays, and projects. Students can expect weekly graded assignments and in-class assessments. The instructor will offer frequent feedback regarding student work and performance. Grading Scale (10 point scale) $10 = \text{Excels } 8 = \text{Proficient } 7 = \text{Approaching } 5 = \text{Needs Work } 0 = \text{Not Submitted Grading Categories Writing } 30\% \text{ Discussion } 30\% \text{ Reading } 20\% \text{ Responsibility } 20\%$

# ELA 3 Hispanic Literature & History

Course Type:	core_elective
Category:	elα
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	12
Semester:	2
Pre-requisite:	ELA 1, ELA 2
Description:	This course will focus on understanding Hispanic Literature both in terms of its historical emergence and development as well as its engagement with and representation of history. Through the analysis of selected readings (such as novels, shorts stories, poems and complementary materials like songs and movies), we will analyze the historical contexts of different Latin American countries in order to reach a deeper understanding of the present-day landscape of this region. The driving questions for this course will be how do literature and history connect in order to shape the unique identity of a country? Do literature and history shape culture or does culture shape literature and history?

Objectives:	In this course: Students will be able to understand, explain and evaluate different historical contexts of Latin America through literature and history. Students will develop and improve analytical and evaluative abilities. Students will be capable of making connections between their own reality and different cultures.
Assessment:	10% Responsibility 10% Reading Comprehension 25% Writing 25% Language and Conventions 30% Speaking and Listening Summative Paper Prompt: Country Personal Proiect The Country Project is for students to develop their own interest and learn more about different countries, cultures, and people in Latin America. This is an opportunity for students to research about a Latin American country from their own interest(s) with the chance to apply it in a new context. Students will apply the results of their research on the country through different literature genres, historical events and/or writing styles.

#### Cultural History of Soviet Russia (1917-1991): Literature, Cinema and Popular Culture HL

Course Type:	elective
Category:	elα
Instructor:	Werner Kiel
Grade:	11, 12
Semester:	2
Pre-requisite:	WCC
Description:	This seminar on literature, cinema and popular culture spans a century of Soviet Russia's rich cultural history. Our aim is to gain a better understanding of what it was like to live in the Soviet Union. How did Soviet Russians express their tastes, aspirations and worldviews? To that end, we will study a broad range of media and genres, ranging from literature, diaries, music and cinema to fashion, youth subcultures and the circus. While doing this, we will train skills to discuss, analyze and critique literary works, films and other cultural products and acts. We will study a number of emblematic literary texts and films from a wide range of genres, including absurdism, utopianism, science fiction, GULAG/camp literature, parody and satire. We will also delve into their reception by professional critics and ordinary readers. Finally, we will also consider key secondary texts that will familiarize us with other trends in Soviet popular culture. Students are encouraged to adopt an interdisciplinary approach based on their own personal interests, analysing literary works from the perspective of art, philosophy, history, political science, etc.

Objectives:	To familiarize ourselves with the key players of Soviet culture, their lterary and Cinematographic texts and popular acts of culture; To acquire a better understanding of the historical, political and social context in which these texts were produced and received; To understand, analyze and critique a wide range of cultural products and acts, produced by both oficial institutional and popular efforts; To understand the disruptions and continuities in Russia's Soviet period; To understand the main genres, philosophical schools and intellectural debates of the Soviet era; To develop the ability to unearth the hidden voices in multi-layered texts; To develop skills for writing blog entries, book reviews and literary analyses, and oral skills for leading a seminar, eiving presentations and participating in discussions on the interpretation of important literary works, films and other cultural products and acts; To become better readers and better viewers.
Assessment:	The follo wing assessments will take place during the course: 1.Read and write: weekly 300-word blog entries (30%) 2. Speaking: student presentation and leading the discussion (20% 3. Speaking: overall participation in class discussions and Socratic seminars (10% 4.Creative projects (40% Examples of projects: Make a short video (10-15 minutes') on a specific literary work; Make a podcast (individually or in pairs) in which you critically discuss a literary work or Soviet movie; Direct and put on stage a Russian theatre play; Watch Aleksei Uchitel's Dreaming of Space (Kosmos kak predchuvstvie, 2005), or Aleksei German's Paper Soldier (Bumazhnyi soldat, 2008) and analyze how they deconstruct the myth of the Soviet Union's conquest of space; Watch An Optimistic Tragedy (Samsonov, 1963) and The Commissar (Askoldov, 1967),two films about female commissars during the Russian Civil War. An Optimistic Tragedy was a huge success, The Commissar was immediately "shelved". Compare the two films and discuss the differences, as well as the similarities; Watch the musical Hiipsters (Stiliagi, Todorovskii 2008) Write an essay about Todorovskii's musical as a tribute to the Soviet Union's budding youth culture of the late 1940s and early 1950s.

### Media Production: Writing and Performance

Course Type:	elective
Category:	elα
Instructor:	Toby Eichas
Grade:	11, 12
Semester:	1
Pre-requisite:	ELA 1

Description:	Everyone wants, needs, and loves good content. Media writing involves creating written material for a variety of mass media outlets including print journalism, online publications, news/informational broadcasting, live streaming, and scripted videos. This elective course will introduce all facets of production to students, allowing them to research, discuss, practice, and create both written content and the finished production associated with it.
Objectives:	To distinguish useful and required information for a potential audience To write and edit meaningful and accurate content To perform the role of communicator / broadcaster / visual media host To assist others on a production To produce a new and unique media creation
Assessment:	30% Written assignments & terminology quizzes 40% Production assignments 15% Social contribution 15% Individual responsibility

#### ELA 3 Cinescapes

Course Type:	core_elective
Category:	elα
Instructor:	James Paul Evans
Grade:	12
Semester:	1, 2
Pre-requisite:	ELA 1, ELA 2
Description:	This course will explore visual analysis, discussing and considering how the space is used and projected onto the screen. Students will analyze a wide range of materials, from writing on theory & film, to scenes, sequences & whole films, and finally other visual mediums such as photography & video games. They will consider the skills and techniques being employed by others in these texts to share experiences and ideas; be it personal, universal, metaphorical etc. For students interested in studying film, or expanding their analytical knowledge, this is a great chance to continue adapting their academic work through a fun, unique topic. Texts will cover foreign film from the US, UK and other countries, as well as reading on both film and important theory that can be applied across texts and formats. The course will also consider interactive mediums like digital games, and still frames from both film and photography. Through studying and analyzing these texts, students will develop a better understanding of the tools needed not just for academic work & analysis, but their own creative work in the future.
Objectives:	After taking this course, students will be able to: Understand, explain and evaluate a variety of texts. Understand and notice the similarities and differences between the mediums in question, and be further prepared for the interdisciplinary nature of some university modules. Write skillful and informed analytical work on a variety of topics, as well as developing their own creative skills for their own original work. Present and discuss their opinions with developed written and verbal communication skills.

Assessment:	Assessments in the following areas will determine the overall course grade: 25% = Reading; 40% = Writing; 25% = Speaking and Listening; 10% = Responsibility Types of Assessments: reflections, annotations, essays, discussions/seminars, group projects, short stories/creations, creative projects. Some work will be weighted more than others, depending on the size or importance of the assignment. Grading System
	I will be using rubrics to grade student work. It will generally follow the 10 point grading scale 10 = Excels 8 = Proficient 7 =
	Approaching 5 = Needs Work 0 = Not Submitted

### ELA 3 Jungian Archetypes in Literature, Film and Culture

Course Type:	core_elective
Category:	elα
Instructor:	Declan Dobson-Smyth
Grade:	12
Semester:	1, 2
Pre-requisite:	ELA1,ELA2
Description:	Ruler, artist, sage, innocent, explorer, rebel, hero, wizard, jester, everyman, lover, caregiver. Who are they? What do they seek? What do they fear? And which are part of you? This course will explore the 12 archetypes of Carl Jung, a psychiatrist, psychoanalyst, and founder of analytic psychology. According to Jung, archetypes are both within us and all around us, in books, film, and advertisement. The course will firstly take a critical analytical approach towards the manifestations of archetype in culture and, through this theoretical lens, ask students to consider the common elements of texts and how characters function within them. To do so, students will need to draw upon their prior knowledge of a M of texts, though more will be introduced and recommended. Finally, students will harness their creative side to design and realise a powerful creative work that leverages the interplay between archetypes. Throughout the course we will take a critical stance towards archetype theory, carefully considering the limitations such a framework may pose.
Objectives:	Students will: Understand a range of basic human motivations and personalities. Be able to identify and explain the use of the 12 archetypes in a variety of texts and fi m. Analyse a character and their complexities. Compare and evaluate the use of character within texts. Critically analyse a text through the theoretical lens of archetype. Evaluate the use of archetype as a theoretical lens. Design and write a creative work drawing upon knowledge of the archetypes. Improve English composition and language (written and spoken, for both for academic and creative purposes).

Assessment:	10% Individual responsibility (ongoing) 10% Social contribution (ongoing) 20% Analytic presentation (week 8) 20% Analytic / evaluative written comparison (week 12) 20% Critical essay (week 16) 20% Creative application (week 20) 100% Total Note: Assignments will be graded for use of English, conventions, and application of the learning objectives.
	Rubrics will be provided.

#### Photojournalism and Documentary Photography Analysis

Course Type:	elective
Category:	ela
Instructor:	Maria Pia Olivari Aeschlimann
Grade:	11, 12
Semester:	2
Pre-requisite:	ELA 1
Description:	Photojournalism and Documentary Photography Analysis course is about to explore how these two disciplines have explored and recorded human experience since the creation of the photography, recording significant moments in history, documenting unfolding news and creating long-lasting images that can change people and society's understanding of the world. Photographers can use photos to expose, reflect, and help to understand different social issues. In this course, we will focus on how photography can implement or promote change, analyzing diverse iconic photos throughout history. The driving questions of this course will be: What is Photojournalism? What is Documentary Photography? How are this different from other types of photography? How can they change and/or impact society?
Objectives:	Students will: analyze and compare events during different periods of time to make informed, creative decisions about social issues, use different forms of art to convey concerns about social and ethical issues, use different forms of art to understand social and ethical issues, understand, explain, and evaluate events related to modern social, cultural, and economic matters of the world, be able to infer about the underlying issues of a specific society or region and apply it to their own reality, be able to articulate, advocate and justify positions on an issue or text confidently and believably, using art forms as a foundation to shape their opinion. be proficient with college-level literary analysis and essays forms
Assessment:	20% Responsibility 25% Writing 25% Language and Conventions 30% Speaking and Listening

# Advanced Art: Exploration of Creative Intentions and Artistic Practices I

Course Type:	elective
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Category:	fineArts
Instructor:	Alex Sicurella
Grade:	11, 12
Semester:	1
Pre-requisite:	Previous experience with art and email approval by teacher
Description:	Advanced Art provides students with the opportunity to pursue and develop personal interests in art practice. Students who take this course are expected to have at minimum some experience in art practices, and should have strong interest in continuing to pursue art in the future. The goal of this course is to provide opportunities for students to explore their artistic talents. Students will be given the chance to develop their artistic intentions, ability to communicate about their art, and push themselves to create exceptional works of art. Students will be expected to create artwork based on various projects. Students will work individually to produce their own artwork, but will be expected to communicate about their work to their peers, and give feedback to each other in the form of critiques. There will be two shows where students will show their artwork to the community and there will be a website created at the end of the year to showcase each of the students as artists.
Objectives:	After taking this course, students should gain: A deeper understanding personal interests in artistic practices The development of familiarity and expertise in the creation of art work An improved ability to communicate about art A sense of how to create artwork with well-developed and creative artistic themes and intentions
Assessment:	Participation and Effort (25%): Attendance and engagement in class during discussions, work periods, presentations, and critiques Completion and quality of weekly journal entries Growth and efforts towards improvement are considered here Appropriate use of in-class work time is a core part of how this is assessed Effort put into projects and artist presentations Participation in critiques You will have a weekly score for your participation and effort that will be scored using the rubric below. Communication 25%: Ability to communicate artistic ideas in a mature way Writing of artist statements Questions and feedback given during critiques Reflections and other written components Practice/ Application (25%: Is how you apply your learning of artistic concepts and ideas Is the application of artistic skills Craft and dedication to completing the projects Ideas (25% Intentions and vision for projects Deliberate connection between artistic elements and intention Creative thought and application of that creativity in your work Originality and personal connection to the work produced Project proposals and other planning documents

#### Advanced Art: Exploration of Creative Intentions and Artistic Practices II

Course Type:	elective
Category:	fineArts

Instructor:	Alex Sicurella
Grade:	11, 12
Semester:	2
Pre-requisite:	Previous experience with art and email approval by teacher
Description:	Advanced Art provides students with the opportunity to pursue and develop personal interests in art practice. Students who take this course are expected to have at minimum some experience in art practices, and should have strong interest in continuing to pursue art in the future. The goal of this course is to provide opportunities for students to explore their artistic talents. Students will be given the chance to develop their artistic intentions, ability to communicate about their art, and push themselves to create exceptional works of art. Students will be expected to create artwork based on various projects. Students will work individually to produce their own artwork, but will be expected to communicate about their work to their peers, and give feedback to each other in the form of critiques. There will be two shows where students will show their artwork to the community and there will be a website created at the end of the year to showcase each of the students as artists.
Objectives:	After taking this course, students should gain: A deeper understanding personal interests in artistic practices The development of familiarity and expertise in the creation of art work An improved ability to communicate about art A sense of how to create artwork with well-developed and creative artistic themes and intentions
Assessment:	Participation and Effort (25%): Attendance and engagement in class during discussions, work periods, presentations, and critiques Completion and quality of weekly journal entries Growth and efforts towards improvement are considered here Appropriate use of in-class work time is a core part of how this is assessed Effort put into projects and artist presentations Participation in critiques You will have a weekly score for your participation and effort that will be scored using the rubric below. Communication (25%): Ability to communicate artistic ideas in a mature way Writing of artist statements Questions and feedback given during critiques Reflections and other written components Practice/Application (25%): Is how you apply your learning of artistic concepts and ideas Is the application of artistic skills Craft and dedication to completing the projects Ideas (25%): Intentions and vision for projects Deliberate connection between artistic elements and intention Creative thought and application of that creativity in your work Originality and personal connection to the work produced Project proposals and other planning documents

# Audio/Video Club

Course Type:	club
Category:	fineArts
Instructor:	Brodi Andrew Craddock

Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	None
Description:	Grade 10 (eligible for semester 2 only) Students will learn technical aspects of music and video production, and will be given an opportunity to make their own songs or video projects.
Objectives:	Students will Learn how to use music production sofiware Leam how to produce video
Assessment:	Students will be assessed based on their finished projects (these can be individual or as part of a group)

# Digital Photography

Course Type:	elective
Category:	fineArts
Instructor:	Alex Sicurella
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	None
Description:	This course is an introduction to Digital Photography. Regardless of the type of camera you use, the goal of this class is to help give a better understanding of both the tools and skills needed to make successful images. The focus of this course in on the composition of images, basic photo editing skills, and some advanced skills. By the end of this course students will create a body of work in the form of a digital photo book or series of printed photos that represents the topics/content covered in class. The course will be based around projects centered on a topic related to photography. The projects will require students to apply new knowledge and practice skills related to photography.
Objectives:	After taking this course, students should be equipped with: the fundamentals of digital photography Photoshop skills for enhancing and editing photos. Skills related to how to use the camera and how to capture different types of images. a deeper understanding for thought processes and practice of creating art

Assessment:	Participation and Effort (30%) Attendance and engagement in class
7.000001110111.	during discussions, work periods and group work Growth and efforts
	towards improvement are considered here Appropriate use of in-class
	work time is a core part of how this is assessed Ability to communicate
	artistic ideas in a mature way through the use of concepts covered in
	class Presentations and Critiques (15%: Artist presentations - these are
	presentations that focus on sharing work from different artists. Students
	will complete 2 presentations throughout the semester, one will be from
	a list of pre-chosen artists and the other will be any artist of their
	choice. Critiques - These will be during projects and at the end of
	projects. During these critiques participation is a requirement and will
	be an important way of demonstrating the ability to communicate ideas
	about art and concepts covered in class. Assignments (25%: Based on
	completion of the projects and the work done related to the completion
	of the projects. This includes project planning and brainstorming, artist
	statements, and more. Final Project (30%) Includes all work related to
	the final body of work. This is the culmination of all of the topics
	covered in class. Should be a representation of your work and efforts
	towards finding your identity as photographer

# Art Exploration Club

Course Type:	club
Category:	fineArts
Instructor:	Alex Sicurella
Grade:	10, 11, 12
Semester:	2
Pre-requisite:	None
Description:	The goal of this club is to provide an opportunity for all students who are interested in creating art and exploring new forms and ideas in art. Students will be given opportunities to try out new mediums (such as digital art, drawing, and more) throughout the semester and will be practicing communicating about art, expressing ideas through the work they create, and will develop their ability to think creatively. The club will give students a space to create and share their artwork with others and help them have access to the materials they need to create.
Objectives:	Students will: understand their own interests, skills, and ability to create art be able to communicate about their own artwork and offer critique on others artwork gain a stronger ability to conceptualize and create intriguing, innovative art work
Assessment:	30% - Participation and Effort 30% - Unit 1 Projects: 15% - Process journals 15% - Completed artworks 40% - Unit 2 Project: 10% - Project proposal 10% - Process journal 10% - Artist Statement 10% - Final artwork

#### IRP3 HL

Course Type:	elective
Category:	irp
Instructor:	Fan Jiatong
Grade:	12
Semester:	1
Pre-requisite:	Students have achieved A/A+ in IRP 2, as well as an approved proposal and acceptance of a supervisor.
Description:	IRP 3 is an HL elective course that provides the time and space for students to delve deeply into a research topic of their choice (preferably one that is a continuation of the IRP2 project) through collaborative learning. Students are required to get an A/A+ in IRP2 and submit an approved proposal with acceptance of a supervisor in order to successfully register for IRP3 course. IRP3 is mainly led by students themselves. Students can work independently or in small groups to conduct their research. Typical learning activities are group discussion, workshop, field trip, and presentation. Supervisors will scaffold students throughout their research and offer academic guidance only in need. The aim is to give students' autonomy to dig into disciplines that are of interest to them and lay the foundation for future college learning.
Objectives:	This course cultivates skills that are essential for achieving success at the university level. Building on the foundations of academic research, this course aims to: Cultivate and drill students' writing, organization, presentation and communication skills. Engage students in a process of thesis-antithesis-synthesis through presentations and collaborative learning. Develop students' abilities to communicate their research projects in an interdisciplinary context. Encourage students to explain the logic of their research and how their concepts are applicable beyond their ownresearch, discipline and culture.
Assessment:	Project responsibility: monthly meetings, discussion, class presentation (20%) Project output: research proposal (80%) graded by supervisor

# Support the Supporters (Parent Education)

Course Type:	club
Category:	irp
Instructor:	Li Xuezhen
Grade:	12
Semester:	2
Pre-requisite:	
Description:	Not Provided

Objectives:	This club aims to empower students by supporting their key supporters (parents). The goal is to bridge parent-child communication by fostering empathy and equipping parents with empirically supported parenting strate gies By the end of the second semester, the students will be able to define our club mission and vision—identify the needs of parents through the lens of "parenting stress"—synthesize the characteristics of the adolescent brain and illustrate the unique challenges and opportunities during adolescence for students and parents examine popular parenting programs and try planning or creating Dalton Parenting Program
Assessment:	Students will be expected to actively participate in and contribute to discussions. Both formative and summative assessments wil count to a total grade. 10%-Class discussion/participation 20%-Glossary Book 440%-Formative assessments 30%-Summative assessments

#### IRP 2

Course Type:	core
Category:	irp
Instructor:	Fan Jiatong, Song Weiqing
Grade:	11
Semester:	1, 2
Pre-requisite:	None

Description:	The Senior 2 Independent Research Program 2 (IRP2) is a compulsory course that strives to lay a solid research foundation for students at Dalton. It aims to equip students with the skills and outlook of researchers using project- based learning. Students will use the Senior 2 year to explore a research field of interest aligned with corresponding elective courses they take and complete a connected research project independently. IRP2 course meets weekly for 90 minutes to provide students with instruction on research design, methods, close reading, and academic writing. Additionally, specialized support is provided through individual meetings with a faculty member who serves as the student's IRP2 academic supervisor. Class time will be dedicated to teachers' mini lectures, student presentations, in- class workshops and seminars. At the end of the year, students will be encouraged to present their research at an academic conference hosted by the school. Project Topic -IRP2 does not have restrictions on the topics of independent research, but students could plan their project together with the elective courses they take during the senior 2 year. Hopefully, the IRP2 project topic is motivated by students' field of interest. Collaboration with a supervisor - Students should formally apply to the teachers they want to work with for IRP2 supervision, before which they need to initiate meetings to have adequate communication over project ideas with the teachers. Students may choose their teacher from elective courses as IRP2 supervisor or consider other Dalton faculty if the teacher shares a similar field of interest and can provide academic support to students in the research field, and grade students' literature review and research reflection. Students need to initiate meetings with supervisors every other week and arrange the meeting content based on their research needs.
Objectives:	The IRP2 course enables students to acquire important generic understandings, skills, and knowledge on research across disciplines. They will be equipped with the ability to communicate academically and think critically, and the creativity and responsibility to make a difference to society. Students will: Search for and identify quality relevant literature in specific fields using libraries, academic databases, and historical archives. Understand principles of discipline-specific research methods Employ appropriate disciplinary research methods to develop, manage, and conduct an in-depth study in the student's area of interest. Analyze and draw conclusions based on information from different sources. Learn and write academic papers based both on secondary research and their own original research. Communicate their research effectively by presenting their ideas in audience-friendly ways. Make objective-driven learning plans and manage learning processes.
Assessment:	Class Activities (10%) After-class assignments (45%) Literature review (30%) graded by supervisor Project responsibility (5%) graded by supervisor Final presentation (10%)

# Applied Mathematics

Course Type:	elective
Category:	math
Instructor:	Wang Jiangyi
Grade:	11, 12
Semester:	2
Pre-requisite:	Passing grade in Finite Mathematics; Approval of teacher
Description:	Applied Mathematics is the second course in a two-semester sequence. This sequence built upon the mathematics knowledge of Algebra or Advanced algebra course, the course will guide the students to further study mathematical concepts and to practice with skills including sets and matrix, polynomial and linear functions, distribution, counting principles, statistics and probability etc. It is important for students to understand and apply mathematical ideas in a variety of contexts. The project assignments are more complex in scope and require a synthesis of the various topics covered in the course. Students are encouraged to work in groups and exploring including Mathematics and Music, Financial mathematics, Optimization, Applied statistics, Origami etc.
Objectives:	Students will demonstrate factual knowledge including the mathematical notation and terminology. Including linear equations, number systems, mathematics of finance etc. The students will apply the course material along with techniques and procedures covered in this course to solve multi-scope problems. Students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields.
Assessment:	15% Participation and Activity 20% Homework 40% Quizzes*4 25% Project

### Computer Science I

Course Type:	elective
Category:	math
Instructor:	Wei Sai
Grade:	11, 12
Semester:	1
Pre-requisite:	Passing grade in Integrated Math HL;B or above Ct for Advanced algebra;B+ or above B+ for Algebra; Approval of teachers

Description:	This course provides help for taking AP Computer Science A exam.  Computer Science is a year-long course addresses the computational big ideas, thinking practices and programming skills by incorporate project-based learning with Java. This collaborative and learner-centric approach engages students in the educational process, improves retention, and develops problem solving, critical thinking, and group communication skills. Students are required to take notes of coding and logical concepts during class, and finish their group-based independent practices in their club time.
Objectives:	By the end of this course, students are expected to have understanding with key computational big ideas (Modularity, Variables, Control, Impact of Computing), familiar with programming skills in Java and also comfortable with writing code on paper and answer code reading problems skillfully. Students' communication, critical thinking and problem solving skills are also expected to be improved through project-based learning.
Assessment:	60 lests 20% Midterm 20% Final 20% Unit Tests 30% Proiects and Daily Practice 20% Unit Proiects 10% Daily Practice 10% Participation Tests: All tests are modeled after the single-select multiple-choice questions and free response questions on the AP Computer Science A exam Unit Proiects: In each unit, students will practice new concepts by completing a project and submit their partial work weekly. For each unit project, 10% of the grades are recorded for completeness of the weekly submission, and 10% are examined based on the quality of the project. Students are allowed to seek help from peer or reliable resources (under academic honesty code) to complete their project, but all work should be submitted individually. Daily Practice: Interactive MCo or written FRO questions will be assigned to students each class as practice. Students can revise and correct their wrong questions to get full mark. Participation: Students are required to engage in not only lecture, but also coding practice and written problem exercises. Poor participation rate will result in deduction of scores.

# Mathematical Modeling I HL

Course Type:	elective
Category:	math
Instructor:	Lu Yizhou
Grade:	10, 11
Semester:	2
Pre-requisite:	Approval of teacher
Description:	This class aims at helping students master the skills of mathematical modeling and participate in the mathematical modeling contests, in the meantime, harness the interdisciplinary knowledge such as physics, statistics, etc.

Objectives:	The main objectives are as follow: Basic mathematical modeling kno wledge. You should learn mathematical methods and apply them into physical problems. Computer language programming. in this course you will mainly study the usage of Matlab, which is a matrix computation sofiware. Essay writing. Since you have to show your work to others and explain why what you've done is significant, a well composed mathematical modeling essay is pivotal. Mathematical modeling contests participation. Afier taking this course you can get most of the necessary knowledge of mathematical modeling, under which condition you're able to take the HiMCM or IM2C contest.
Assessment:	Homework 40% (at least once a week) Project 25% (including monthly project and final project) Final exams 30% (including 3 tests: (a) basic mathematics modeling knowledge test (b) literature reading and writing test (c) Matlab programming test. You may choose at least 1 test to participate in, but only the top 1 grade is recorded as your final exams score. For instance, if you took all three tests and your score are namely (a) 96 (b) 87 (c) 90, you' re your final exams score should be 96 Participation 5%.

# Game Theory

Course Type:	elective
Category:	math
Instructor:	Jiang Wanyu
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	Passing grade in S1 math
Description:	This course is an introduction to game theory and strategic thinking. Ideas such as strategy, Nash equilibrium, backward induction, signaling, etc. can be discussed and applied to games played in class and to examples drawn from economics, politics, sports, the movies, and elsewhere. Game theory is also an application course of mathematics and some of the concepts the students learned in basic math class should be involved. Such includes set theory, mapping and function, expectation and probability, sequence and so on. Simple single variable calculus is involved to solve maximization problems and class introducing the methods are offered for those who are not familiar with taking derivatives. Students are required to understand real life problems, extract appropriate models from it and use the tools learned in the class to solve them.

Objectives:	This course demonstrates the value of examining a strategic situation from the tight theoretical perspective. Logical thinking is required for solving real life problems in strategic situations. Grame theory can help us understand how the forces of strategy influence the outcome of social interaction. After taking this course, students should be able to: Find questions and extract models from descriptive languages. Have a deeper understanding of basic math tools and its applications. Think of some strategic considerations to take into account making choices. Predict ho w other people or organizations behave when they are in strategic settings. Apply game theory tools to settings from real life problems.
Assessment:	Participation: 10% Homework: 40% (once per week, taking average) Ouiz: 10% Tests: 30% (3 Chapter Tests, taking average) Reflection: 10% (for activities or games played in class)

### Mathematical Competition Club II

Course Type:	club
Category:	math
Instructor:	Lu Yizhou
Grade:	10, 11
Semester:	2
Pre-requisite:	Approval of teacher.
Description:	Knowledge of mathematics is vital to senior students. Students must learn the basic idea of primary math in order to get prepared for international mathematical competitions.
Objectives:	Students will attain a general knowledge about senior high school mathematics and apply it to simple practical problems. Students can get help from this course in order to prepare for the relevant math competitions such as AMC1012, Euclid, etc. Students can prepare for math courses of higher level.
Assessment:	Class Participation: 50% Competition Participation: 40% Community Contribution: $10\%$

### Mathematical modeling II HL

Course Type:	elective
Category:	math
Instructor:	Lu Yizhou
Grade:	11, 12
Semester:	1
Pre-requisite:	Passing Grade in Mathematical modeling I HL

Description:	This class aims at helping students master the skills of mathematical modeling and participate in the mathematical modeling contests, in the meantime, get interdisciplinary knowledge such as physics, statistics, etc.
Objectives:	The main objectives are as follows: Advanced mathematical modeling knowledge. You should leamn mathematical methods and apply them into physical problems. Computer language programming. In this course you will continue to learn Matlab. What's more, you may be able to get some simple knowledge of SPSS and Comsol. Essay writing. Since you have to show your work to others and explain why what you've done is significant, a well composed mathematical modeling essay is pivotal. Mathematical modeling contests participation. After taking this course you can get most of the necessary kno wledge of mathematical modeling, under which condition you're able to take the HiMCM or IM2C contest.
Assessment:	Home work 40% Project 40% (including monthly project and final project I Participation 10% Community Contribution 10%.

#### Calculus II

Course Type:	elective
Category:	math
Instructor:	Wei Lei
Grade:	11, 12
Semester:	2
Pre-requisite:	Passing Grade in Calculus I
Description:	In Calculus 2, based on the understanding and mastery of the basic concepts of integral, students will explore more complex integral problems and learn new integration methods, including Partial Fraction, Integration by parts, Separation Variables, etc. In addition, some methods will be introduced to estimate the numerical solutions in differential equations, such as Euler's Method and Slope Field. After that, students will learn Parametric equation and polar equation, and try to solve corresponding problems in calculus. Finally, students will also explore some issues in sequences and series, such as determining convergence and divergence of a given series, identifying and applying Taylor's Series and Maclaurin's Series.
Objectives:	After attending this course: Students will have a better understanding of different inte gral problems and learn some applications of calculus in real-life problems; Students will learn Parametric equation and polar equation, and try to solve corresponding problems in calculus. Students will also have a good understanding of the definition of series and their divergence or convergence; Know how to apply Taylor and McLaughlin formulas.
Assessment:	Grading Item Points Class performance 10 Classwork Preview 10 Homework 15 Chapter test (1,2,3) 20 Middle Exam 20 Final Exam 20 Group Contribution 5 Total 100

#### Statistics I

Course Type:	elective
Category:	math
Instructor:	Jiang Wanyu, Du Xinmeng, Wang Jiangyi
Grade:	11, 12
Semester:	1
Pre-requisite:	Students must satisfy one of the following prerequisites: Passing grade in Integrated Math HL; B or above in Advanced Algebra; B+ or above in Algebra; Approval of teacher
Description:	This course provides help for taking AP Statistics exam. Statistics I is the first course in a two-semester sequence. This sequence is an introductory college statistics course. In this sequence, students develop strategies for collecting, organizing, analyzing and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance phenomena. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students are advised to use a TI-nspire calculator and computer based statistical software to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data. Students will also work in groups to complete projects based on real world statistical applications. Projects will require them to collect, analyze and interpret data.
Objectives:	Constructing and interpreting graphical displays of distributions of univariate data Exploring data and Comparing distributions Planning and conducting a study and generalizability of results and types of conclusions that can be drawn from your study Anticipating patters: exploring random phenomena using probability and simulation Use a TI-nspire calculator and computer based statistical software to investigate statistical concepts. Work in groups to complete projects based on real world statistical applications
Assessment:	10% Participation 40% Homework 10% Chapter Test 20% Midterm 20% Final

# Computer Science I (Club)

Course Type:	club
Category:	math
Instructor:	Wei Sai
Grade:	11, 12

Semester:	1
Pre-requisite:	Currently enrolled in Computer Science Course or students who have coding experience and approved by the instructor
Description:	This club course provides additional help for taking AP Computer Science A exam. The Computer Science Club provides students with a collaborative, learner-centric, project-based learning environment. As a lab resource to the regular Computer Science class, the computer science club allows learners to practice and discuss programming skills, algorithms, and big ideas in the area.
Objectives:	By the end of this course, students are expected to enhance their understanding with key computational big ideas, computational thinking, and programming skills in Java with lab practice. Students' communication, critical thinking and problem-solving skills are also expected to be improved through project-based learning.
Assessment:	This is a Pass or Fail course. For the current Computer Science students, they are required to actively participate and utilize the club time to finish all projects in the regular course. For the non-Computer Science students, they are required to submit a project proposal of self-designed program in the language they prefer and submit their project at the end of the club course.

# Microeconomics I

Course Type:	elective
Category:	math
Instructor:	Jiang Wanyu
Grade:	11, 12
Semester:	1
Pre-requisite:	Passing grade in S1 math, ELA and WCC

Description:  This course provides help for the AP Microeconomics exam. Microeconomics is a two-semester long regular course. This course in the fall semester is the first part of the full course. Microeconomics focuses on how economic decisions are made by individuals, firms, and organizational structures. Supply and demand analysis is developed to demonstrate how market prices are determined, how those prices determine an economy's allocation of goods and services, how factors of production are allocated in the production process, and how goods and services are distributed throughout the economy. We evaluate the strengths and weaknesses of economic decision makers by using the concepts of efficiency and equity. We also analyze and evaluate the effects of government intervention. Emphasis is placed on reasoned logical argument so that we can use economics as a method and model for decision making. Students will study how various economic agents make their choices and decisions in a market environment, and the implications of those choices and decisions for the allocation of productive resources.  Students will study how various economic agents make their choices and decisions in a market en vironment, and the implications of those choices and decisions in a market en vironment, and the implications of those choices and decisions in a market en vironment, and the implications of those choices and decisions for the allocation of productive resources. After successful completion of this course students will be able to demonstrate command of basic microeconomic concepts and graphical models, and apply them to new siturations. In specific, the students should be able to: Understand basic economic concepts Use and interpret the language of business and basic measurements of economics performance.  Demonstrate economic questioning and analysis skills. Interpret a variety of graphical models and paraphrase economic concepts. Generate, interpret, label, and analyze graphs, charts, and data to describe and explain econo		
decisions in a market en vironment, and the implications of those choices and decisions for the allocation of productive resources. After successful completion of this course students will be able to demonstrate command of basic microeconomic concepts and graphical models, and apply them to new siturations. In specific, the students should be able to:  Understand basic economic concepts Use and interpret the language of business and basic measurements of economics performance.  Demonstrate economic questioning and analysis skills. Interpret a variety of graphical models and paraphrase economic concepts.  Generate, interpret, label, and analyze graphs, charts, and data to describe and explain economic concepts Analyze the development of modemn economic theory. Apply economic skills and concept kno wledge to higher college-level  Assessment:  Participation:10% Homework: 40% (once per week, taking average)	Description:	Microeconomics is a two-semester long regular course. This course in the fall semester is the first part of the full course. Microeconomics focuses on how economic decisions are made by individuals, firms, and organizational structures. Supply and demand analysis is developed to demonstrate how market prices are determined, how those prices determine an economy's allocation of goods and services, how factors of production are allocated in the production process, and how goods and services are distributed throughout the economy. We evaluate the strengths and weaknesses of economic decision makers by using the concepts of efficiency and equity. We also analyze and evaluate the effects of government intervention. Emphasis is placed on reasoned logical argument so that we can use economics as a method and model for decision making. Students will study how various economic agents make their choices and decisions in a market environment, and the implications of those choices and decisions for the allocation of
	Objectives:	decisions in a market en vironment, and the implications of those choices and decisions for the allocation of productive resources. After successful completion of this course students will be able to demonstrate command of basic microeconomic concepts and graphical models, and apply them to new siturations. In specific, the students should be able to: Understand basic economic concepts Use and interpret the language of business and basic measurements of economics performance.  Demonstrate economic questioning and analysis skills. Interpret a variety of graphical models and paraphrase economic concepts.  Generate, interpret, label, and analyze graphs, charts, and data to describe and explain economic concepts Analyze the development of modemn economic theory.  Apply economic skills and concept kno
	Assessment:	

# Mathematical Competition Club I

Course Type:	club
Category:	math
Instructor:	Lu Yizhou
Grade:	10, 11
Semester:	1
Pre-requisite:	Approval of teacher.
Description:	Knowledge of mathematics is vital to senior students. Students must learn the basic idea of primary math in order to get prepared for international mathematical competitions.

Objectives:	Students will attain a general knowledge about senior high school mathematics and apply it to simple practical problems. Students can get help from this course in order to prepare for the relevant math competitions such as AMC1012, Euclid, etc. Students can prepare for math courses of higher level.
Assessment:	Class Participation: 50% Competition Participation: 40% Community Contribution: 10%

#### Finite Mathematics

Course Type:	elective
Category:	math
Instructor:	Wang Jiangyi
Grade:	11, 12
Semester:	1
Pre-requisite:	Students must satisfy one of the following prerequisites: C+ or above for Advanced algebra; B or above for Algebra; Approved by teachers
Description:	Finite Mathematics is the first course in a two-semester sequence. This sequence built upon the mathematics knowledge of Algebra or Advanced algebra course, the course will guide the students to further study mathematical concepts and to practice with skills including sets and matrix, polynomial and linear functions, distribution, counting principles, statistics and probability etc. It is important for students to understand and apply mathematical ideas in a variety of contexts. The project assignments are more complex in scope and require a synthesis of the various topics covered in the course. Students are encouraged to work in groups and exploring including Mathematics and Music, Financial mathematics, Optimization, Applied statistics, Origami etc.
Objectives:	Students will demonstrate factual knowledge including the mathematical notation and terminology. Including linear equations, number systems, mathematics of finance etc. Students will describe the fundamental principles arising from the mathematical ideas. Students will identify and apply the laws and formulas that directly from the definition of mathematics; for example, the formulas associated with matrices and the mathematics of finance.
Assessment:	15% Participation and Activity 20% Homework 40% Quizzes*5 25% Project

#### Computer Science II

Course Type:	elective
Category:	math
Instructor:	Wei Sai

Grade:	11, 12
Semester:	2
Pre-requisite:	Passing Grade in Computer Science I
Description:	This course provides help for taking AP Computer Science A exam.  Computer Science is a year-long course addresses the computational big ideas, thinking practices and programming skills by incorporate project-based learning with Java. This collaborative and learner-centric approach engages students in the educational process, improves retention, and develops problem solving, critical thinking, and group communication skills. Students are required to take notes of coding and logical concepts during class, and finish their group-based independent practices in their club time.
Objectives:	By the end of this course, students are expected to have understanding with key computational big ideas (Modularity, Variables, Control, Impact of Computing), familiar with programming skills in Java and also comfortable with writing code on paper and answer code reading problems skillfully. Students' communication, critical thinking and problem- solving skills are also expected to be improved through project-based learning.
Assessment:	30% Review Practice 15% Mock Tests 25% Unit Ouizzes 10% Unit Proiects 20% Maior Proiect Review Practice: Review practice problems will be assigned to students during class in the revie wing sessions. Revision and corrections are allowed for students to get full marks. Mock Tests: Three mock tests are assigned to students and their actual grades will be recorded. If there are additional mock tests (more than 3), the lowest grade can be dropped. Unit Quizzes: There are at least 4 quizzes expected in this semester, one quiz for Unit 6, and three for Additional Unit. If there are additional quizzes (more than 4), then the lowest grade can be dropped. Unit Project: Proiect for Unit 4 and Additional Unit. Major Project: Group project on self-designed programs cover ing materials we learned. Program propo sal and presentation need to be delivered along with the codes.

#### Calculus II HL

Course Type:	elective
Category:	math
Instructor:	Lu Yizhou
Grade:	11, 12
Semester:	2
Pre-requisite:	Approval of Teacher

Description:	This course provides help for taking AP Calculus BC exam. Calculus is a preparation course for university, especially for those who are willing to major in science and engineering. If you were able to finish this course you could get an idea of the higher mathematics more or less and get prepared for calculus courses later on, which may help you reduce the burden of study in the future.
Objectives:	After taking this course: Students will attain a general knowledge about calculus and apply it into practical problems. Students can get help from this course in order to prepare for the Calculus BC exam. Students can determine whether they are suitable for majors which requires a high level of master of calculus such as mathematics, physics, computer science, etc.
Assessment:	Class work & Home work: 40% Chapter Quiz: 20% Final Exam: 15% Final Project: 15% Responsibility: 10%

# Computer Science II (Club)

Course Type:	club
Category:	math
Instructor:	Wei Sai
Grade:	11, 12
Semester:	2
Pre-requisite:	Currently enrolled in Computer Science Course or students who have coding experience and approved by the instructor
Description:	The course provides additional help for taking AP computer science A exam. The Computer Science Club provides students with a collaborative, learner-centric, project-based learning environment. As a lab resource to the regular Computer Science class, the computer science club allows learners to practice and discuss programming skills, algorithms, and big ideas in the area.
Objectives:	By the end of this course, students are expected to enhance their understanding with key computational big ideas, computational thinking, and programming skills in Java with lab practice. Students' communication, critical thinking and problem-solving skills are also expected to be improved through project-based learning.
Assessment:	This is a Pass or Fail course. For the current Computer Science students, they are required to actively participate and utilize the club time to finish all projects in the regular course. For the non-Computer Science students, they are required to submit a project proposal of self-designed program in the language they prefer and submit their project at the end of the club course.

#### Statistics II

Course Type:	elective
Category:	math
Instructor:	Jiang Wanyu, Du Xinmeng, Wang Jiangyi
Grade:	11, 12
Semester:	2
Pre-requisite:	Passing Grade for Statistics I
Description:	This course provides help for taking AP Statistics exam. Statistics II is the second course in a two-semester sequence. This sequence is an introductory college statistics course. In this sequence, students develop strategies for collecting, organizing, analyzing and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance phenomena. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students are advised to use a TI-Nspire calculator and computer based statistical software to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data. Students will also work in groups to complete projects based on real world statistical applications. Projects will require them to collect, analyze and interpret data.
Objectives:	Build strategy for Statistical inference: estimating population parameters and testing hypotheses Identify an appropriate confidence interval procedure for a population mean/proportion/regression line, including the mean difference bet ween values in matched pairs. Justify a claim based on a confidence interval for a difference of population means/proportion/ regression line. Use a TI-Nspire calculator and computer based statistical software to investigate statistical concepts. Work in groups to complete projects based on real world statistical applications
Assessment:	10% Particijpation 20% Homework 10% Take home Chapter Test*3 20% Midterm 20% Final 20% Final Project

### Calculus I HL

Course Type:	elective
Category:	math
Instructor:	Lu Yizhou
Grade:	11, 12
Semester:	1
Pre-requisite:	Approval of Teacher

Description:	Calculus is a preparation course for university, especially for those who are willing to major in science and engineering. If you were able to finish this course you could get an idea of the higher mathematics more or less and get prepared for calculus courses later on, which may help you reduce the burden of study in the future.
Objectives:	The course provides help for taking Calculus BC exam. After taking this course: Students will attain a general knowledge about calculus and apply it into practical problems. Students can determine whether they are suitable for majors which requires a high level of master of calculus such as mathematics, physics, computer science, etc.
Assessment:	Classwork & Homework: 40% Chapter Quiz: 15% Mid-of-term Exam: 15% Final Exam: 20% Responsibility: 10%

### Calculus I

Course Type:	elective
Category:	math
Instructor:	Wei Lei
Grade:	11, 12
Semester:	1
Pre-requisite:	Students must satisfy one of the following pre-requisites: Passing grade in Integrated Math HL; B or above for Advanced Algebra; B+ or above for Algebra; Approval of teacher
Description:	This course provides help for the AP Calculus BC exam. Calculus is a college preparatory course, which can help students understand the relevant contents of advanced mathematics in advance. At the same time, it can also provide students with a large number of mathematical theories and mathematical tools to deal with more complex science and engineering problems. Calculus 1 mainly includes limit and continuity of functions, derivatives and their operations, the application of derivatives, Anti-derivative, Indefinite integral, Definite integral, and Application of Integral, etc.
Objectives:	Atter taking this course: Students will understand the meaning of limit and continuity of functions and can solve the limit problems in a variety of ways Students will master the derivative formulas and operation methods of most functions Students can flexibly apply derivative formula and differential theory in different scenarios Students will understand the inverse operation of derivatives and master a large number of formulas of Definite or indefinite integrals
Assessment:	Class performance 10 Class work Preview 10 Homework 20 Chapter test (1,2,3) 15 Middle Exam 20 Final Exam 20 Group Contribution 5 Total 100

# Physics in Life (Third Science)

Course Type:	core
Category:	physics
Instructor:	Wang Yiming
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	Did not take any physics course in grade 10
Description:	Physics in Life is a descriptive course that is designed for non-science major students. It covers topics ranging from the applications of physics to commonly experienced phenomena and machines. The mission of this course is to spark interest in the eyes of students, to facilitate students to raise questions and to analyze the world around them, to have students think and experience. At a more pragmatic level, the course will prepare students to apply physics and physical science concepts in their career and personal life.
Objectives:	Aims: To emphasize the importance of the process of scientific investigation as a means of solving problems in every day life; To contribute to the pupils' general education by helping to make sense of the physical environment through scientific inquiry; To provide the basis for further study of the subject; To develop experimental and investigative abilities; To develop the skills necessary to find solutions to scientific problems; To understand that scientific ideas are developed within a contemporary and historical context. To develop positive attitudes towards Physics, Science and the environment.
Assessment:	Homework 35 Ouiz 25 Lab 10 Mid-term 10 Final Exam 10 Proiect 10 Total 100

# Physics 2: Knowledge of Fluid, Thermodynamics, Light, Modern Physics

Course Type:	elective
Category:	physics
Instructor:	Wang Yiming
Grade:	11, 12
Semester:	1
Pre-requisite:	S1 full-year physics and should have taken or be concurrently taking pre-calculus or an equivalent course.
Description:	The course provides help for taking AP Physics 2 exam. Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; geometric and physical optics; and quantum, atomic, and nuclear physics.

Objectives:	Students will: use representations and models to communicate scientific phenomena and solve scientific problems. use mathematics appropriately. engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course.
Assessment:	Homework 30 Labs 10 Quiz and Test 20 Midterm exam 15 Final exam 15 Proiects 10 Total 100

#### Advanced Mechanics with Calculus

Course Type:	elective
Category:	physics
Instructor:	Ma Jiyun
Grade:	11, 12
Semester:	1
Pre-requisite:	Physics 1 in senior 1 and calculus in senior 2.
Description:	The course provides help for taking the AP Physics C- mechanics exam. The course is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in the physical sciences or engineering. Introductory differential and integral calculus are used throughout the course. The laboratory portion of the course focuses on students asking questions, making observations and predictions, designing experiments, analyzing data, and constructing arguments in a collaborative setting where they direct and monitor their progress. Each student completes project based on the content in the semester.
Objectives:	After the learning of the course, students should be able to meet the tollowing achievement: Understand the core physical problems, physical concepts and physical laws ofeach topic, with the learning to form a knowledge frame of mechanics. Use mathematical means to carry out rigorous analysis and solution. Use the knowledge and methods of the course, studied, analyzed and judged the problems with the scientific methods. Understand the possibilities and limitations of knowledge and methods, develop students the critical thinking and ssustainable thinking abilities. Proficient use the mathematical tools in physical research and problem handling Appreciate the perfect combination of physics and mathematics and mutual promotion.
Assessment:	Participation 5% Homework 20% Report and presentation 20% Ouiz and exam 20%(5+10) Mid and Final 35% (15+20)

### Physics 2: Application of Physics Principle

Course Type:	elective
Category:	physics

Instructor:	Wang Yiming
Grade:	11, 12
Semester:	2
Pre-requisite:	Physics 2: knowledge of fluid, thermodynamics, light and Modern physics
Description:	The course provides help for taking AP Physics 2 exam. Physics 2 course in Semester 2 is a continuing course of Physics 2: knowledge of fluid, thermodynamics, light and Modern physics. Students in this course are expected to perform well on AP-physics 2 exam and also encouraged to take the academic proficiency test as most of the topics are covered. The first part of semester 2 is AP exam oriented. As the first semester already covers all the new content for AP Physics 2, semester 2 mainly focuses on application and revision by past papers for the exam in May. After the AP exam is taken, students will devote more time on projects including Physics Show and activities visiting Science Museum during the second part of Semester. Students will also spend some time on hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to demonstrate foundational physics principles and apply the science practices.
Objectives:	Students will: plan and implement data collection strategies in relation to a particular scientific question. perform data analysis and evaluation of evidence work with scientific explanations and theories connect and relate kno wledge across various scales, concepts, and representations in and across domains.
Assessment:	Grading Item Points Homework 30 Labs 20 Ouiz and Test 20 Proiects 30 Total 100

### Advanced Electromagnetism with Calculus HL

Course Type:	elective
Category:	physics
Instructor:	Ma Jiyun
Grade:	11, 12
Semester:	2
Pre-requisite:	B+ or above in Advanced Mechanics with Calculus. With strong calculus skills. Teacher's permission is required.

Description:	The course provides help for taking AP C- Electromagnetism exam. The course is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in the physical sciences or engineering. Introductory differential and integral calculus are used throughout the course. The laboratory portion of the course focuses on students asking questions, making observations and predictions, designing experiments, analyzing data, and constructing arguments in a collaborative setting where they direct and monitor their progress. Each student completes project based on the content in the semester.
Objectives:	After the learning of the course, students should be up to the following achievement: To understand the core physical problems, physical concepts and physical laws of each topic, can use mathematical means to carry out rigorous analysis and solution in electromagnetism range. Using the knowledge and methods of the course, studied, analyzed and judged the problems with the scientific methods. Understand the possibilities and limitations of knowledge and methods, develop students the critical thinking and ssustainable thinking abilities. Proficiency in the use of mathematical tools in physical research and problem handling related with derivation and calculation. In the learning process can appreciate the perfect combination of physics and mathematics and mutual promotion.
Assessment:	Participation 5% Homework 20% Report and Project 20% Ouiz and exam 20% (5+10 Mid and Final 35% (20+15)

# Mathematical Method in Physics HL

Course Type:	elective
Category:	physics
Instructor:	Ma Jiyun
Grade:	11, 12
Semester:	1
Pre-requisite:	Fundamental knowledge of calculus. A or above in Physics 1 HL, A+ in physics 1 SL.
Description:	The course will prepare you in deep physics and mathematics application in physics that is helpful to attend international contest. The course is taught with the designed special topic which related into the physics branches. In the course, we will go over the content include the oscillation, wave, thermal, review the content in physics 1. We suggest the students who choose the course should also choose the Physics Critical thinking challenge club. The physics international contest: Late Oct. ASOP(on campus, English) Late Nov. BPHO(on campus, English) Mid Feb. 泛珠(Shenzhen, bilingual)

Objectives:	The purpose of the course is to train students the mathematical thinking, calculation skills in physics learning. After the learning of the course, students should be up to the following achievement: To understand the core physical problems, physical concepts and physical laws of each topic, we can use mathematical means to carry out rigorous analysis and solution. Using the physics knowledge, studied, analyzed and judged the problems with the scientific, mathematical methods. With the mathematical analysis, understand the possibilities and limitations of knowledge and methods, develop students the critical thinking and sustainable thinking abilities. Proficiency in the use of mathematical tools in physical research and problem handling In the learning process can appreciate the perfect combination of physics and mathematics and mutual promotion.
Assessment:	Homework 30% Quiz and exam 15% Mid-exam 20% Final-exam 25% Semester Proiect Report 10%

#### Physics Critical Thinking Challenge Club I

Course Type:	club
Category:	physics
Instructor:	Ma Jiyun
Grade:	11, 12
Semester:	1
Pre-requisite:	Advanced Mechanics with Calculus or Mathematical Method in Physics Learning HL in the current semester
Description:	The club will focus on deep learning in physics and mathematical application training in physics. In Fall semester, the students will be prepared for the ASOP (Oct.) and BPHO (Nov.) contest. In the club, we will teach some content that is missing in normal physics courses, and the club will help students who will attend international contests to review and deep learning of normal physics courses. We also can prepare the contest with the paper in recent years. We suggest the students who choose MMP or Advanced physics choose the club.
Objectives:	After attending this club course, students will: be able to apply physics knowledge in real life develop a deep understanding of the concepts and theorems in physics be well-prepared for the physics contest in fall semester
Assessment:	Attendance 30% Homework 30% Quiz & exam 40%

#### Physics Critical Thinking Challenge Club II

Course Type:	club
Category:	physics

Instructor:	Ma Jiyun
Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	Mechanics 1&2 HL for grade 10, Advanced Mechanics with Calculus or Mathematical Method in Physics Learning HL for grade 11&12.
Description:	The club will focus on deep learning in physics and mathematical application training in physics. In Spring semester, the student will be prepared for the BPHO challenge contest (March) and the AP exam (May). The club will help students who will attend international contests or AP exams to review and deep the learning of physics. You also can prepare the related content with the paper in recent years. We suggest the student who will attend the AP exam or physics contest in spring semester choose the club.
Objectives:	After attending this club course, students will: be able to apply physics knowledge in real life develop a deep understanding of the concepts and theorems in physics be well-prepared for the physics contest in spring semester and AP physics exam
Assessment:	Attendance 30% Homework 30% Ouiz & exam 40%

## Portrait Photography: Self-expressing and exploring

Course Type:	elective
Category:	slc
Instructor:	Feng Yiyao
Grade:	11, 12
Semester:	2
Pre-requisite:	None
Description:	Portrait Photography offers a comprehensive exploration of portrait photography, including technical aspects of shooting and editing, while incorporating different themes, such as feminism, relationships, culture, and social problem. Students will learn essential photography techniques, lighting setups, and post-processing skills using software like Adobe Photoshop (PS) and Lightroom. They will also study how to use the form of portrait photography to express their feelings and ideas and explore self-identity in order to develop the skill of using portrait photography to express thoughts and ideas.
Objectives:	After taking this course, students should be equipped with: Students will gain a deep and solid understanding of basic techniques and skills, including camera settings, lighting, and editing. Students will develop the ability to tell stories through their portraits and evoke emotions in the viewer.

Assessment:	Students will be assessed both formally and informally on assigned texts. Assessments may include presentations, group discussions, photography works, personal statement writing, and projects. Students can expect weekly graded assignments and in-class assessments. The instructor will offer frequent feedback regarding student work and performance. Students will be assessed based on the following four-point scale: 4 = excels; 3 = proficient; 2 = approaching; 1 = needs work; 0 = not
	submitted $20\%$ = Participation and Efforts $30\%$ = Communication $20\%$ = Practice $30\%$ = Idea

#### Queen of Sciences-A History of Mathematics

Course Type:	elective
Category:	slc
Instructor:	Liu Hanyu
Grade:	11, 12
Semester:	1
Pre-requisite:	Full-year math course in grade 10
Description:	This math history course uncovers the captivating story behind the evolution and achievements of mathematics throughout history.  Through a combination of lectures, interactive discussions, and presentations, this course aims to provide a holistic understanding of mathematics as a dynamic and ever-evolving discipline. The course will cover various periods and regions, highlighting key mathematical concepts, discoveries, and eminent mathematicians who left indelible marks on history. Topics may include ancient Egyptian and Babylonian mathematics, the contributions of ancient Greece and the rise of calculus. Students will develop critical thinking skills, enhance their problem-solving abilities, and cultivate a deeper appreciation for the beauty and elegance of mathematics.
Objectives:	After taking this course, students will be able to: gain a holistic understanding of mathematics as a dynamic and ever-evolving discipline understand the profound influence of mathematics on diverse ficlds such as science, technology, architecture, art, and philosophy have a broader perspective on the historical development of mathematics, recognizing the interplay between cultural, scientific, and mathematical progress
Assessment:	Students will be graded by participation, review questions, seminar and group presentation. Students will be assessed based on the following four-point scale: $4 = \text{excels}$ ; $3 = \text{proficient}$ ; $2 = \text{approaching}$ ; $1 = \text{needs}$ work; $0 = \text{not}$ submitted Assessments in the following areas will determine the overall course grade: $50\% = \text{Homework}$ ; $20\% = \text{Group}$ Project; $10\% = \text{In-class}$ Discussion; $20\% = \text{Class}$ Participation

# Bioart-Exploring and Breaking the Boundary of Art and Science

Course Type:	elective
Category:	slc
Instructor:	Du Lehan, Qian Shuo
Grade:	11, 12
Semester:	2
Pre-requisite:	None
Description:	This course is designed to break down the boundaries between traditional art and creation with an interdisciplinary approach to learning, exploring the fusion of biology, technology, and artistic expression, and spreading the word about the emerging field of material art. The course will help students understand the concept and ideas of bioart, learn about the biotechnology involved in bioart and understand how it is integrated with art through reading bioart-related books, watching the short documentary "BioArt - Art from the Laboratory" and conducting case studies of artworks.
Objectives:	By attending this course, students will be able to Understand the concept of object art Know the origins and development of bioart Understand the ideas conveyed by bioart Critically evaluate a work of biological art Analyze a work of biological art Know how bioart artists integrate thinking into their artwork Gain practical experience in the basic techniques of creating bioart work.
Assessment:	Students will be assessed both formally on assigned texts. Assessments may include class discussions, reading notes, artist statements, in-class sharing and feedback, and artistic works. The instructor will offer feedback regarding student work and performance. Students will be assessed based on the following four-point scale: $4 = \text{excels}$ ; $3 = \text{proficient}$ ; $2 = \text{approaching}$ ; $1 = \text{needs work}$ ; $0 = \text{not submitted The}$ overall course grade is composed of: $25\% = \text{Effort}$ and Participation $25\% = \text{Practice}$ and Application $25\% = \text{Idea}$ $25\% = \text{Presentation}$ and Feedback

# Management Psychology and Organizational Behavior (MPOB)

Course Type:	elective
Category:	slc
Instructor:	Zhu Jiaying
Grade:	11, 12
Semester:	1
Pre-requisite:	

Description:	Management Psychology and Organizational Behavior (MPOB) is a comprehensive course designed to provide students with a deep understanding of the fundamental principles that govern the behavior of individuals and groups within organizations. Throughout the course, students will examine the underlying psychological theories and explore how people act in organizations, why people act as they do, and what we can do to predict and manage their behavior. The course covers a wide range of topics, including personality, leadership, decision-making, and motivation. The course is mostly lecture-based but also includes some group discussions of carefully selected cases, group presentations and projects, etc.
Objectives:	Upon successful completion of this course, students will develop their ability to: Cultivate team leadership Coordinate interpersonal relationships Understand key personality traits Motivate others in the organizations Have good psychological qualities Analyze and solve problems in daily life and the future workplace
Assessment:	Students' final grades will consist of the following parts: $5\%$ = Attendance; $15\%$ = Class Participation; $20\%$ = Presentation; $30\%$ = Case Analysis Reports; $30\%$ = Individual Project;

# Art Therapy: Foundation and Formal Applications

Course Type:	elective
Category:	slc
Instructor:	Huang Siqi
Grade:	11, 12
Semester:	1
Pre-requisite:	AorA+inELA1/ELA2
Description:	Art Therapy: Foundation and Formal Applications introduces the connection between artforms and psychological treatments. Students will utilize presentation and free writing skills established in ELA 1 and ELA 2. Students will cultivate skills in poster presenting, exhibition preparation, artwork analysis, and disorder case studies. Ultimately, this course aims to expose students to several forms of art treatments and different effect of different therapies.
Objectives:	Students will be able to identify the definition of art therapy and understand the effect of these treatments. Students will be able to distinguish different treatments and the different artforms and also their effects. Students will be able to propose therapies for different patients with different symptoms and illness. Students will be able to learn the artists that propose their own art therapy and their life backgrounds. Students will be able to create an artwork that is able to express feelings and emotions. Students will be able to present the artwork and explain and analyze their work.

Assessment:	Students will be assessed both formally and informally on assigned texts.
	Assessments may include moodboard creation, presentations, artwork
	exhibitions, journaling, and projects. Students can expect weekly graded
	assignments and in-class assessments. The instructor will offer frequent
	feedback regarding student work and performance. Students will be
	assessed based on the following four-point scale: 4 = excels; 3 =
	proficient; 2 = approaching; 1 = needs work; 0 = not submitted
	Assessments in the following areas will determine the overall course
	grade: 20% = Mood boarding; 20% =Journals; 20% =Midterm project;
	20% =Final project; 20% = Responsibility

# **Economics Competition Club**

Course Type:	club
Category:	wcc
Instructor:	Wang Jiangyi
Grade:	10, 11, 12
Semester:	2
Pre-requisite:	None
Description:	This club course will help you prepare the following business competitions: NEC, SIC, and IEO. Economics is the study of how society provides for itself by making the most efficient use of scarce resources so that both private and social welfare may be improved. The subject, therefore covers the study of individuals, households, firms, government and international economic institutions as they attempt to make better use of scarce resources. Joining economics competition enables individuals to develop a better understanding of the economic issues which affect them and the world in which they live. It will also enable students to offer informed comments on economic matters. The knowledge gained from this course in Economics will be of lifelong value to the student. The influence of the subject on all areas of activity should stimulate the individual to continue reading and conducting research in Economics. It is recognized that persons doing this course may be drawn from different backgrounds and may possess different interests.

Objectives:	Promote understanding of the basic principles and concepts of economics which are accepted in large measure by economists while recognizing that the field is changing continuously. Develop an appreciation of the various methods used by economists in analyzing economic problems. Develop an understanding of the global economy and of the relationships between rich and poor nations with respect to interational trade and finance and the most important international financial institutions. Encourage students to apply economic principles, theories and tools to everyday economic problems, for example, inflation, unemployment, environmental degradation, sustainable development and exchange rate instability and to contribute meaningfully to any dialogue on these issues. Encourage students to apply economic theory to the critical issues.
Assessment:	30% Participation and Activity 20% Homework 50% Project

#### Ethics in Living

Course Type:	elective
Category:	wcc
Instructor:	Justin Brown
Grade:	11, 12
Semester:	2
Pre-requisite:	WCC
Description:	A life worth living is worth living well, but what does it mean to "live well"? It is a question that has been asked by the greatest minds throughout history the world over, but it can only be answered by each of us as individuals. We are all made to answer this question in some form with every decision we make every day. What will I eat for lunch? How will I travel to school today? How will I react to this situation? Being mindful of this allows us to live a more purposeful, fulfilling life. In this class, we will examine perspectives ranging from Plato to Rousseau, Lao Zi to Locke, in order to create a framework for each of us to build our personal ethos. Selected readings detailing different points of view on this subject followed by peer-led discussions will form the foundation of this course. From there, we will begin asking how to apply our beliefs to our everyday lives. Ultimately, students will be asked to provide a personal statement outlining their most fundamental belief and how it can be applied in their day-to-day lives. The goal is not to live by someone else's understanding of how we should live, but to understand how we live, why we live that way, and apply consistent action to our behavior according to what we discover about ourselves.

Objectives:	Evaluate the works of philosophers on the subject of ethics throughout history around the world Discuss the faults and strengths of a wide variety of approaches to the topic Analyze and describe possible solutions to complex theoretical problems with logical consistency Write a personal statement centered on ethics Develop a claim or thesis and supporting it in an essay Analyze the claims, evidence, and reasoning you find in sources Compare and contrasting disparate belief systems Corroborate, qualify, or modify an argument using diverse and alternative evidence in order to develop a complex argument Classify concepts
Assessment:	Classwork 40% Ouizzes 25% Classroom performance 20% Final Proiect 15%

## Cities and Modernity HL

Course Type:	elective
Category:	wcc
Instructor:	Leo Krapp
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC
Description:	The city has been a centerpiece of the experience of modernity and a subject of fascination among social scientists and artists for more than 200 years. From Edinburgh and Paris to New York and Los Angeles, and now to Hong Kong, Tokyo, and Shanghai, the story of the city is the story of capitalism, of modernity, and of the connection between social structure and subjective experience. By tracing historically what makes the city so socially important and aesthetically captivating, this course will provide an introduction to the methods and perspectives of the social sciences. We will begin by using the city as a lens into some core theoretical and historical concerns of the social sciences in the 20th century. We will move on to media depictions of cities around the globe before concluding with a set of case studies on contemporary Asian cities. These three topics will coalesce into our own set of inquiries into what role the city plays in our own histories, lives, and imaginations.
Objectives:	Understand different ways of studying and thinking about the city as a historical entity, drawing on anthropology, geography, and urban studies Analyze cultural expression and media by taking into consideration history and social structure Think critically about the connection between experience, materiality, and the political economy Think globally about modernity, capitalism, and urbanization Design and conduct their own qualitative research projects while critically reflecting on the methodology of ethnography
Assessment:	

# Art History II HL

Course Type:	elective
Category:	wcc
Instructor:	Conor Dunn
Grade:	11, 12
Semester:	2
Pre-requisite:	WCC, Art History I
Description:	This course provides help for taking AP Art History exams. This Art History course welcomes students into the global art world to engage with its forms and content as they research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the students develop in-depth, holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, developing understanding of individual works and interconnections across history and cultures.
Objectives:	Students will. Analyze visual elements of works of art Analyze contextual elements of a work of art, and connect contextual and visual elements of a work of art. Compare two or more works of art. Analyze the relationship between a work of art and a related artistic tradition, style, and/or practice Analyze visual clements of a work of art beyond the image set (the 250 works picked) Attribute works of art. Analyze art historical interpretations. Develop and support art historical arguments.
Assessment:	Class performance 20 Retrieval quizzes 20 Create a Museum Project 30 Contributions of an Artist Project 30

#### Behavioral Medicine

Course Type:	elective
Category:	wcc
Instructor:	Li Mingzhen
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC, ELA1

Description:	The course provides help for taking AP Psychology exam. The goal of this course is to acquaint you with the field of health psychology through lectures, readings, open discussions, and assignments. This is an introductory health psychology course. You will receive a taste of different areas within health psychology. Topics such as stress, emotion, behavior may relate to physical health, and in turn, how these factors may be impacted by disease and physical disability will be covered. In the end of this semester, you will know how to take better care of yourself and people you truly care about.
Objectives:	Students will This course refers to the understanding of psychological influences on how people stay healthy, how they become iil and how they respond when they get ill. This course is concerned with a aspect ofhealth and illness across life-span. This is the study of psychological & behavioral process in health, illness and health care, concered with the understanding how psychological, behavioral and cultural factors contribute to physical health and illness.
Assessment:	Attendance & Participation: 42% Integration Essay 1: 10% Integration Essay 2: 15% Group Presentation: 25% Exam (open book): 8%

## The Origins and Development of Social Systems

Course Type:	elective
Category:	wcc
Instructor:	Brodi Andrew Craddock
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC
Description:	This course aims to introduce students to the fundamental concepts of political order and socio-economic systems, and explore the relationship between their respective origins and development. The content is global in scope and interdisciplinary in methodology, though with a focus on the comparative-historical method of qualitative analysis. Students will be given the chance to develop their interests and skills as scholars and social scientists, with the course designed to accommodate a wide range of potential areas of specialization. Some topics include the transition from kinship-based societies to impersonal bureaucracies, how religion and family impacts political development, how material conditions influence statecraft, and theories of the emergence of a capitalist word economy.
Objectives:	Students will Understand key concepts in the history of social development Explain why different societies developed distinct institutions Analyse the causes of the emergence of a world economic system Evaluate various theories on the origins of capitalism
Assessment:	Participation - 15% Seminars - 25% Written assignments -25% Final research project -35%

#### **Advanced World Cultures and Civilizations I**

Course Type:	elective
Category:	wcc
Instructor:	Conor Dunn
Grade:	11, 12
Semester:	1
Pre-requisite:	WCC
Description:	This course provides help for taking AP World History exam. Students in this course must learn to view history thematically. This course is organized around overarching themes that serve as unifying threads throughout the course, helping students to relate what is particular about each time period or society to a "big picture" of history. The themes also provide a way to organize comparisons and analyze change and continuity over time. Consequently, virtually all study of history in this class will be tied back to these themes.
Objectives:	Students will Identify and explain a historical concept, development or process Analyze sourcing and situation of primary and secondary sources Analyze arguments in primary and secondary sources Analyze the context of historical events, developments or processes Using historical reasoning processes, analyze patterns and connections between and among historical developments and processers Develop an argument Examine the diversity of cultures throughout the world which together establish the beauty and horror of human development Attempt to see the events of the past through the eyes of those who created, experienced and lived them.
Assessment:	Class performance 10 Unit 0 project / presentation 20 Retrieval quizzes 10 Semester 1 -LEO 20 Semester 1 -DBO 20 Columbia Exchange Research Project 20

#### Fallout of Empire

Course Type:	elective
Category:	wcc
Instructor:	Justin Brown
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC

Description:	Over five hundred years ago, European ships set sail to plant the seeds of empire around the globe. In the subsequent centuries, their languages, religions, cultures, and political systems took root and spread to every continent through violence, manipulation, and oppression. In the post-war era, decolonization efforts have given rise to independent nations in the wake of these empires. But what sort of lasting fallout remains from centuries of colonialism? How can we better understand the modern world by understanding our recent past? This class will take a more scholarly approach to complex global issues that have arisen as a result of colonialism and imperialism. By examining both primary sources and modern academic literature, we seek to gain a more complete perspective on the modern globalized world, how we got here, and what our predecessors thought and experienced.
Objectives:	Examine contemporary perceptions of colonialism and imperialism through selected readings from scholarly journals, articles, and books Analyze primary sources for a better understanding of first-person perspectives on historical events Gain kno wledge of the modern world through the lens of history Competently discuss world issues and historical transformations Develop a better understanding of world cultures and people through centuries of cultural exchanges
Assessment:	Classwork 40% Ouizzes 25% Classroom performance 20% Final Proiect 15%

#### **History of Sports**

Course Type:	elective
Category:	wcc
Instructor:	Conor Dunn
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC
Description:	Why do thousands of fans go each week to watch their favorite sports teams play? Why do millions of others spend time watching the same teams on television? Why do people join fantasy leagues and place bets on pro sports? Since ancient times, sporting events have been an integral part of society. Sports, sporting events, and fans are inescapable, and they play an interesting role in the development of our society. From our earliest days, sports have pulled communities together, as well as created bitter rivalries between cities. This course will examine the history of sports, their very foundations, as well as examine the role sports and sports figures have played in shaping and changing society.

Objectives:	Students will Research the history and development of various sports through time Examine both the Ancient and Modern Olympic games and their impact on society Analyze the way in which sports reflect established class boundaries Examine the culture which has built itself around modern sports as well as the issues that have developed within and outside sports along with this growth
Assessment:	Class performance 10 History of a Sport Project 20 Retrieval quizzes 10 Sports and City Relationship 10 Current events 20 Sports Debate 20 I.O.C. Simulation 10

#### Tabletop Roleplaying Games Club (TTRPG Club)

Course Type:	club
Category:	wcc
Instructor:	Justin Brown
Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	None
Description:	Grade 10 (eligible for semester 2 only) Tabletop roleplaying games such and Dungeons & Dragons have fueled the imaginations of writers and actors, entrpeneurs and athletes, young and old for decades. Once limited to a small but enthusiastic fanbase, these games have made their way to the mainstream via books, movies, television, and video games. More than just a fun diversion, these games allow players to expand their creativity, dive into moral dilemmas, exercise their problem solving and critical thinking skills, and socialize constructively in a form of collaborative storytelling generated spontaneously through their characters actions.
Objectives:	Learn the basics of how to play classic tabletop RPGs such as Dungeons & Dragons Collaborate to create a world in which player-made characters will operate, including social, political, and cultural structures, the physics and logic behind game mechanics, and plot elements. Utilize reading, writing, speaking, listening, critical thinking, problem solving, and mathematical skills to prepare for and run through a series of sessions Write a reflection on the process of decision-making, collaboration, and creation
Assessment:	This is a Pass/Fail course Class Performance 40% Written work (character backgrounds, Worldbuilding, etc) 30% Character Proiect 10% World Project 10%

#### Psychology of Relationship and Happiness

Course Type:	elective
Category:	wcc

Instructor:	Li Mingzhen
Grade:	12
Semester:	1, 2
Pre-requisite:	ELA2, any psychology courses experience is preferred
Description:	This course continues the psychology journey, as you delve into the disciplines of emotional process and relationship. This is a discussion-based course. Seminars are a cornerstone of this course. The point of them is to give you the opportunity to develop your ability to integrate different academic disciplines; they also serve as the primary venue for expressing and discussing ideas with your peers. As you participate in the Seminars, I encourage you to work on honing the skills and confidence to effectively communicate your ideas. Together, we will consider issues that arouse in the courses, discuss the content, and prepare for the various seminar assignments. Throughout, I ask you to focus on the following main question: How do the interactions between disciplines open up new ways of understanding the world around you?
Objectives:	Students will. This course prepares students with many theories and hands-on practice of emotional expression and emotional intelligence competencies. This includes building and improving the most efficient way to deal with various kinds of relationships (friendship, romantic relationship, parent-children relationship, etc.) Student will demonstrate skill in critical view and evaluation of the current corpus of knowledge available on the problem of interest.
Assessment:	Grading Criteria: Attendance & Participation: 42% Integration Essay 1: 10% Integration Essay 2: 15% Group Presentation: 25% Exam (open book): 8%

#### Model United Nations Conference Preparation

Course Type:	club
Category:	wcc
Instructor:	Werner Kiel
Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	WCC; debating skills and affinity with the United Nations and topics related to international relations is a plus

Description:	Grade 10 (eligible for semester 2 only), Model UN is a class that provides an academic learning experience through the simulation of the structures, processes, and issues of the member nations of the United Nations Organization. The class offers students a unique opportunity to learn about international relations while role playing United Nations delegates. Our goal is to participate in a Model United Nations Conference in China. The Model UN course is designed to acquaint students with the operations of the United Nations through the study of political positions of member nations. Additionally, students should achieve a level of understanding in the use of simulation activities as a means for teaching and learning about the political perspectives of different nationalities on contemporary world issues.
Objectives:	By joining the club course, students are expected to: Participate in a Model United Nations Conference; Define the structures and general procedures of the United Nations; Understand and competently use the rules of procedure, diplomatic protocol, and negotiating techniques common to UN delegates; Demonstrate knowledge of important historical issues affecting the UN and evaluate the organization's effectiveness. Analyze issues currently before the United Nations from the selected member country's perspective, and articulate the foreign policy of the selected country.
Assessment:	Assessments will be based on in-class projects that are part of the preparation process for the MUN Conference. We will aim to work on these projects as much as possible during club class time in order to avoid extra workload outside the classroom. The focus will be on the learning process and engagement in these projects. Writing (50%):country profile, policy statements, draft resolution and reflection paper In-class Speeches and Mock Sessions (30%):in order to prepare for the conference, each student is required to give at least one general and one substantive debate speech in class and participate all mock sessions that will be held before the conference. Quizzes (20%): As early preparation for the MUN proceedings and country positions is essential to your success at the conference, I may administer quizzes throughout the semester. These quizzes will test your knowledge of your assigned countries, rules of procedure, the process of negotiating, and committee structures and roles. Passing the quizzes is necessary to pass the course successfully.

# Introduction to Psychology

Course Type:	elective
Category:	wcc
Instructor:	Li Mingzhen
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC, ELA1

Description:	The course provides help for taking AP Psychology exam. The Introduction to Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental process of human beings and other animals. As relevant to each area outlined in following content, the course provides instruction in empirically supported psychological facts, research findings, terminology, associated phenomena, major figures, perspectives, and psychological experiments. The course also teaches ethics and research methods used in psychological science and practice.
Objectives:	Students will To identify theoretical underpinnings of the major areas of psychology, including history, learning, personality, social and environmental influences, and physiology ofbehavior. To explain different models of human behavior based on science versus intuition or general ways of knowing. To recognize ways of pursuing questions in Psychology via discussion of theory and empirical research. To describe connections bet ween knowledge gained in Psychology to everyday life.
Assessment:	15% Presentation 40% Homework & Quiz 20% Proiect 12.5% Exam 1 12.5% Exam 2 Alternative Exam 3 (can replace cither Exam 1 or Exam 2)

## Global Political Economy and Development HL

Course Type:	elective
Category:	wcc
Instructor:	Werner Kiel
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC
Description:	Why are the poorest countries failing and what can be done about it? This course starts from the analytical perspectives within the discipline of international political economy (IPE), but it will also consider alternative approaches within the broader field of development studies. Through a wide range of empirical case studies, drawn in particular from the African and Asian contexts, students will be challenged to critically contrast, evaluate, and connect the various theoretical approaches to the real-world problems of the 'bottom billion'. As such, the course provides insight into the political, economic, and social processes behind international development and helps students to identify, understand, and evaluate them in a wide range of cases.

Objectives:	By learning the course, students wil: Be able to understand, contrast, and apply the main perspectives within International Political Economy; Be able to reflect on theories of and approaches to international development and apply and evaluate them empirically through case studies; Analyse a range of empirical case studies of development, particularly in the African and Asian contexts; Enhance skills of locating and selecting primary and secondary sources; Enhance presenting. debating. and essay writing skills.
Assessment:	The following assessments will take place during the course: 1. Read and write: weekly 300-word blog entries (30% 2. Speaking: student presentation and leading the discussion (20%) 3. Speaking: overall participation in class discussions and Socratic seminars (10% 4. Creative projects (40%) Examples of projects (you are also more than welcome to propose your own project): Make a short video (10-15 minutes') on a specific topic or case in international development; Make a podcast (individually or in pairs) in which you critically discuss a case study; Design a development strategy for a specific country; An academic essay in which deals with a topic of choice, within the context of the course themes of IPE and development, and will be based on/make meaningful use of the literature prescribed for the course. The topic will need to be approved by the course convenor.

## Human Geography II

Course Type:	elective
Category:	wcc
Instructor:	Leo Krapp
Grade:	11, 12
Semester:	2
Pre-requisite:	WCC, Human Geography I
Description:	This course provides help for taking AP Human Geography exam. It will explore the relationship between the places people live and the things they do there. Geography is a living entity, breathing down the shoulders of human history. This class will provide an introduction to the critical perspectives necessary to evaluate this influence. While the course will remain rooted in historical perspectives, there will also be a serious emphasis on contemporary events and their geographical roots. This class will also go considerably deeper than the AP curriculum allows to address some of the core conceptual and methodological concerns of geography, sociology, and urban studies. These concepts and questions will provide starting points to dig into culture, politics, landscape, and social organization. We will then formulate our own set of geographical inquiries into contemporary social life. These will be based around student interest, but could include digital media, consumption, climate change, immigration, art, education, or post-industrial life. Final research projects will take these themes to the next level.

Objectives:	Think geographically about scale, time, and space Think historically about the evolution of urban, industrial, and agricultural landscapes Form and defend arguments about geographic issues and relate them to current discussions in the media and the academy Critically evaluate current events based on geographic factors Conduct a research project on a geographic issue with contemporary ramifications
Assessment:	15% - Participation in weekly seminar-style discussions about readings. Students will also sign up for one week to lead discussions at the beginning of the semester. 15% - Weekly post-discussion short writing assignments, graded based on completion 40% - One presentation after Unit 10, to begin developing a personal research project. Group or Individual both acceptable. Students will then respond to questions and lead a short discussion. 30% - A final research project related to a contemporary issue of concern. I encourage a wide range of ideas. Media- based projects, research papers, etc. all acceptable. Note: In addition to responding to readings and videos etc., the class will also follow current events across the globe. I will bring in many news stories from regions of the world far afield, but I expect students to do the same for places closer to home.

#### Advanced World Cultures and Civilizations II

Course Type:	elective
Category:	wcc
Instructor:	Conor Dunn
Grade:	11, 12
Semester:	2
Pre-requisite:	WCC, Advanced World Cultures and Civilizations I
Description:	This course provides help for taking AP World History exam. Students in this course must learn to view history thematically. This course is organized around overarching themes that serve as unifying threads throughout the course, helping students to relate what is particular about each time period or society to a "big picture" of history. The themes also provide a way to organize comparisons and analyze change and continuity over time. Consequently, virtually all study of history in this class will be tied back to these themes.
Objectives:	Students will Identify and explain a historical concept, development or process Analyze sourcing and situation of primary and secondary sources Analyze arguments in primary and secondary sources Analyze the context of historical events, developments or processes Using historical reasoning processes, analyze patterns and connections between and among historical developments and processers Develop an argument Examine the diversity of cultures throughout the world which together establish the beauty and horror of human development Attempt to see the events of the past through the eyes of those who created, experienced and lived them.

Assessment:	Class pertormance 10 Retrieval quizzes 10 Semester 2 -LEQ 20 Semester 2 - DBQ 20 Genocide Proiect 20 End of Year Proiect 20

#### Foodie Club

Course Type:	club
Category:	wcc
Instructor:	Leo Krapp
Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	None
Description:	Grade 10 (eligible for semester 2 only), Calling all food lovers! This club will be all about the good stuff that we spend so much time and energy thinking about, traveling for, investing in, and arguing over. We will take the time to explore food from a variety of different angles, and there will be multiple opportunities for students to guide the topics and activities of this club. The basic framework will be structured around three themes: Food Writing, Food Media, and Food in Beijing. My hope is that this club can provide the opportunity for students to explore any and all of their interests in food, whether these are strictly epicurean or related to career aspirations. We will read about famous restaurants from the around the world, follow some notable food writers and critics, watch some documentaries, discuss food culture across China and within Beijing, and of course eat. Menus will be curated, restaurants will be reviewed, 特产will be shared, and takeout will be ordered. Tea and coffee afficionados rejoice, beverages are certainly not off the table.
Objectives:	Students will be more knowledgeable about the culinary scene around the world Students will be comfortable reading restaurant reviews and food writing Students will think about food as a prop in film and literature Students will have the opportunity to think about food-adjacent careers Students will be able to eat food and talk about eating food and enjoy eating food with others
Assessment:	40% - Discussions, group readings, film and documentary viewings, student-led presentations, potlucks, takeout, in- class food reviews, longform restaurant criticism, menu curations, short research projects on ethnic or international cuisine in Beijing 25% - Presentation on topic of their interest, including but not limited to one restaurant in Beijing or around the world, one movie, one type of cuisine, one dish, or one ingredient 25% - Students will also produce one creative project of their own design, including but not limited to food writing or criticism, multimedia projects, social media pages, short videos, menus, vlogs, or custom dishes 10% - Reflection

## Human Geography I

Course Type:	elective
Category:	wcc
Instructor:	Leo Krapp
Grade:	11, 12
Semester:	1
Pre-requisite:	WCC
Description:	This course provides help for taking AP Human Geography exam. It will explore the relationship between the places people live and the things they do there. Geography is a living entity, breathing down the shoulders of human history. This class will provide an introduction to the critical perspectives necessary to evaluate this influence. While the course will remain rooted in historical perspectives, there will also be a serious emphasis on contemporary events and their geographical roots. This class will also go considerably deeper than the AP curriculum allows to address some of the core conceptual and methodological concerns of geography, sociology, and urban studies. These concepts and questions will provide starting points to dig into culture, politics, landscape, and social organization. We will then formulate our own set of geographical inquiries into contemporary social life. These will be based around student interest, but could include digital media, consumption, climate change, immigration, art, education, or post-industrial life. Final research projects will take these themes to the next level.
Objectives:	Think geographically about scale, time, and space Think historically about the evolution of urban, industrial, and agricultural landscapes Form and defend arguments about geographic issues and relate them to current discussions in the media and the academy Critically evaluate current events based on geographic factors Conduct a research project on a geographic issue with contemporary ramifications
Assessment:	15% - Participation in weekly seminar-style discussions about readings. Students will also sign up for one week to lead discussions at the beginning of the semester. 15% - Weekly post-discussion short writing assignments, graded based on completion 40% - One presentation after Unit 5, to begin developing a personal research project. Group or Individual both acceptable. Students will then respond to questions and lead a short discussion. 30% - A final research project related to a contemporary issue of concern. I encourage a wide range of ideas. Media- based projects, research papers, etc. all acceptable. Note: In addition to responding to readings and videos etc., the class will also follow current events across the globe. I will bring in many news stories from regions of the world far afield, but I expect students to do the same for places closer to home.

#### Psychological Themes and Theories in Modern Film

Course Type:	club
Category:	wcc

Instructor:	Li Mingzhen
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC1, ELA1
Description:	We are going to explore content areas in depth, as opposed to giving superficial coverage to many areas. If time becomes a limiting factor, changes in the schedule will reflect that bias. Thus, topic areas and readings may be dropped or added, depending upon time constraints. I believe education is a cooperative enterprise in which you have an active role. Therefore, I want to encourage active participation on your part during the course. Please don't hesitate to respond, question, and challenge. To facilitate this process, I will occasionally ask you to take part in experiential exercises or discussions. I hope these experiences will allow you to apply the material we cover to your own lives. During our scheduled class meetings you can expect to explore great films and relate them to psychological theories. I encourage class participation and am interested in your perspectives.
Objectives:	Students will Advanced analysis and critical investigation of psychological themes in modern cinema including depiction of lifespan development, personality, memory, learning processes, personality disorders, trauma, autism, and clinical practice. I For Your information: You will enjoy great films You will develop an understanding of basic psychological principles across the major fields of psychology You will be able to define and apply key psychological concepts, terms, and theories. You will develop critical thinking and analysis skills by evaluating accuracies of portrayals of psychological concepts in film. You will develop an awareness of the impact of popular film on society
Assessment:	Discussions and attendance 40% Presentation 20% Papers 20% Individual project 20%

# A History of the Present Analysing Contemporary Discourse

Course Type:	elective
Category:	wcc
Instructor:	Brodi Andrew Craddock
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	WCC

Description:	This course aims to introduce students to how competing narratives function in Western political discourse and explain how these narratives emerged. Students will explore the role played by various institutions (media, culture, universities, think-tanks, etc.) in constructing narratives, analyze how they operate in relation to political and social life, and engage in ideological critique to reveal the systems of thought that underpin them. In a context in which the old binaries of left and right wing are losing valence, students will learn how to excavate the complex discourses surrounding globalization, populism, identity and culture, and understand the role played by narratives in community formation.
Objectives:	Students will Understand the ideological history of contemporary discourse Explain how official and popular narratives are formed Analyze the socio-political impact of competing narratives Formulate critical readings of cultural texts (films, television, etc.)
Assessment:	Participation - 15% Seminars - 25% Written assignments -25% Final research project -35%

# Art History I

Course Type:	elective
Category:	wcc
Instructor:	Conor Dunn
Grade:	11, 12
Semester:	1
Pre-requisite:	WCC
Description:	This course provides help for taking AP Art History exam. This Art History course welcomes students into the global art world to engage with its forms and content as they research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the students develop in-depth, holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, developing understanding of individual works and interconnections across history and cultures.
Objectives:	Students will. Analyze visual elements of works of art Analyze contextual elements of a work of art, and connect contextual and visual elements of a work of art. Compare two or more works of art. Analyze the relationship between a work of art and a related artistic tradition, style, and/or practice Analyze visual elements of a work of art beyond the image set (the 250 works picked) Attribute works of art. Analyze art historical interpretations. Develop and support art historical arguments.
Assessment:	Grading: Points Class performance 20 Retrieval quizzes 20 Diorama Proiect 30 Art and Society Research 10 Recreate a Work of Art 30

#### Higher Level History Exam Preparation

Course Type:	club
Category:	wcc
Instructor:	Conor Dunn
Grade:	11, 12
Semester:	1, 2
Pre-requisite:	None
Description:	This club helps students prepare for the AP History exams (World History, European History, American History). While the content of these exams is catered to the specific region covered in the course title, the format of all three exams is the same. We will review that format so students are prepared to take any of these exams. We will also review each type of question and be provided examples so that we may practice before taking the exam (if we choose to). Interpreting primary/secondary sources, as well as being familiar with the specific format of each essay type is necessary before testing to reach your scoring potential. This club will not focus on content, but that may come up at times in order for us to answer appropriately.
Objectives:	Students will Review the format of the A.P. history exams. Examine primary and secondary sources in order to answer multiple choice questions Implement testing strategies to narrow down possible answers to unknown questions Review the format of the Long Essay Question and the Document Based Question Work incrementally to fulfill all needs of the A.P. rubric on each type of essay
Assessment:	Participation 20 Multiple choice practice 20 Short Answer Practice 20 Long Essay Practice 20 Document Based Question 20

#### Microeconomics II

Course Type:	elective
Category:	
Instructor:	Jiang Wanyu
Grade:	11, 12
Semester:	2
Pre-requisite:	Passing grade in S1 math, ELA and WCC

Description:	This course provides help for taking AP Microeconomics exam. Microeconomics is a two-semester long regular course. This course in the spring semester is the second part of the full course. Students must pass Microeconomics 1 to take this course. A complete review of stuff in both semesters will be included. Activities, discussion, and presentation about economics related researches real-world events will also be included. Microeconomics focuses on how economic decisions are made by individuals, firms, and organizational structures. Supply and demand analysis is developed to demonstrate how market prices are determined, how those prices determine an economy's allocation of goods and services, how factors of production are allocated in the production process, and how goods and services are distributed throughout the economy. We evaluate the strengths and weaknesses of economic decision makers by using the concepts of efficiency and equity. We also analyze and evaluate the effects of government intervention. Emphasis is placed on reasoned logical argument so that we can use economics as a method and model for decision making. Students will study how various economic agents make their choices and decisions in a market environment, and the implications of those choices and decisions for the allocation of productive resources.
Objectives:	Students will study how various economic agents make their choices and decisions in a market environment, and the implications of those choices and decisions for the allocation of productive resources. After successful completion of this course students will be able to demonstrate command ofbasic microeconomic concepts and graphical models, and apply them to new situations. In specific, the students should be able to: Understand basic economic concepts Use and interpret the lan guage of business and basic measurements of economics performance. Demonstrate economic questioning and analysis skills. Interpret a variety of graphical models and paraphrase economic concepts. Generate, interpret, label, and analyze graphs, charts, and data to describe and explain economic concepts Analyze the development of modern economic theory. Apply economic skills and concept knowledge to higher college-level
Assessment:	Participation: 10% Discussion: 15% Short Paper: 15% Presentation: 10% Homework: 30% (once per week, taking average) Tests: 20% (2 Chapter Tests, taking average)

# Chemistry Contest Club II: Macroscopic Performances of Chemical Reactions

Course Type:	club
Category:	
Instructor:	Li Junzi
Grade:	10, 11, 12
Semester:	1, 2
Pre-requisite:	General Principles of Chemical Science I

Description:	Attention: Grade 10 (eligible for semester 2 only) Students who take General Principles of Chemical Science II HL and Physical Chemistry II HL are highly recommended to take this club course concurrently. The course can provide critical support for students to prepare for AP chemistry exam and multiple international chemistry contests. General chemistry topics will be taught including lab skills and designing experiments. The first term will mainly cover the knowledge of microstructure and the second term will focus on macroscopic performances of chemical reactions. The topics are interconnected with each other and thus students are required to acquire and apply the knowledge to explain and to predict some chemical phenomenon.
Objectives:	Upon completion of the club course, students are expected to be better at: Building the network of chemistry with all topics involved and able to apply it to solve problems. Being self-critical and autonomous. Formulating and analyzing complex problems. Designing experiments with scientific methodology. Presenting logically a series of chemistry phenomenon with understanding of their underlying mechanisms.
Assessment:	The course will be graded (P/F) based on the following items: Homework 20% Lab 20% Presentation 5% Test 35% Proiect 20%