Algebra I

Instructor:林子平 老师

林子平 老师就学于浙大求是小学，浙大附中，曾获杭州第一届数学竞赛一等奖。先后获浙江大学学士学位、上海交大硕士学位。在留学美国时期，曾就读于加州大学，U.C.Davis, 统计系,Ph.D.Program，后获休斯敦大学工程硕士学位。1990起从事计算机软件开发工作，并热心投入初高中数学的教学辅导。

Pre-requisites: Pre-Algebra
Students: 6-8 grade

Description

Algebra I makes up the Heart of Algebra in SAT Math. This course helps students to explore the tools of Algebra. Students will learn to comprehend fundamental Algebra Concepts such as Factoring Technique, Completing the Squares, Quadratic Equations, etc. and master the ability to solving problems using Logical Reasoning and Algebraic Skills.

Contents

- Solving Linear Equations
- Functions and Patterns
- Analyzing Linear Equations
- Solving Systems of Linear Equations
- Solving Linear Inequalities
- Polynomials
- Factoring
- Quadratic an Exponential Functions
- Radical Expressions and Triangles
- Rational Expressions and Equations

Prepare for

CBE (Credit By Exam),Geometry, and Algebra II, SAT Math

Geometry

Instructor：林子平 老师

Under the influence from his father, who was a math professor of ZheJiang Univ., and many best educators from ZheJiang University and his high school (ZheJiang Univ. Affiliated High School), Mr. Lin had shown great intertest in Math and won top award for the 1st Hangzhou Math Competition. Mr. Lin graduated from ZheJiang Univ. with a Bachelor degree of Arts and Shanghai JiaoTong Univ. with a Master degree of Science. He studied at the Univ. of California, Davis, Dept. of Statistics, in Ph.D. program. Mr. Lin graduated from the Univ. of Houston with a Master degree of Engineering. He had been a software developer for many years, working for Halliburton, Exxon, and BMC Software. Mr. Lin has been enjoying tutoring students in various areas ranging from Pre-Algebra, Algebra I, Geometry, Algebra II, and SAT to Calculus.

Description

Pre-requisites: Algebra I
Students: 7-9 Grade

Geometry Concepts make up a significant part of SAT Math. This course helps students to recognize and work with geometric concepts. They will build on the ideas of inductive and deductive reasoning, postulates and theorems of Euclidean geometry. Students will use geometry software to aid visualizations, spatial reasoning, and geometric modeling to solve problems.

Contents

- Reasoning and Proof
- Parallel and Perpendicular Lines
- Congruent Triangles
- Relationships in Triangles
- Quadrilaterals
- Proportions and Similarity
- Right Triangles and Trigonometry
- Transformations
- Circles

Prepare for

CBE (Credit By Exam), Algebra II, SAT Math

Algebra II

Instructor：林子平 老师

Pre-requisites: Algebra I, Geometry
Students: 8th - 10th grade

Description

Algebra II and Algebra I makeup Passport to Advanced Math in SAT Math. This course will progressively and systematically teach student some of the more difficult and advanced concepts in Algebra. The class will use algebra software to help student visualizing some of the concepts and building solid foundation for Pre-Calculus and eventually Calculus.

Contents

- Equations and Inequalities
- Linear Relations and Functions
- Systems of Equations and Inequalities
- Matrices
- Quadratic Functions and Inequalities
- Polynomial Functions
- Radical Equations and Inequalities
- Rational Expressions and Equations
- Exponential and Logarithmic Relations
- Conic Sections

Prepare for

CBE (Credit By Exam), Pre-Calculus, SAT Math

Pre-Calculus

Instructor：林子平 老师

Pre-requisites	10^{th}-11^{th} grade Algebra II, Geometry
Prepare for	Calculus, SAT Subject Test in Mathematics Level 2

Description

Calculus developed by Isaac Newton and others has wide applications in Physics and other natural sciences, Engineering, and Economics. HuaXia Pre-Calculus is aimed to help student prepared for the All-Important Calculus. This course will progressively and systematically teach student some of the advanced concepts in Pre-Calculus and introduce Limits, Derivatives and Antiderivatives, and the Fundamental Theorem of Calculus.

Contents

- Linear Equations & Inequalities and Piecewise Functions
- Systems of Linear Equations & Inequalities and Matrices
- Families of Graphs – Symmetry, Continuity, and End Behavior
- Polynomial, Rational, and Radical Functions & Inequalities
- The Trigonometric and Periodic Functions
- Trigonometric Identities and Equations
- Vectors and Parametric Equations
- Polar Coordinates and Complex Numbers
- Introduction to Analytic Geometry and Conics
- Exponential and Logarithmic Relations
- Arithmetic, Geometry, and Special Sequences & Series
- Combinatorics, Statistics and Probability
- Limits, Derivatives, and Antiderivative, and the Fundamental Theorem of Calculus

Pre-Algebra

Dr. Tang has background in Physics, Biophysics. He obtained his Ph. D in engineering from UT Austin.

Instructor：唐军平 博士

Target Students	6th grade – 7th grade
Pre-requisites	Have knowledge of concept and operations (addition, subtraction, multiplication, and division) of rational numbers (fraction, decimals, and percents). Have taken the 6th grade math.

Description

This course is designed to improve and enhance students' ability of calculation involving power, radicals, exponents, and logarithm, and lay a solid foundation for the future study in algebra.

Course Syllabus

The following concepts and skills will be studied in this course:
Power: relationship between multiplication and power calculation, calculation of power form and governing rules, in case of same bases and different bases, and base converting. Concepts of zero power and negative power will be also introduced.
Radicals: introduction of root calculation and the concept of radicals; the useful skill of rationalizing denominator will be emphasized.
Exponents: introducing concept of exponent based power and radicals. Advanced skills for evaluating and simplifying expressions containing exponents will be introduced.
Logarithm: concept of logarithm, its relation with power and root will be clarified. Rules that governing log calculation will be explained. Common logarithm and natural logarithm will be introduced.

Middle School Math Competition Class

ABOUT THE CLASS

Course mission: Middle School Math Competition Class provides engaging math programs to middle school students of all ability levels to build confidence and improve attitudes about math and problem solving.

ABOUT THE TEACHER

Mr. Baohong Wang 汪宝宏老师

Wang has eight years of coaching experience in MATHCOUNTS and TMSCA/UIL. As a head coach of MATHCOUNTS, he led the Willow Wood Junior High School math team to participate in MATHCOUNTS State Competition three times. In the year 2019, the school team was honored the sixth-placespot in the state competition. Now Mr. Wang continues to teach Math in HuaXia Chinese School for the third year with his coaching experience.

MATHCOUNT

MATHCOUNTS is a national mathematics competition that builds problem solving skills. The students will be building their knowledge of Algebra, Geometry, and other subjects. Learning MATHCOUNTS will help apply the knowledge while developing problem solving skills.

TMSCA and UIL

TMSCA and **UIL** are similar as they cover many areas of middle school math. This includes Algebra, Geometry, Probability, and also number skills. The students will become faster at answering problems and find success in school competitions when they learn and practice.

Middle School Math Competition Class

Taught by
Mr. Baohong Wang
汪宝宏 老师

Course Syllabus

In this class, we will learn, review and practice the following topics

1. Algebra
- Linear Equations
- System Equations
- Quadratics
- Statistics

2. Counting
- Venn Diagram
- Combinations and Permutations
- Pascal Triangle

3. Probability
- Probability Basics

4. Number Theory
- Factors

Different Bases

5. Geometry
- Geometry Basics
- Circles
- Pythagorean Theorem
- Area
- Three-Dimensional Geometry
- Similarity

6. Trigonometry
- Trigonometry Basics

7. Students will practice the following real contest problems
- MATHCOUNTS/MATHLEAGUE
- UIL/TMSCA Math
- AMC 8

Middle School Math Competition Basics

Instructor：俞新天

Xintian Yu, a graduate from top Chinese university and a Ph.D. holder from top U.S. university, has strong scientific computing background and work experience in both academia and industry. He has coaching experience in various mathematical competitions including Mathcounts, UIL, AMC8/10, TMSCA, and Mathleague. He also had college teaching experience in the U.S.

Students	6^{th} – 8^{th} grade
Pre-requisites	Pre-algebra
Prepare for	Mathleague, Mathcounts

Contents

Fall semester:

- Algebra
- Counting
- Probability I

Spring semester:

- Probability II
- Geometry
- Number theory

Course Description

This course is based on the fun and enlightening Mathleague and Mathcounts (School level) programs. It is designed to get inexperienced middle school students started on math competition. The questions presented in the course are more challenging than those students would encounter in their school study. The students will learn mathematical knowledge and problem-solving skills that are usually not taught in the school. One year of middle school study or equivalent math knowledge is recommended to get most out of this course.

Middle School Math Competition Advanced - AMC 8

Instructor：俞新天

Students	8^{th} – 10^{th} grade
Pre-requisites	Algebra & Geometry
Prepare for	Mathcounts, AMC 8/10

Description

This course is for students who have finished the Middle School Math Competition Basics course or for students at similar level. It is designed to prepare experienced math competition students for State and National level Mathcounts or AMC 8/10, two of the most premier US math competitions. More advanced topics will be discussed in the class and harder Mathcounts or AMC 8/10 problems will be presented to the students to solve. The students will learn advanced problem-solving skills and build positive attitudes towards analytical thinking.

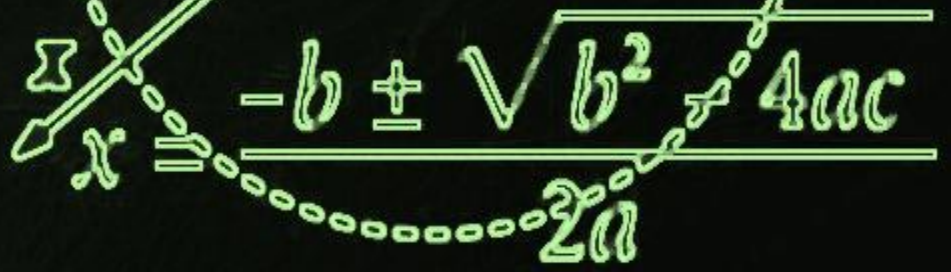
Contents :

Fall semester:

- Algebra advanced topics
- Counting advanced topics
- Probability advanced topics I

Spring semester:

- Probability advanced topics II
- Geometry advanced topics
- Number theory advanced topics



SAT Math Prep / Saturday Class

Instructor：俞新天

Students	8th – 9th grade (PSAT), 10th – 11th grade (SAT)
Pre-requisites	Algebra
Prepare for	PSAT, SAT

Description

This course is for students who will take SAT or PSAT in very near future. It will include a brief review of all the important topics in the test as well as the connections between these different topics. Through large amount of practice questions, students will learn and master problem-solving skills specific to the SAT test and gain confidence in test-taking. Students will also learn how to make personalized study plan and develop practical strategies to deal with challenging problems that could appear in the test.

Contents

MISS WALTER

About the teacher:
Miss Walter holds a degree in English Literature, Magna Cum Laude, from University of Houston, where she also taught freshman English. Born and raised in Houston, Texas, she is a teacher and private tutor with 10 years of experience.

Reading, Vocabulary and Grammar Connection

Students will improve their vocabulary and grammar through reading lessons and discovering concept for themselves.
Students learn quickly when assignments are challenging, yet interesting enough to make the effort worthwhile! This is a great class for learning concepts needed to do well on the SAT and ACT! Students will also use their new skills to write an essay, and receive intensive instruction on their weaknesses in essay writing .

Saturday Classes

LITERARY ANALYSIS AND ESSAY WRITING
2:00 PM - 4:00 PM
(2-SEMESTER CLASS)

Have trouble finding deeper meanings in readings? This class will help you analyze, make connections, and put your thoughts into words using the style and structure your teachers expect in a good essay. If you want to make your teacher say "Wow!" about your essays, this class is for you. If you love analyzing, this class is for you, too!

Grades 8-10

Express Yourself! Writing Class
11 AM – 1 PM

This class is designed to get students more easily expressing their thoughts, opinions, and memories on paper. Let it flow! They will be able to use this ability on:

Personal narratives for STAAR exams
Integrating personal examples into expository essays
Application essays for educational camps like Duke TIP
Writing for personal expression, like poetry and creative writing

Grades 6-8

Sunday Classes

Express Yourself! Writing Class
11 AM – 1 PM
(1-semester class)

This class is designed to get students more easily expressing their thoughts, opinions, and memories on paper. Let it flow! They will be able to use this ability on:

Personal narratives for STAAR exams

Integrating personal examples into expository essays

Application essays for educational camps like Duke TIP

Writing for personal expression, like poetry and creative writing

Grades 6-8

LITERARY ANALYSIS AND ESSAY WRITING
2:00 PM - 4:00 PM
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Have trouble finding deeper meanings in readings? This class will help you analyze, make connections, and put your thoughts into words using the style and structure your teachers expect in a good essay. If you want to make your teacher say "Wow!" about your essays, this class is for you. If you love analyzing, this class is for you, too!

Grades 8-10

For Better Reading & Writing

This class uses challenging yet interesting texts to inspire students' reading and as a model of what good writing looks like. The result is better reading comprehension, an ignited interest in reading a variety of books, and more skillful and mature writing. If you want to "grow up" your reading and writing, this class is for you!

Grades 6-8

MISS WALTER

College and Club Application Essay

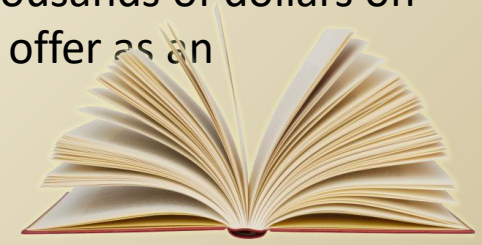
MISS WALTER

Did you know that students can start applying for college scholarships in 9th grade? Most people don't start thinking about scholarships until 12th grade and miss the deadlines.

And at some point in the coming years, there is a high chance your student will have to write an admissions essay about a time they demonstrated leadership. How would you prepare them to tackle it if your student just wasn't the leader type?

Speaking of leadership, did you know that the Duke TIP program means virtually nothing on a student's resume? There are other, more prestigious and rewarding summer programs that aren't as well-advertised.

I'm on a mission to give parents and students the knowledge I've learned over more than a decade of working as a test prep and college admissions tutor, because time and again I've seen families who want to guide their students well, yet make common mistakes simply because they don't have experience. I don't want you to have to do this process alone, and I don't want you to spend thousands of dollars on test prep or college guidance companies. My classes are what I offer as an alternative.



In **College and Club Application Essay**, we will be discussing, planning and writing the kinds of essays students will have to write for applications for clubs, scholarships and college admissions. I'll show them examples of real, winning essays written by students, as well as my own essays that I've written over the years.

In addition, students will get lots more info along the way: how to choose clubs and extracurriculars, where to find those truly prestigious summer programs, what the timeline should be for the high school years as students plan the countdown to college, and how to choose a major (or even whether college is the right path for their interests.)

These kinds of discussions naturally happen in the supportive, relaxed, but knowledgeable style I bring to the class.

Ultimately, the goal for the class is for your student to be informed and able to take the right steps at the right time over the next years, and I hope the further result is that the rest of the family feels secure that they're not missing out on things that are important, or wasting time, effort and money on things that aren't.

This class would be a good fit for:

Students who will be applying for private schools, clubs or summer camps in the next year;

Students who want to be better personal narrative/personal expository essay writers;

Students who want to learn what their gameplan should be in the high school years in preparation for college admissions;

Students whose families have a hard time having productive discussions about extracurriculars, clubs and college admissions, but know the student needs the information.

SAT English Prep / Sunday Class

Instructor : Hunter Lee

Course Description: This class is to prepare the 9th-12th graders who wish to achieve a higher score in SAT. Through knowledge of the test format, knowledge of grammar conventions and knowledge of strategies to tackle the different kinds of questions, the students will increase test-taking confidence, make better answer choices and manage time better, leading to improved test scores.

As the seasoned SAT/ACT test-prep instructor and test-rehearsal orchestrator of past 20 more academic years, Mr. Hunter have served and contracted with Princeton Reviews at first, and later with HCC systems, UH systems, many ISDs as well for numerous sessions of SAT / ACT / GRE / GMAT / Pre-Calculus / AP-Calculus / AP-Physics / AP-Chemistry etc. all around Houston regions.

In brief overviews, the repertoires of Mr. Hunter's testing operations offer as follows: 1st, the regular SAT / ACT prep classes, 2nd, the emergency SAT / ACT pre-test trials, 3rd, enhanced SAT / ACT top-scoring classes, 4th, the make-up classes of SAT / ACT.

Well, in the academic field slates, Mr. Hunter has orchestrated more than 35,000 rounds of SAT sessions, 15,000 bounds of ACT test-preps, 8000 more of GRE rehearsals, approximated 5,000 of GMAT trials, as well as counterless coaching-classes of AP s and PreAP s.

We will be focused on the following topics:

1. Readings (Herodontus/ Pale blues/Milky's /Arias / Gold Apple/ Hypo' Oath/Cutting Edges)
2. Grammars {Tenses /Moods /Usages /Patterns /Idioms / Five Formats /Senses /Skills /jargan }
3. vocabulary (Roots/ Derivations / Rolled Patterns / Fangles / Diluvians / Scenarioed)
4. Bio-burners (Treatises / Oratories / Documentaries / refined stylistics / portrayals)
5. Logistics / Captures (Chimera's pens/ Hypnos' formats / Relativity's lens / Maxwell' spectra)

高中化学
老师简历
课程简介

王勤老师:她是拥有20 多年教学经验的老师，拥有德克萨斯州终身化学教师证书和硕士学位。在过去的25年中她在Houston Community College 休斯顿社区大学)教过大学化学，和在高中教过AP化学，荣誉高中化学和普通高中化学。她在Harmony 高中和Cy-Fair ISD 教过20 多年，在休斯顿社区大学教过5年。在2014-2015学年她的AP化学班的学生100%通过AP化学国家考试，之前她每年AP化学班的学生有85%左右的AP考试合格率，她的AP预科班和普通化学班的学生在学区的评估测试合格率每年始终在85-90%。王勤老师退休后，多年来一直在华夏教授高中化学一系列的辅导课。化学课是高中课程中的难点，自从王勤老师在华夏教授化学课程以来，学生成绩大幅提高，每年AP考试之后，捷报频传。

Pre- AP CHEMISTRY
High School honor chemistry

Every high school student who wants to go college will take pre-AP chemistry. It is a require class. This supplemental class aligns with all public and private high schools' curriculum, and offers many effective strategies and suggestions for guiding students as they learn chemistry. The class provides opportunities through lectures, activities and discussions that allow students to further their understanding, and to discover critical concepts, and apply the knowledge they've gained to their school work and assessments. This class is intended for further assessments or student homework by practice additional problems. Many students would benefit from such further problem solving in order to reach full understanding of chapter material in their school chemistry textbook.

Throughout this supplemental class, students are building problem solving and critical skills, and set a solid foundation that will be available to them for learning college chemistry and AP chemistry.

AP Chemistry Exam
Preparing Class

This class is to prepare students taking Advanced Placement Chemistry. Whether a student is taking AP Chemistry at his/her school or he/she is working on it independently, the stage is set for a great intellectual experience. This class is to help students try to master the AP Chemistry exam, put students on a fast track with focused review. This class will follow the College Board Concept Outline to help students practice difficult problems, diagnostic tests etc. that has all of the elements of the AP Chemistry Examination so that students can walk in with confidence and get best scores possible when they are taking exam. This class is a good supplement for AP chemistry students. Every class will review and discuss the theories and concepts, work on the challenge problems and leave some class time to answer students' school work that assigned in their AP chemistry class.

华夏程课介绍

PYTHON & JAVA
G 4 +

华夏中文学校 实Python操网络软件课程

Python Web Application Programming is a one year program course designed to help students excel in AP Computer Science and also help adult student find related job and answer interview questions. Students will learn step by step how to write Python program, and how to build web application which connect to the database. We based on learn on demand consept, let student learn language basic while it is needed for the task. Require Laptop computer.

Python 新生班

Python 1 - Semester 1:

1. Download and install all software needed for this class, such as Python package, VS code Editor and more...
2. An introduction to Python fundamentals. Topics include simple print statement, console usage, data type, , operators, conditional statements, loops, arrays, class and objects, string, and Java standard classes. Students
3. write simple game and build up function concept.
4. write python program to plot chart based math formular. and learn to build own package.

儿童课程偏重打好语言基础；成人课程则偏重建立网络编程理念，编写网络应用软件，解答面试问题。

Python 续读生班

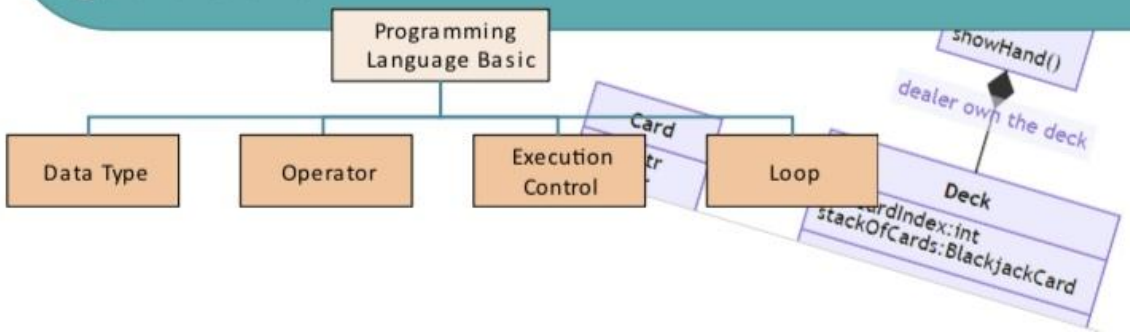
Python 2 - Semester 2:

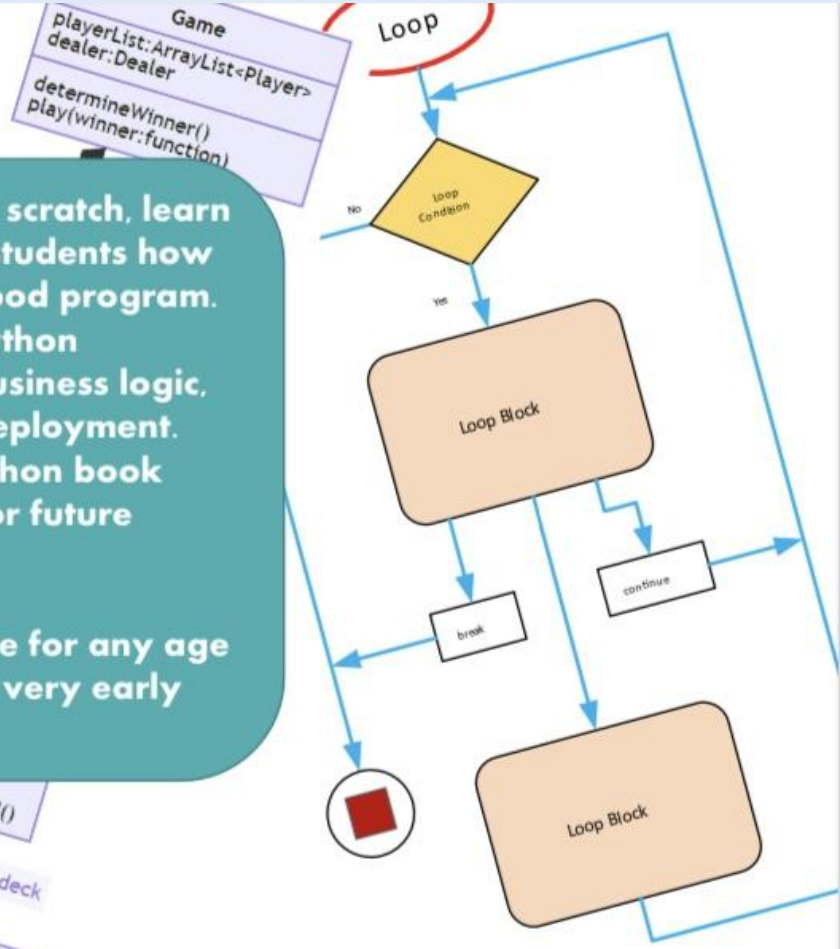
1. Download and install NPM, MongoDB, Git software tools for building web application.
2. Topics include csv file handling, JSon format, Json to class. inheritance and polymorphism, array and array list, file O and exception, recursion, sorting and searching, and program design and analysis.
3. Learn MongoDB database collection and document concept, create Python program to Create, Read, Update and Delete (CRUD) data record in DB.
4. Create Python Server to connect to MongoDB, and create DB service for CRUD.
5. Display data from Database to web browser.
6. Use React JS generate simple GUI to display database data.

华夏中文学校 Python 语言编程简介

Python language course is designed for student start from scratch, learn from language basic to OOP programing. Not only teach students how to write python program, also teach them how to write good program. This class will have new student class, python continu-1, python continue-2, and more. Try to build skill on user interface, business logic, database, unittest, logging, documentation, and product deployment. Very important, will help each student write their own Python book which include everything they have learned in the class, for future reference.

This course does NOT need more math background, it suite for any age of student. Actually, start learn computer language can be very early age of students.





华夏中文学校Java实操软件编程课程

Java Programming is a two-sessions computer programming course in English, designed to help students excel in AP Computer Science. No prereqests for student. Students will learn step by step how to install tools and how to write Java program, include sample games, plot chart, database access, and simple web application. Student will learn language basic such as loop, condition, data type while they are learning build application. Since it is a on-line class, need laptop computer, better has additional monitor.

Java 新生班

Java-1:

1. Download and install all software needed for this class, such as Java JDK, Eclipse, Git ...
2. An introduction to Java fundamentals, Topics include simple print statement, data type, operators, conditional statement, loops, array, ArrayList, String...
3. Build up OOP concept, introduce, class, interface, abstract class concept
4. Build Card game based on Java classes.

Java 续读生班

Java-2:

1. Learn Relational database access by using mySQL, and hibernate.
2. Handle Exception, write unit test, debugging, logging.
3. Learn requently used design pattern, such as observer, command, factory, sigleton...
4. Introduce ReactiveX, functional programing include map, filter, reduce, zip, soft, and more.