

SDHXCS Enrichment Classes (才艺课)

Subject (科目):	Computer Science		
Course Name (课程名称):	AP Level Coding in Python (高级电脑编程) 公众号链接		
Teacher Name (教师姓名)	Cao, Paul (曹英俊)	Phone	(440) 320 - 2818
		email	cs4fun.sd@gmail.com
Teacher's Background (教师简介):	<p>Dr. Paul Cao, the principal instructor at CS4FUN, teaches computer science at UC San Diego. He has more than 12 years of teaching experience in computer science programs at liberal arts colleges and research institutions. He and his CS4FUN team are committed to unlocking students' potential in coding through formal computer science training, which includes developing computational thinking in a structured and fun-filled environment and building a solid foundation in practical coding skills with Python.</p> <p>圣地亚哥华夏中文学校电脑编程班的主讲教师是 Paul Cao，他目前任教于加州大学圣地亚哥分校（UCSD）计算机科学与工程系，他在杜克大学计算机工程专业获得博士学位。Paul 在本科和 K-12 教育领域拥有丰富的教学经验。他在 UCSD 负责主讲本科课程，如计算机编程 I 和 II、计算机结构和高级数据结构。他在美国计算机科学教育界，尤其 K-12 教育研究领域享有较高声誉。他的学生遍布硅谷各大公司和顶尖大学的研究生院。</p>		
Course introduction (课程简述):	<p>This class focuses on building a solid programming foundation for students. The goal is to prepare students for their AP CS course in high school. Topics include strings, 1D and 2D arrays, File I/O, class and objects, inheritance and polymorphism, and recursion. This course is equivalent to a freshman level course at UCSD. This course requires that a student has completed the level 1 course or at the consent of the instructor.</p> <p>本课程旨在给学生打下坚实的电脑编程基础，为学生将来考试计算机 AP 做准备。课程以 UCSD 大一本科生的编程课为模板，加入了针对青少年的编程教学方法。课程内容包括字符串，一维和二维数组，基于类的编程，文件处理，迭代等。要求学生选学过计算机编程 1 或者经任课教师同意</p>		
Course Objectives (课程目标):	<ol style="list-style-type: none"> 1. String processing in Python 2. Array manipulation (1D and 2D array) 3. Write class in Python with inheritance and polymorphism 		

	<p>4. Understand file I/O and data processing 5. Understand and write code in recursion</p> <p>1. Python 的字符串处理 2. 一维和二维数组处理 3. 基于 class 的编程 4. 文件处理和数据分析 5. 迭代方法的理解和编程</p>		
<p>Pre-requisite/Student Ages (先决要求/学生年龄要求):</p>	<p>6th - 10th grade Students need to bring their own laptops (pc or mac) 6-10 年级， 学生要自带手提电脑。</p>		
<p>Student Evaluation / Presentation (评分方法 (演出、比赛、展示等)):</p>	<p>The evaluations will be based on regular homework assignments and final projects. 根据学生完成与否定期的家庭作业和最终项目给予期末评估。</p>		
<p>Class Size (最多招生人数限制):</p>	<p>15 Students for each class (Sundays at 3: 30am - 5:00pm)</p>		
<p>Course Fee (报名费 / 学费):</p>	<p>Registration & material fee</p>	<p>\$550 per year</p>	<p>Special course fee</p>