



SUMMER CHALLENGE 2015

July 6-24, 2015

REGISTRATION BEGINS FEBRUARY 9, 2015

Summer Challenge is a summer commuter program offered by the Halbert and Nancy Robinson Center for Young Scholars for students currently in the 5th or 6th grade. This program offers highly capable students a fast-paced, challenging curriculum. Students qualify with high scores on the MSP or other nationally standardized aptitude or achievement tests. Participation in a nationally recognized talent search can also serve to qualify a student, or placement in a recognized gifted school program.

DATES AND LOCATION: Classes will be offered on the University of Washington's Seattle campus **July 6-24, Monday through Friday**. Class hours are 9:00 a.m. To 2:20 p.m. We will offer after-class supervision on campus. You can find more information posted on our website.

ABOUT THE PROGRAM: Students take one of several course offerings. All courses approach the study of underlying concepts through hands-on activities that are action-oriented, encouraging students to learn by exploring issues and solving problems with both their heads and their hands. Courses are not designed to take the place of regular classes taken in school and are multidisciplinary. The material will be advanced beyond material with which most fifth and sixth grade students are familiar, but there will be time spent in discussions and in small groups in class to help students learn and understand. Homework is limited and most work will be done in class.

QUALIFICATIONS: Students must have completed either 5th or 6th grade by the start of summer, and qualify by at least one of the following:

- Participation in the Robinson Center Saturday Enrichment Program
- MSP scores in the 95th percentile or better in Math or Reading (students taking Math Courses *must* have a qualifying math test score)
- Participation in a recognized gifted program or talent search
- 95th percentile or better on a recognized, nationally normed test

REGISTRATION: *Our application process is entirely online.* Complete applications are processed first. Registration for a specific course continues until that course is full, at which time students may be placed on a waitlist. Registration will begin on February 9th at 8:00 a.m.

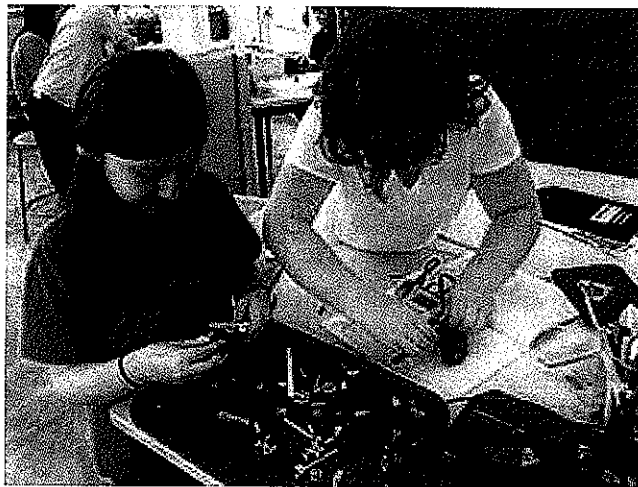
TUITION & FINANCIAL AID: Summer Challenge tuition for 2015 is \$950. Some classes will have an additional \$75-\$100 Materials & Excursions fee. There is also a non-refundable \$40 registration fee. The After-Class program fee is \$150 (for 3 weeks, from 2:30-4:30 p.m.). Need-based financial assistance is available.

QUESTIONS: Contact Alex West, Program Assistant, at RCsummer@uw.edu.

SUMMER CHALLENGE

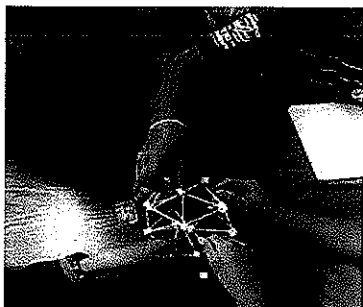
SAMPLE COURSE DESCRIPTIONS

CHEMISTRY, ECOLOGY, DRAMA! In this fast-paced, fun-filled course we integrate chemistry, ecology, research writing and theatre production to understand the past and analyze the future of the Puget Sound region where salmon and people have lived together for thousands of years. Scientists say that Puget Sound is dying. The Governor has set up a new agency called the Puget Sound Partnership. Its mission is to bring the ecological health of Puget Sound back into balance within the next couple of decades. How can we get there? What will life be like in this region in the year 2050? Fifth graders will be 51 years old! 6th graders will be 52! That's the same age as your teacher is now! In this course we dissect, analyze and synthesize EVERYTHING! We dissect salmon under high-powered microscopes to understand their anatomy, the features and functions that make them an indicator species of our bioregion. We dissect chemistry to learn the basic ecological building blocks of Puget Sound. We dissect a Northwest Coast Indian legend to produce a professional play with lights and sound on a real stage! Finally, we analyze patterns from the past and build scenarios for the future to create a blue print for our lives in Puget Sound in the year 2050. The future is in your hands. **Materials and Excursions Fee.**



INTRODUCTION TO ROBOTICS This class introduces students to the world of robots while learning about principles of physics, engineering concepts, strategic design, problem solving and teamwork. Applying the principles of scientific inquiry and the design cycle, students build and program LEGO Mindstorm NXT robots to accomplish increasingly complex missions. Through "hands on/minds on" activities using the LEGO Mindstorm NXT robotics equipment, official First LEGO League (FLL) competition boards and other materials, students will have fun exploring the nature of momentum, friction, gearing and leverage; the fundamentals of sound design and construction such as bracing, center of gravity and steering; the analysis of missions to identify strategic solutions; the developing of programming logic and planning of tasks and team communications essential to successfully accomplishing the

missions efficiently and effectively. We will investigate robots' uses today (including a field trip) and the future possibilities. The course wraps up with student research project presentations and a First LEGO League-style competition! Students with little or no LEGO experience are welcome, and more experienced LEGO-builders will find the missions challenging and fun. **Materials & Excursions Fee.**



MATH TOPICS This class offers the student interested and passionate about all things mathematical an opportunity to explore and stretch beyond the boundaries of the standard school math curriculum. A wide variety of math ideas will be introduced and investigated, ranging from logic, parity, combinatorics, game strategies, and similar topics. In addition to working through problems as a class, students will participate in various mathematical contests, compete in a mathematical Olympiad, play mathematical games, and spend time on math-related fun (jokes, puzzles, and fun problems). This course will allow students to deepen and widen their mathematical skills in a creative and fun way. If you love to think about math and want to spend time with others who

want to do the same, this is the class for you! **NOTE: Requires a qualifying test score in math.**



SUMMER STRETCH 2015

June 29–July 30, 2015

REGISTRATION BEGINS MARCH 9, 2015

Time to make summer plans! If you are enrolled in 7th, 8th, 9th, or 10th grade during the 2014-2015 academic year, Summer Stretch may be an option for you. It is a 5-week commuter program with classes on the University of Washington's Seattle campus. The program offers an opportunity for vigorous academic challenge in the company of other capable students. Courses are fast-paced and roughly at the 9th and 10th grade levels, although our fast-paced math courses range from Algebra 1 through Precalculus. Students only take one course.

DATES AND LOCATION: Classes will be offered on the University of Washington's Seattle campus **June 30–July 30, 2015 M, T, Th.** Class hours are 9:00 a.m. To 2:20 p.m. Although no supervised before and after class program is offered, students are welcome at the Robinson Center before and after class; our hours are 8:00 a.m. to 4:30 p.m. You can find more information posted on our website.

Students are expected to attend all classes. The amount of homework is substantial and can amount to several hours per night. Fast-paced math and chemistry courses are at high school level and are the equivalent of one academic year, while other courses generally cover up to a semester of academic work at high school level. We also offer courses that are more "elective" in nature and which do not fulfill high school requirements.

VERY IMPORTANT: Some high schools award credit for these courses; yours may or may not. If you desire credit and/or appropriate placement, you must check with your school prior to applying to this program. Some students use these courses to advance toward an earlier graduation; others give themselves a boost toward taking advanced placement. You should check with your school prior to applying to this program.

QUALIFICATIONS: Students qualify by submitting documentation for at least one of the following: Enrollment in an identified gifted program that specifically serves highly capable students; qualification to participate in a nationally-recognized talent search; MSP scores or other standardized test for peer age group in the 95th percentile or above; SAT/ACT scores in the 50th percentile or better in subject area; or, past participation in our Summer Challenge program. **NOTE:** For Fast-Paced Math courses, students must submit qualifying test scores; for Chemistry, Math and American Literature, a recommendation form from a current teacher in subject area must be submitted.

REGISTRATION: *Our application process is entirely online.* Complete applications are processed first. Registration for a specific course continues until that course is full, at which time students may be placed on a waitlist. Registration will begin on March 9th 2015 at 8:00 a.m. on our website.

TUITION & FINANCIAL AID: 2015 tuition is \$925. Some courses have an additional \$75-\$100 Materials & Excursions fee. There is also a non-refundable \$40 registration fee. Need-based financial assistance is available.

QUESTIONS: Contact Alex West, Program Assistant, at RCsummer@uw.edu.

SUMMER STRETCH

SAMPLE COURSE DESCRIPTIONS

AMERICAN LITERATURE: This course will explore the political, social, and artistic value of storytelling. Through reading, discussing, and writing about novels, memoir, short stories, poetry, art, film, and non-fiction students will develop ideas about how writers and scholars explore the cultural significance of storytelling. Through class assignments, discussions and work with peers, students will learn to think critically, to write analytically, and to read with insight.

ARGUMENT & DEBATE: This course explores the nature of arguments, the methods of debate, and the strategies of persuasion. In preparation for formal and casual debates, you will investigate controversial questions and sharpen your skills as a persuasive speaker. Research, performance and communication skills will all be prioritized. Bring a critical mind and a friendly attitude.

AN INTRODUCTION TO MICROBIOLOGY: THE GOOD, THE BAD AND THE DEADLY: This course will provide an in-depth exploration of the vast world of microorganisms, from everyday surroundings to infectious diseases. Using a combination of lecture, discussion and field and laboratory studies, we will cover environmental bacteria found in the Pacific Northwest, the relationship between bacteria and food, and both natural and disease-causing bacteria found in humans. Major projects will include mapping an infectious disease outbreak and an ethical debate about current issues facing the scientific community.

FOR THE LOVE OF WISDOM: A JOURNEY IN PHILOSOPHY AND CRITICAL THOUGHT: Can philosophical questioning truly give someone the confidence to pursue what is important in life, or perhaps even the courage to face death? We will find out together by coming face-to-face with some of life's most important and difficult questions, many of which Socrates himself grappled with over 2,000 years ago. Food, games, movies, music and more will act as fun catalysts for our thoughts, and the interests of our group will determine where our conversations lead. Along the way, we will develop concrete skills in critical thinking, empathy, cooperative discussion, logic, and creative questioning.

MATHEMATICS (FAST-PACED): The fast-paced math classes offer one year of work in an appropriate course: **Algebra 1 or 2, Geometry, or Precalculus.** Placement in fast-paced math courses depends on the student's math background and school district requirements. **These classes are not recommended if your school cannot offer appropriate placement for Fall 2015.**

***PLEASE NOTE THAT THE FAST-PACED MATH CLASSES ARE NOT LECTURE-BASED** Instead, a large part of each day will be spent doing small group work, individual study and test taking. The instructor is primarily there as a resource and facilitator, and the student works independently for the most part. Self-motivation and strong independent learning and study habits are essential for success in this highly accelerated and individually paced program.*

