



ROBINSON CENTER FOR YOUNG SCHOLARS

UNIVERSITY *of* WASHINGTON

Undergraduate Academic Affairs

SATURDAY ENRICHMENT PROGRAM WINTER 2012!

Math and Writing Classes

The Robinson Center will be offering both mathematics and writing courses for young students in January. These classes are intended to provide intellectually ambitious students with challenge, inspiration, and fun, in a collaborative, supportive learning environment. The math classes are not intended to move students ahead in the standard curriculum but rather to explore areas of math not usually covered in the K12 classroom. Our writing classes focus on expanding students' writing and editing skills but also on creative expression across genres.

Students should register for the course according to their **CURRENT** grade in school. Placement is determined by grade, not age. Class size is limited, and so it is first come/first served; waitlists will be established if necessary.

Tuition is \$250.00 for our 50 minute classes and \$450 for our 100 minute classes. Tuition is to be paid in full (by check or credit card) when the student registers for the course. Go to the Robinson Center [website](#) for more about how to register for the classes.

Parking is available for free on the University of Washington campus as of 12:00 noon on Saturdays.

Important Dates

DECEMBER 5: REGISTRATION BEGINS (online registration via our Robinson Center website).

JANUARY 14: CLASSES BEGIN

(NO CLASS SATURDAY FEBRUARY 18)

MARCH 17: LAST DAY OF CLASSES

CLASSES

Grades K-1 and Parents

Nurturing the Math Instinct: A Parent-Child Adventure in Mathematics

We are all born with the capacity to love mathematics. This class explores how to cultivate a child's innate interest in mathematics by creating a culture of mathematics at home. Through puzzles and games that capture the quality of play in math, we'll learn how to think creatively, support each other, and keep the spark of joy alive and well in our mathematical lives.

This class is designed to engage both kids and parents. Each child will register and attend with one parent, and the classes will be divided between discussions with the parents about how to encourage their child's interest in mathematics, and time spent learning new games and puzzles that can be played at home.

Instructor: Katherine Cook
Time: 12:30-1:20 pm



Grades 2-3

Mathematical Strategy

It's fun to play, but more fun, as the saying goes, to win. But it's fun to lose too, if you can use losing to figure out what the best strategy for a game should be. Win or lose, cracking the key to how a game works is the most fun of all.

Our subjects will range through games of chance (which gave rise to the modern study of probability) and games of skill. All of these games are mathematically relevant, and will serve as an opportunity to hone our logical precision, to begin building an intuitive understanding of probability and randomness, and to sniff out patterns wherever they lurk.

Prerequisites: A love of games is required.

Instructor: Daniel Finkel
Time: 12:30-1:20 pm

Grades 4-5

How to Count Your Way Out of Trouble: A Course Exploring the Art of Combinatorics

In this course, we will take an exhilarating tour of the mathematical field of combinatorics, picking up some of the classic and more beautiful techniques used in all of math on the way. We'll learn what pigeons have to do with anything, how getting dressed can be a game, and why knowing all your options will help you in a pinch. Counting is one of the most powerful techniques we have at our disposal, and in this class we'll savor some of the most delicious ideas in mathematics--the Fibonacci numbers and Pascal's triangle, for example--that arise as a result of just simple counting.

Times: **Section A: Girls Only**, 1:30-2:20 pm; **Section B**: 2:30-3:20 pm
Instructor: Katherine Cook

Imagination Lab for Creative Writers

This class is for all writers who want to exercise their imaginations and experiment with words together. It will give you inspiration for getting started, tools for turning your best ideas into poems and stories, and help polishing your favorite pieces of writing. Some of our time will be spent writing independently, but we'll also read, think, and talk with each other every step of the way. We'll begin by using specific, concrete language to describe everything from people, places, and things to feelings and dreams, and then we'll go wherever our imaginations take us.

Time: 12:30-1:20 pm
Instructor: Chelsea Jennings

Real Worlds / Imaginary Worlds

The great big world we live in is made up of small things—and so are the worlds we read about in books, see on stage and in the movies, and dream up in our imagination. In this class, we'll learn how to take descriptions of small things – like the way your dog looks at you or what it feels like to walk outside in the snow – to bring whole worlds to life. We'll use our powers of observation and imagination to write about people and places and what happens to people *in* places. We'll play games and read stories and poems that spark our imagination and sharpen our writing skills.

Time: 2:30-3:20 pm
Instructor: Talia Shalev

Guthrie Annex II Box 351630 Seattle, Washington
<http://depts.washi>



Grades 6-8

Exploring with Essays

In this class, you'll use essays to explore ideas, topics, memories, and beliefs that are important to you. We'll practice writing several different types of essays, including personal essays, narrative essays, persuasive essays, and book or movie reviews, and then we'll work on revising your favorite one or two pieces of writing so they express your thoughts clearly and creatively. Along the way, we'll think about how to use vivid words to make your writing come alive, how to best organize your thoughts, and how to write strong beginnings and endings so readers will want to keep reading (and be glad they did). You'll leave the class with tools you can apply to your schoolwork as well as your own writing projects.

Time: 1:30 – 3:20 pm (100 minute class)

Instructor: Chelsea Jennings

The Power of Description

Have you ever read a poem that takes place somewhere that seems so real that you can almost see the sun streaming in through the kitchen window or hear the cars roaring by outside? Have you ever read a story about characters who seem so alive that you feel like you've met them before? Good writers bring places, people, and amazing moments to life through the power of description. In this class, you'll develop your powers of description by using tools you already have: your words, your senses, and your imagination. To that end, we'll investigate the world around us, experiment with different writing forms, and get inspired by reading. At the end of nine-weeks, you'll have a portfolio of creative writing that you can add to, revise, and share – if you choose – with family and friends.

Time: 12:30 – 2:20 pm (100 minute class)

Instructor: Talia Shalev

Grades 8-10

The Geometry of Reflections

Imagine a room made entirely of mirrors. A light bulb in the room turns on, and yet does not illuminate the entire room. How is this possible?

Thus begins our investigation of the geometry of reflections, a study that brings together such diverse topics as star polygons, billiard problems, conic sections, infinity theory,

chaos theory and dynamics, modular arithmetic and number theory. This class will be a fun, problem-based excursion into this fascinating, rarely-seen subject.

Prerequisites: Some familiarity with algebra and geometry is recommended.

Time: 1:30 – 3:20 pm (100 minute class)

Instructor: Dan Finkel

Instructors

Katherine Cook has been teaching math for years, to students ranging in ages from 5 to 55. A joyful mathematician who values curiosity and the art of asking good questions, she taught mathematics and physics at The Evergreen State College and the University of Washington, and has worked extensively in the Seattle area with K-5 public schools developing math curriculum. She is currently co-director of Math for Love.

Dan Finkel is a passionate mathematician and experienced math instructor, with a Ph.D. in Mathematics from the University of Washington, where he received an Excellence in Teaching Award in 2005. He has taught math to a wide variety of students, from 4th-12th graders in Brooklyn to UW undergraduates here in Seattle. He has also taught in the Robinson Center's Summer Stretch Program.

Chelsea Jennings is a lifelong reader and writer who holds an MFA in Creative Writing from the University of Washington, where she is currently a PhD candidate in English. Chelsea has taught Composition and Creative Writing at UW for the past five years, and is in her second year as an Assistant Director of the Expository Writing Program. Having worked with students ranging from kindergarteners to adults, Chelsea is excited to talk to fellow writers of all ages about their writing projects and process. Her poetry has appeared in the *Boston Review*, the *Madison Review*, *Black Warrior Review*, *Poet Lore*, *Best New Poets 2007*, and elsewhere.

Talia Shalev is a teacher and poet who believes all good writing – whether it's in the form of an academic essay, poem, or professional e-mail – is creative. Talia has taught composition and creative writing at the University of Washington (M.F.A., 2011) and has developed educational materials for instructing younger students in writing. Her own creative work has appeared in *The Seattle Review*, for which she was awarded the magazine's Grace Posner Kameros Scholarship, as well as in *Mare Nostrum*. This year, Talia was named a finalist for a Ruth Lily Fellowship from the Poetry Foundation.