

## **The Link School Course Catalog for 2008-2009**

**The experiential education** at The Link School has five key components:

Academics - a variety of learning opportunities includes an innovative blend of small group and individual instruction taught by dedicated Christian Scientist faculty members who hold advanced degrees appropriate to their subjects; intensive block courses conducted by visiting instructors; state-of-the-art online courses which allow students to earn credits outside of the Link curriculum; and interdisciplinary learning opportunities in an unparalleled natural setting of rivers, mountains and canyons which stretch out from the school's backyard.

Expeditions - trips each month encourage character development, leadership, and natural sciences education in backcountry settings.

Individually Mentored Projects – projects broaden knowledge and skills in areas of the students' interests with instruction and oversight from a mentoring adult.

Service Work – service opportunities include daily chores and responsibilities at home in the Lodge and projects that extend out into the greater community.

Spiritual Development - purposeful spiritual exploration and community investment in living our faith deepens students' "link" with the Divine.

**The academic program** consists of two types of courses, those designed and taught by the school's faculty and those developed and delivered by K12, an accredited online educational system. (The Link School is a member of the Daycroft Online Learning Community and receives K12 courses through Daycroft.) Courses are taught in multi-age settings with grade-appropriate assignments, resources, and assessments. Link School courses are experiential by design and include a wide variety of assessments, including, but not limited to, portfolios, presentations of learning (POLs), field experiences both local and abroad, fieldwork, blogs, group problem-solving, and authentic assessments such as writing for publication. K12 courses are taught online by K12 instructors through a more traditional approach, but Link School teachers assist students with K12 coursework, adding a personal and creative touch to those learning experiences.

The faculty encourages experiential, interdisciplinary learning across the curriculum. Students pursue individualized learning plans, individual projects and group activities. Some credits are earned through successful mastery of college preparatory core subjects; others by self-directed student explorations. Whenever possible, learning is integrated with ecology and culture.

Extensive use of technology is a critical component of the curriculum.

## **Courses offered in 2008-09**

*Courses are developed by The Link School unless otherwise noted.*

### **English**

An effective citizen of the 21<sup>st</sup> century must be able to think and communicate clearly. Guided practice in analytical reading, writing, and speaking for various audiences, gives students the tools and confidence to share their ideas with others. Much of the writing instruction is on a one-on-one, coaching basis. Assessments are appropriate for the student's skills and grade level.

#### **English I and II**

Two semesters, one credit. Freshman and sophomore grade levels.

Literary selections follow the themes of The Link School's Intended Outcome of developing respectful relationships; classic novels with Western settings; Latin American short stories and poetry; and a student's choice of genres to study, such as science fiction, fantasy, historical novels, plays, and autobiography. Students explore the Bible as the foundation of Western literature and culture. The writing program moves from paragraph development to introductory thesis writing and includes poetry, journaling, writing for publication and creative writing. Portfolio and POL presentation skills are introduced and practiced. Vocabulary development, grammar instruction, and research skills are included.

#### **English III and IV**

Two semesters, one credit. Junior and senior grade levels.

Students analyze novels, plays, and poems of selected US and Latin American authors of note and English playwrights including Shakespeare. The writing program includes researched, critical thesis writing, reflective journal writing, writing for publication and creative writing. Portfolio and POL presentation skills are more fully developed. Vocabulary development and grammar instruction, including SAT review, are included.

### **Spiritual Exploration Seminar**

Two semesters, one half literature credit.

Sunday evenings will be spent in discussion session considering a variety of religious, philosophical and cultural approaches to living a life of meaning and spiritual depth. Reading will include, Man's Search for God, Black Elk Speaks, Joshua, Miracle in the Andes, The Tao of Pooh, Mutant Message, The Vision, Zen and the Art of Motorcycle Maintenance, and Jonathan Livingston Seagull, among others.

### **Mathematics**

Mathematical reasoning, skills and principles play an ever-increasing role in our digital society. Colleges expect students to complete four years of high school level math starting with Algebra I.

### Pre-Algebra (K12)

Two semesters, one credit.

In this course, students sharpen their computational and problem-solving skills while learning the language of algebra. Students translate word phrases and sentences into mathematical expressions; analyze geometric figures; solve problems involving percentages, ratios, and proportions; graph different kinds of equations and inequalities; calculate statistical measures and probabilities; apply the Pythagorean theorem; and explain strategies for solving world problems. Online lessons provide demonstrations of key concepts, as well as interactive problems with contextual feedback. A textbook supplements the online material.

### Algebra I (K12)

Two semesters, one credit.

Students develop algebraic fluency by learning the skills needed to solve equations and perform manipulations with numbers, variables, equations, and inequalities. They also learn concepts central to the abstraction and generalization that algebra makes possible.

Students learn to:

- Use number properties to simplify expressions or justify statements.
- Describe sets with set notation, and find the union and intersection of sets.
- Simplify and evaluate expressions involving variables, fractions, exponents, and radicals.
- Work with integers, rational numbers, and irrational numbers.
- Graph and solve equations, inequalities, and systems of equations.
- Determine whether a relation is a function and describe the domain and range of a function.
- Use factoring, formulas, and other techniques to solve quadratic and other polynomial equations.
- Formulate and evaluate valid mathematical arguments using various types of reasoning.
- Translate word problems into mathematical equations, and then use the equations to solve the original problems.

### Geometry (K12)

Two semesters, one credit.

Students learn how to recognize and work with geometric concepts in various contexts. They begin with the foundations of geometry, focusing on inductive and deductive reasoning, logic, concepts, and techniques of Euclidean plane and solid geometry. They go on to develop an understanding of mathematical structure, method, and applications of Euclidean plane and solid geometry. They use visualizations, spatial reasoning, and geometric modeling to solve problems. Topics of study include points, lines, and angles; triangles; right triangles; quadrilaterals and other polygons; circles; coordinate geometry; three-dimensional solids; geometric constructions; symmetry; the use of transformations; and non-Euclidean geometries.

### Algebra II (K12)

Two semesters, one credit.

In this course, students investigate traditional algebraic concepts, beginning with the fundamentals of linear equalities. They examine functions, including absolute value and radical functions. Students work extensively with quadratic functions, including fitting a curve to data. They use matrices to solve systems of equations with linear programming problems, as well as complex numbers as solutions to quadratic equations. Students finish the course with a unit of study on polynomials. Many problems explore real-life applications of algebra. Students also practice a transformational approach to graphing functions.

### Pre-Calculus (K12)

Three terms, three credits

In the first semester, students focus on analytic geometry, with an initial review of algebraic properties, functions, and graphs. They learn about algebraic and inverse functions, exponential and logarithmic functions, conic sections, matrices, determinants, complex numbers, and discrete algebra. In the second semester, students begin with a review of basic concepts in trigonometry, then learn about approximate values, trigonometric identities, graphs, equations, logarithms, vectors, complex numbers, and polar coordinates. Both semesters present examples of the role of mathematics in daily life.

Prerequisites: Algebra I, Geometry, Algebra II

## **Modern Languages**

Study of a second language opens windows on the world. Students become comfortable standing in another person's shoes. Language study includes an appreciation for and understanding of other cultures. It also heightens awareness of one's native tongue of English through emphasis on speaking, listening, reading and writing. The Link School offers Spanish language study for its practical application in the U.S. and as preparation for the extended field program in Peru.

### Spanish I (K12)

Two semesters, one credit.

A multi-media, game-based approach makes this introductory Spanish course different from traditional approaches to language learning. Advanced teaching techniques are used to turn compelling adventures and activities into rigorous lessons in grammar and vocabulary. This course provides a solid foundation for reading, speaking, writing, and understanding Spanish and cultivates a passion for the language through exposure to culture and dynamic experiences of real people and real places. This course also features cutting-edge adaptive learning technology that lets students select the learning style that's right for them.

### Spanish II (K12)

Two semesters, one credit.

Students with a beginning foundation in Spanish will see their skills soar through compelling lessons that give them access to content so interesting that they forget that they are learning Spanish. This unique learning methodology, which relies heavily on games and stories, works effectively to take students from a tentative understanding of

Spanish basics to a greater level of sophistication. This course concentrates on students' ability to articulate more and more complex thoughts and to understand authentic native language from a variety of enticing sources.

### Spanish III (K12)

Two semesters, one credit.

Intermediate Spanish students who have a strong base of vocabulary, speaking and listening skills will reach a new level of mastery and fluency in this course. This course teaches advanced grammar and vocabulary and emphasizes correct accents and comprehension of "real world" native speech. The high-energy excitement of the content, the challenging games and the wide variety of compelling stories contained in this course combine to make advanced learning as exciting as ever. Our unique error recognition technology helps students to eliminate common mistakes from their speaking and writing.

## **Environmental Science**

In the 21<sup>st</sup> century, the environmental sciences will continue to play a powerful role in transforming our society and our place in the universe. Stewardship for the natural environment is an Intended Outcome of The Link School. Environmental Science courses develop that sense of stewardship as humanity makes progress towards sustainability.

### Mountain Studies

Two semesters, one credit.

The Link School is located in the heart of the Rocky Mountains, providing an excellent laboratory for the study of mountain environments. Drawing on concepts from biology, chemistry, physics, and the earth sciences students will learn to interpret the complexity of mountain landscapes. A strong emphasis is placed on the scientific method, the design of field research projects, and the collection and interpretation of field data.

## **Social Studies**

Social studies courses help students meet many of The Link School's Intended Outcomes, including a compassionate and respectful relationship with others, service to their communities as informed citizens and prospective voters, and making a difference for good through prayerful and informed action. An interdisciplinary extended field program to Peru provides a unique classroom setting in which to learn history, geography, and culture.

### American Studies: United States Government

Fall semester, one-half credit.

The presidential election season offers contemporary and hands-on lessons in the structure and operation of our American government. Topics include the Constitution, the three branches of government, the role of political parties, and a variety of public policy issues related to the campaign. Extensive use of The Christian Science Monitor will bring an understanding of current events to our discussions.

### American Studies: Westward Movement

Spring semester, one-half credit.

Chaffee County, Colorado, home of The Link School, is a microcosm of the forces and conflicts that shaped the building of the West. Evidence of those struggles abounds even today. Within the broader context of U.S. history, students will explore Native American migrations, sacred places and ceremonies; courageous explorers like Zebulon Pike, who camped here in December 1806; and the influences of Spanish traders and American trappers, miners, ranchers, and railroad men who settled in the wilderness. A hands-on local history course like no other!

### World Regional Geography: The Andes

Fall semester and the January Block, one-half credit.

One of the highlights of the 2008-2009 school year will be the month-long expedition to Peru. Throughout the Fall semester students will prepare for this trip with a thorough survey of the history, culture, and contemporary societies of the Andean region, including the influences of the Incas, the Spanish, and modern-day globalization. Students will also become expert map-readers, developing a solid working knowledge of the political and physical geography of South America. The course will culminate with expedition to Peru in January, 2009. In Peru, the learning will come the life during homestays, Spanish language studies, a rich examination of Andean arts and music, and a trek through traditional mountain villages in the high Andes.

## **Enrichment Courses – 1 credit per year**

Enrichment courses at The Link School are designed to support the living and learning experience of each student. Many of the skills and dispositions cultivated in these courses are integral to the underlying educational philosophy the school, but do not fit cleanly in the more traditional coursework listed above.

### Stewardship and Sustainability Seminar (required, one quarter credit for full year)

Service work in support of the school community and local communities will include food planning and preparation from local food sources (students plan menus, maintain budgets, shop, cook, and clean up for all meals), gardening, forestry work, trail work, projects with the Division of Wildlife, alternative energy projects, and animal husbandry.

### Work Experience & Business Development Seminar (required, one quarter credit for full year)

Students will work in areas of their choice to earn funds towards their day-to-day expenses and in particular for their plane ticket to Peru. Work opportunities include local computer businesses, food service & catering, forestry, carpentry, cutting hay, retail, childcare, etc. Student run business opportunities include firewood, tree trimming, snow plowing, hand crafts, Christmas trees, etc. Students will learn how to develop and carry out a basic business plan in regard to budgeting for expenses and planning profits, etc.

Leadership Seminar (required, one quarter credit for full year)

Leadership skills will be taught in particular in preparation for and during expeditions. Students will earn various levels in relation to communication skills, small group leadership skills, small group participation, expedition mentality, outdoor skills, & environmental awareness. Expeditions during Fall Semester 2008 included the Maroon Bells backpacking trip, Desolation Canyon river trip, Horsepacking in the San Isabel, White Rim mountain biking trip, and a variety of shorter weekend trips.

Creative and Industrial Arts, & Computer Workshops (one quarter credit full year)

Students will have the opportunity throughout the year to develop artistic skills and abilities in photography, fine arts, music and handcraft (knitting, quilting, etc). Students will receive basic instruction and have the opportunity to work projects in carpentry, auto mechanics, and metals. Students will also become proficient in a variety of computer applications, including blogs, video and photo editing, Web page design, hardware repair, Skype, video conferencing and other skills useful in presenting POLs.

Hardware repair and maintenance will also be taught. Fall 2008 we conducted a barn building construction project,, a weeklong photography seminar, and a week long videography seminar.

College Prep for Juniors and Seniors (variable credit)

Students will focus on the college search process, including college essay writing and SAT/ACT practice and review.

**Physical Education**

Two semesters, .5 credit per semester.

Students will engage in a daily workout routine and spend one week each month on a physically demanding expedition.

## **Graduation requirements**

The graduation requirements listed are minimum requirements. Students interested in attending highly selective colleges will be expected and encouraged to complete more academic coursework.

English	4 credits
Mathematics	3 credits
Modern Languages	2 credits
Science	3 credits
Social Studies/History	3 credits
Applied and Fine Arts	2 credits
Enrichment Courses	variable (minimum of 6 credits required)
Physical Education	4 credits
<b>Total</b>	<b>23 credits + 4 PE</b> (a minimum for graduation)

## **Course Requirements for an Academic Year:**

English	1 credit
Mathematics	1 credit
Spanish	1 credit
Environmental Science	1 credit
Social Studies	1.5 credits
Enrichment Courses	1 or more credits
Physical Education	1 PE credit
<b>Total Credits</b>	<b>6.5 (minimum) + 1 PE</b>

## **Additional Information**

**AP (Advanced Placement) courses** are available through K12 and will be offered on request.

**Standardized testing:** Freshmen through juniors will register to take the PSAT (Pre-Scholastic Aptitude Test) in October. This preliminary exam gives students practice in taking standardized tests before results from such exams become part of their record for college. Students and faculty receive detailed PSAT score reports. As part of the college admission process, upperclassmen will also take SAT and ACT exams, depending on the requirements per college.

**Notice: Changes** The Link School reserves the right, as necessary, to withdraw courses at any time and to change requirements affecting graduation and curricula, and any other regulations affecting the student body. Such changes, and the dates they become effective, will be decided by proper school authorities and may affect both present and prospective students.