

*Roncalli High School*



Education  
Guide

2017 - 2018

2000 Mirro Drive  
Manitowoc, WI 54220  
920-682-8801

## *Roncalli High School Mission Statement*

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The mission of Roncalli High School is to  
educate in the Catholic traditions of  
spiritual growth, life-long service,  
and academic excellence.

# RONCALLI HIGH SCHOOL

## GRADUATION REQUIREMENTS

Department	Required for Graduation	U.W. System Minimum Requirements
<b>English</b>	<b>4</b>	<b>4</b>
<b>Religion</b>	<b>4</b>	-
<b>Mathematics</b>	<b>3</b>	<b>3</b> <b>(4 recommended)</b>
<b>Science</b>	<b>3</b>	<b>3</b>
<b>Social Studies</b>	<b>3</b>	<b>3</b>
<b>Physical Education</b>	<b>1.5</b>	-
<b>Health</b>	<b>.5</b> <b>(if not taken in 7<sup>th</sup> or 8<sup>th</sup> grade)</b>	-
<b>Technology</b>	<b>.5</b>	-
<b>Fine Arts</b>	<b>.5</b>	-
<b>Modern Language</b>	<b>(highly recommended)</b>	<b>Highly recommended</b> <b>(2 required at Eau Claire and Madison)</b>
<b>Academy</b>	<b>1</b>	-
<b>Electives</b>	<b>8</b>	<b>4</b>
<b>Total Credits</b>	<b>29</b>	<b>17</b>

### Required Classes:

- **English** – English 9, English 10, English 11, English 12 or AP English
- **Religion** – Religion 9, Religion 10, Religion 11, Religion 12 (Apologetics), plus 1 additional course
- **Math** –
  - Algebra or Algebra Essentials; Informal Geometry or Geometry; Algebra 2 or AAT or HAAT
  - Geometry; AAT or HAAT; Pre-Calculus or HPC

**Science** – Foundations of Science, Biology, plus 1 additional course

**Social Studies** – World History, American History, Government, Economics

**Technology** – Introduction to Engineering Practices(Required for Class of 2021)

**Physical Education** – Physical Education 9, Physical Education 10, plus 1 additional course

**Academy** - Academy 9, Academy 10, Academy 11, Academy 12

# RONCALLI HIGH SCHOOL

## Course Offerings

<b><u>ART</u></b>	<b><u>Year</u></b>	<b><u>MATHEMATICS</u></b>	<b><u>Year</u></b>	<b><u>RELIGIOUS STUDIES</u></b>	<b><u>Year</u></b>
2-D Art*	9-12	Algebra Essentials	9	Religion 9	9
3-D Art*	9-12	Algebra I	9	Religion 10	10
Architecture Drawing	10-12	Geometry	9-10	Religion 11	11
Ceramics & Sculpture*	10-12	Informal Geometry	10-11	Religion 12: Apologetics*	12
Drawing*	10-12	Honors Adv. Algebra and Trigonometry	10-11	Senior Theology*	12
Painting*	10-12	Advanced Algebra and Trigonometry	10-11	Service and Spirituality*	12
Graphic Design*(18-19)	11-12	Algebra 2	11-12	World Religion*	12
Printmaking (17-18)	11-12	Pre-Calculus	11-12		
Studio Problems*	12	Honors Pre-Calculus	11-12	<b><u>SCIENCE</u></b>	
Senior Art*	12	Probability and Statistics*	11-12	Foundations of Science	9
Art Outreach*	12	A.P. Calculus	12	Biology	10-12
		Calculus	12	Chemistry	10-12
		Trigonometry*	12	AP Physics	10-12
				Environmental Science	11-12
				Human Biology	11-12
				A.P. Chemistry (17-18)	11-12
<b><u>BUSINESS/TECHNOLOGY</u></b>		<b><u>MODERN LANGUAGE</u></b>		<b><u>SOCIAL STUDIES</u></b>	
Intro to Engineering Practices*	9-12	Spanish 1	9-11	World History	9
Software Applications*	9-12	Spanish 2	9-12	Mock Trial*	
Computer Architecture*	10-12	Spanish 3	10-12	(meets after school)	9-12
Multimedia Techniques*	10-12	Alternate on-line Language#	11-12	American History	10
Computer Languages/Coding*	10-12	Spanish 4	11-12	Economics*	11-12
Tech Support*	11-12	Spanish 5	12	Government*	11-12
Intro to Business*	11-12			Intro To Sociology*	11-12
Intro to Marketing*	11-12			A.P. U.S. History	11-12
Accounting*	11-12			Psychology*	11-12
		<b><u>MUSIC/FINE ARTS</u></b>			
<b><u>ENGLISH</u></b>		Mixed Choir	9	<b><u>OTHER REQUIREMENT</u></b>	
English 9	9	Beginning Band	9-12	Academy	9-12
English 10	10	Concert Band	9-12		
English 11	11	Colorguard*	9-12	<b><u>Alternative Course Options</u></b>	
Creative Writing*	11-12	Concert Choir	10-12	Study Skills#	9-12
Public Speaking*	11-12	Oratorio Choir	10-12	Alternative Course#	11-12
English 12	12	Music Theory and Composition*	11-12	Youth Apprenticeship	11-12
A.P. English	12	Survey of Film/Theatre*	11-12	College Courses#	12
University Reading*	12			Career Internship*	12
		<b><u>PHYSICAL EDUCATION and HEALTH</u></b>		Senior Project#	12
		Health*	9-12	The Great Courses*#	12
		Physical Education 9*	9		
		Physical Education 10*	10		
		Nutrition and Fitness*	11-12		
		Individual/Team Sport*	11-12		
		Student Athletic Trainer*#	11-12		
		Strength Training & Conditioning*#	11-12		
		Outdoor Education*#	11-12		
		Alternate Phy Ed Elective#	11-12		
<b><u>FAMILY/CONSUMER ED</u></b>				<b><u>CODE</u></b>	
Consumer Sciences Inv.* (CSI)	9			* Semester-long course	
Foods 1*	10-12			# Approval needed	
Foods 2*	10-12				
Child Development and Parenting*	10-12				
Interior Design* (17-18)	10-12				
Sewing 1* (18-19)	10-12				
Sewing 2* (18-19)	11-12				
Nutrition and Fitness*	11-12				
Career and Life Skills*	11-12				
Family & Consumer Ed. Survey*	12				

## Art

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### Fundamentals of 2-D Art

Elective

Length: One semester

Prerequisites: None

Grade: 9, 10, 11, 12

Fulfills Fine Arts requirement

Credit: .5

This is a general course introducing the fundamentals of creative expression. Emphasis will be on the understanding and application of basic design elements and principles, composition, techniques, and media in a two-dimensional format. This will include work in drawing, painting, design, graphic design, and printmaking. A weekly sketchbook assignment reinforces in-class areas of the student as well as encouraging student creativity.

### Fundamentals of 3-D Art

Elective

Length: One semester

Prerequisites: None

Grade: 9, 10, 11, 12

Fulfills Fine Arts requirement

Credit: .5

This is a general course introducing the fundamentals of creative expression. Emphasis will be on the understanding of basic design elements and principles, composition, techniques, and media in a three-dimensional format. This will include work in relief, ceramics, assemblage, and subtractive sculpture. In each area, problem-solving activities and use of basic tools and materials give students growth in life skills.

### Architectural Drawing

Elective

Length: Two semesters

Prerequisites: None

Grade: 10, 11, 12

Fulfills Fine Arts requirement

Credit: .5 per semester

In this two-semester course, students will discover what it is like to be an architect by studying the story of architecture, including history, architectural studies, the forms of architecture, and the occupations of architects and builders. Emphasis will be placed on drawing and studying blueprints.

### Ceramics and Sculpture

Elective

Length: One semester

Prerequisites: A or B in Fundamentals of 3-D Art

Grade: 10, 11, 12

Fulfills Fine Arts requirement

Credit: .5

This course further explores the art of sculpture and three-dimensional design, as introduced in Fundamentals of 3-D Art. Areas to be studied include advanced units in ceramics and glazes, the use of a potter's wheel, soft sculpture, enameling, and an introduction to the jewelry making process.

## **Drawing**

Elective

Length: One semester

Prerequisites: Fundamentals of 2-D Art

Grade: 10, 11, 12

Fulfills Fine Arts requirement

Credit: .5

This course will further explore the variety of drawing techniques as introduced in Fundamentals of 2-D Art. An experimental approach to drawing media and methods will be taken as well as the study of contemporary artists and designers. Creative drawing and visual thinking will be emphasized.

## **Painting**

Elective

Length: One semester

Prerequisites: Fundamentals of 2-D Art

Grade: 10, 11, 12

Fulfills Fine Arts requirement

Credit: .5

This course will explore the variety of painting techniques as introduced in Fundamentals of 2-D Art. Media explored includes watercolor, acrylic, and oil on a variety of grounds. Emphasis will be on creativity and experimentation. The works of contemporary painters will also be studied as well as matting and framing techniques.

## **Graphic Design and Publication (18-19)**

Elective

Length: One semester

Prerequisites: None

Grade: 11, 12

Fulfills Fine Arts requirement

Credit: .5

Graphic Design and Publication will prepare the student to enter the job market with minimal skills in advertising design, cartooning, contemporary hand lettering techniques, media arts, illustration, graphic design, web design, photography, layout, and window and bulletin board design. Through work on the school's yearbook, the student will learn writing and interviewing, advertising, sales and marketing, finance and budgeting, publishing, proofreading and time management. Field trips and community resource people will be utilized to make the experience relevant and meaningful.

## **Printmaking (17-18)**

Elective

Length: One semester

Prerequisites: Fundamentals of 2-D Art

Grade: 11, 12

Fulfills Fine Arts requirement

Credit: .5

Printmaking will explore the four basic methods of making original prints. This will include work in planographic (lithography), relief (wood engraving, linocut), intaglio (etching), stencil (screen printing), and the monoprint. Each method will stress design elements and principles to create motifs that express personal interests and strong compositions.

## Studio Problems

Elective

Length: One semester

Prerequisites: 2-d or 3-d Architecture or Senior Art

Grade: 12

Fulfills Fine Arts requirement

Credit: .5

Studio Problems offers seniors the opportunity to build a portfolio for college scholarship and application as well as giving students the opportunity to specialize in a particular area of the Arts. Portfolio's in drawing, painting, sculpture, ceramics, graphic design and architecture are possible.

## Senior Art: The Basics

Elective

Length: One semester

Prerequisites: None

Grade: 12

Fulfills Fine Arts requirement

Credit: .5

Have you ever wanted to draw a picture but feel your skills are just not there? Do you have trouble knowing what colors look good together? Do you know which is the best glue for putting that broken mug back together? Do you avoid going to art shows and galleries because you don't know a van Gogh from a Lichtenstein? Well, this class may be for you. Senior Art is an introductory course on the "basics" of art. What it is, why people do it, and what it does for us. Real life is filled with everyday art decisions you may not be equipped to answer. This class will help.

## Art Outreach

Elective

Length: One semester

Prerequisites: Fundamentals of 2-D and 3-D Art

Grade: 12

Fulfills Fine Arts requirements

Credit: .5

This course provides senior art students an opportunity to share their talents with others by not only creating a body of work suitable for the Senior Art Exhibit but also by and designing exciting art lessons for the elementary aged students of Roncalli's feeder schools. This course is designed to direct the student to work independently and as members of a group. Emphasis will be on sharing one love of art with others. The students will also be responsible for the planning and execution of an Elementary Art Exhibit to be held at Roncalli during March in cooperation with the national youth art month celebration

## **STEM**

### **Introduction to Engineering Practices**

Freshmen Requirement; Elective 10,11,12

Length: One semester

Prerequisites: None

Grade: 9,10,11,12

Fulfills Technology requirement

Credit: .5

This STEM course is a basic introduction to engineering for all students. It is a blended course with an in-house instructor paired with online learning. Students who complete this course will learn the concepts needed to develop their ideas into solutions that will improve our lives. Exciting hands-on learning activities like data comparison of heart rates, rating consumer products, destructive testing and 3D solid modeling will apply math, science, technology, history and English content from other courses into a STEM experience.

### **Principles Of Engineering (18-19)**

Elective

Length: One semester

Prerequisites: Introduction to Engineering

Grade: 9,10,11,12

Credit: .5

This STEM course contributes to the curriculum by providing opportunities for students and teachers to link content together and apply it to solve problems. More and more jobs demand advanced skills, requiring team members to learn, reason, think creatively, make decisions, and solve problems. An understanding of science, technology, engineering and math and their methods contribute in an essential way to these skills. Principles of Engineering is a team based advanced course designed for most students. Students who complete this course will engage in real-world case studies and learning activities that focus on the engineering process, making the world a better place to live and work.

### **3D Solid Modeling (19-20)**

Elective

Length: One semester

Prerequisites: Intro to Engineering and Principles of Engineering

Grade: 10,11,12

Credit: .5

Learning 3D design is an interactive process. Students learn best when they can explore practical applications of the concepts presented. This STEM course has many activities and exercises that enable students to put design concepts into practice. Students solidify ideas such as artificial heart components, extreme sports equipment, hip replacement parts, robotic arm components, and musical instruments to name a few. Ideas become reality in this course.

UNITS: Understanding a Graphical User Interface (GUI), Basic Functionality, Sketched Features, Basic Operations in 3D Solid Modeling, Applied Features, Loft Features, Pattern Features, Fillets, Design Tables, Assembly Basics, Toolbox Basics, Drafting Basics, Visualization, Basic Sheet Metal Design Theory, Surfacing Features, Weldment Features, Predictive Analysis and Simulation, SolidWorks CSWA Certification

### **Software Applications**

Elective

Length: One semester

Prerequisites: None

Grade: 9, 10, 11, 12

Credit: .5



This course expands on the general concepts studied in Technology Survey. Students will compare/contrast features of major software suites such as Microsoft Office and Corel WordPerfect. Students will work more intensely with word processing, spreadsheet and database applications.

## **Computer Architecture**

Elective

Grade: 10, 11, 12

Length: One semester

Prerequisites: None

Credit: .5

Students will learn how to diagnose simple computer problems, install hardware, upgrade memory, and gain an understanding of the hardware components as they work in harmony within the system.

## **Multimedia Techniques**

Elective

Grade: 10, 11, 12

Length: One semester

Prerequisites: Software Applications

Credit: .5

Students learn the basics of multimedia software and hardware. Topics that will be included are creating multimedia presentations, scanning/editing photographs, video editing and working with digital images.

## **Computer Languages/Coding**

Elective

Grade: 10, 11, 12

Length: One semester

Prerequisites: Software Applications

Credit: .5

Students will explore computer languages such as HTML, Java, JavaScript, and C that are used in the production of web pages, computer programs, and graphic animation/creation.

## **Tech Support**

Elective

Grade 11, 12

Length: One Semester

Prerequisites: Computer Architecture

Credit .5

The student will assist the technology coordinator in computer updates and trouble shooting for any problems that arise.

## **Introduction to Business**

Elective

Grade 11, 12

Length: One Semester

Prerequisites: None

Credit: .5

Introduction to Business is designed to provide you with a solid foundation of knowledge in a variety of business-related areas. You will gain an understanding of economic systems, business ownership, entrepreneurship, personal finance, and explore career opportunities. While exploring the career opportunities, you will have the opportunities to practice creating cover letters and resumes.

## **Introduction to Marketing**

Elective

Grade 11, 12

Length: One Semester

Prerequisites: None

Credit .5

Introduction to Marketing is a one semester class. It is recommended for students that are considering a career in any aspect of business. The class offers a survey of market research, product research and development, product distribution, advertising, and selling. Career opportunities in various businesses will be explored throughout the course.

## **Accounting**

Elective

Grade 11, 12

Length: One Semester

Prerequisites: None

Credit .5

Accounting will give you a thorough background in the basic accounting procedures used to operate a business. The accounting procedures presented will also serve as a solid background for employment in office jobs and preparation for studying business courses in a 4-year or a 2-year college or university.

## English

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### English 9

Freshmen requirement  
Length: Two semesters  
Prerequisites: None

Grade: 9  
Fulfills English graduation requirement  
Credit: .5 per semester

The reading of nonfiction, short stories, novels, drama, and poetry will highlight literary study. This course concentrates on grammar, vocabulary development, writing, and speaking skills. These skills are applied and integrated into the reading of literary selections. Writing expectations are journaling, structuring varied and effective sentences, creating coherent paragraphs, and developing logical formal essays which include the descriptive and the personal essay. Speaking includes an overview of the process of communication, interviewing, and informative speeches.

### English 10

Sophomore requirement  
Length: Two semesters  
Prerequisites: None

Grade: 10  
Fulfills English graduation requirement  
Credit: .5 per semester

American Literature and Composition is a required writing-intensive course which introduces students to early American literature from the pre-colonial era to the twentieth century. This integrated reading, writing, and speaking course focus on American literature as the context for developing literary skills and appreciations which are then expressed in quality writing and speaking. Writing expectations include the autobiography, persuasive essay, comparative essay, and informative essays. Both informative and persuasive speeches are part of the course work.

### English 11

Junior requirement  
Length: Two semesters  
Prerequisites: None

Grade: 11  
Fulfills English graduation requirement  
Credit: .5 per semester

British/World Literature Survey is full year course designed for the student to read a selection from British and European literature. Emphasis is on viewing literature in its social, political, and historical perspective and analyzing, interpreting, and responding to literature. Active participation in class discussion, literary analysis essays, and research report will be required. The process and writing of a college level research paper will be a focus of the class.

### Creative Writing

Elective  
Length: One semester  
Prerequisites: None

Grade: 11, 12  
Credit: .5

Creative Writing is designed to give students experience in both reading a variety of creative fiction and nonfiction and writing in a variety of forms and styles. Students will write daily, using prompts to create one to two paragraph pieces. Students will read published pieces and complete a variety of exercises during class, giving them experience in writing dialogue, poetry, essays, news articles, short stories, fable, biography, description, explanation, and persuasion. The student will read original pieces aloud in class and may publish pieces online at figments.com or other secure sites that allow members to read and react to each other's writing. In addition to daily and class writing, each student will set his or her own writing goal for the semester, to be turned in as a final exam. These may include but are not limited to: a collection of poetry, a collection of essays, a collection of news articles and interviews, a collection of letters, biography or memoir, a short story. All writing will be assessed against the 6 Traits of Writing and aligned to the National Association of Teachers of English Language Arts Standards and Benchmarks.

### Public Speaking

Elective  
 Length: One semester  
 Prerequisites:

Grade: 11, 12  
 Credit: .5

Principles of effective public speaking, with emphasis on preparing and delivering well-organized, logical, and persuasive arguments. This is a laboratory type student participation course with emphasis on learning-by-doing. Includes informative and persuasive speeches, presentations, and impromptu speeches.

## English 12

Senior requirement  
 Length: Two semesters  
 Prerequisites: none

Grade 12  
 Fulfills English Graduation requirement  
 Credit: .5 per semester

This full-year integrated senior English course is designed to help students become skilled readers and writers. Reading materials will be selected from both classics and contemporary plays, poetry, essayists, short stories, and novels. This course will include the writing of a variety of academic essays including a critical analysis, critical review, an investigative report, and creative writing.

## Advanced Placement English

Elective  
 Length: Two semesters  
 Prerequisites: None

Grade: 12  
 Fulfills English graduation requirement  
 Credit: .5 per semester

In place of Senior English, seniors may take Advance Placement English. This two-semester advanced placement course engages college-bound seniors in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. Expository, analytical, and argumentative writing are required. The course is very demanding and has the same writing and reading expectations as a university. Students are strongly encouraged to take the AP exam when it is offered in May

## University Reading Seminar

Elective  
 Length: One or Two semesters  
 Prerequisites: None

Grade: 12  
 Credit: .5

University Reading Seminar is a guided reading course designed to expose the college-bound senior to classic and award winning literature as well as current and classic nonfiction of the type that they will be required to read in college. Students will read approximately one book per month and be prepared to discuss the book, in depth, with both the instructor and peers. In addition, students will be required to complete a writing assignment for each book read, the purpose of which is to give them experience in the kind of writing that will be required of them in college

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## **Family & Consumer Education CSI (Consumer Sciences Investigation)**

Elective Grade: 9  
Length: One semester  
Prerequisites: None Credit: .5

This course is designed to introduce students to the realm of Family and Consumer Education (FACE). The course provides students the opportunity to learn essential life skills by allowing them to develop skills in food and nutrition, basic sewing, consumerism, family relationships and personal responsibility.

## **Foods 1**

Elective Grade: 10, 11, 12  
Length: One semester  
Prerequisites: None Credit: .5

Make eating an adventure! Travel around the world and through the United States with food as your guide. Explore the psychology of food and why you eat the way you do. By focusing on basic kitchen skills, you will gain an understanding of the science of food. Proper preparation knowledge will be developed through labs that cover global and regional dishes, with an emphasis on basic kitchen skills. Creativity is encouraged through units covering cake decorating and a Chili cook-off.

## **Foods 2**

Elective Grade: 10, 11, 12  
Length: One semester  
Prerequisites: Foods 1 Credit: .5

Be an artist in the kitchen! Express your creativity with food preparation and service. Entertain with style. Study meal planning for different occasions, learn proper food service techniques, discover gourmet and microwave cooking. Make elegant desserts, bake yeast bread, and prepare complete meals. Show off your skills in a pie baking contest. This course will prepare you for cooking as a relaxing hobby or for employment in a food related job.

## **Child Development and Parenting**

Elective Grade: 10, 11, 12  
Length: One semester  
Prerequisites: None Credit: .5

The purpose of this course is to help students acquire an understanding of human growth and development, learn child psychology, develop skills in positive discipline, evaluate various parenting methods, and follow the physical, intellectual, and social development of children from conception to school age. Learning the history and theories of experts in the development area helps a student to work with and to nurture children in both their personal lives and in their careers. Toddlers and pre-schoolers will be observed and guided during a nursery school experience planned by the students. Anyone considering a career which involves children, who babysits, or who wants to someday be a parent should consider this course.

## **Interior Design (17-18)**

Elective Grade: 10, 11, 12  
Length: Second semester  
Prerequisites: None Credit: .5

After studying the elements of basic design--color, line, balance, rhythm, proportion, and harmony—the student will learn how to apply the elements of design to clothing, buildings, and home furnishings. Fashion design and merchandising would include designing of original garments for specific body types and occasions and analysis of fashion merchandising techniques. Home and interior design would include architecture, floor planning, and interior decorating principles.

### **Sewing 1 (18-19)**

Elective

Grade: 10, 11, 12

Length: One semester

Prerequisites: None

Credit: .5

Learn to sew! This course is designed for any sewing ability with the student planning the units he/she will complete from patterns, kits or original designs. Sewing can be a hobby, a way to save money, a part-time business or a creative career. Have fun with a sewing machine and hand stitching needle. Any project using thread, fabric or stitching may be constructed. Projects to be made could include: duffle luggage, quilts, sportswear, home furnishings, stuffed animals, sew for children, makes clothes for school or formal occasions. Learn to needlepoint, embroider, cross stitch, stencil, patchwork, quilt and more.

### **Sewing 2 (18-19)**

Elective

Grade: 11, 12

Length: One semester

Prerequisites: Sewing 1

Credit: .5

Advanced sewing for students that have taken Sewing 1.

### **Nutrition and Fitness**

Elective

Grade: 11, 12

Length: First semester

Prerequisites: None

Fulfills Phy Ed requirement

Credit: .5

Mix food with physical fitness as you study the significance of lifestyle on your health, athletic performance, and weight maintenance. The class will help students attain practical fitness and nutrition goals and apply healthy food choices to snacking, home cooking, and eating out. Assume control and responsibility for living a long and healthy life. Experience a variety of fitness and cooking experiences. Develop your optimum level of physical fitness as we explore fitness concepts and prepare food to enhance body composition. Classes will alternate between studies and experiences with nutrition topics and participation in fitness workouts.

### **Career and Life Skills**

Elective

Grade 11-12

Length: One Semester

Prerequisites: None

Credit: .5

Career and Life Skills is a course designed to help students prepare skills for, and make the transition to, the world beyond high school. The student will chart a course for success by examining personal character, values, and goals then use that information to plan for the future. Other topics include resumes, interviews, and effective communication. Additionally, the student will discover the basics of personal finance. In cooperation with outside businesses, students will have an opportunity to job shadow a profession/occupation of interest to them.

## **Family and Consumer Education Survey**

Elective

Grade: 12

Length: One semester

Prerequisites: None

Credit: .5

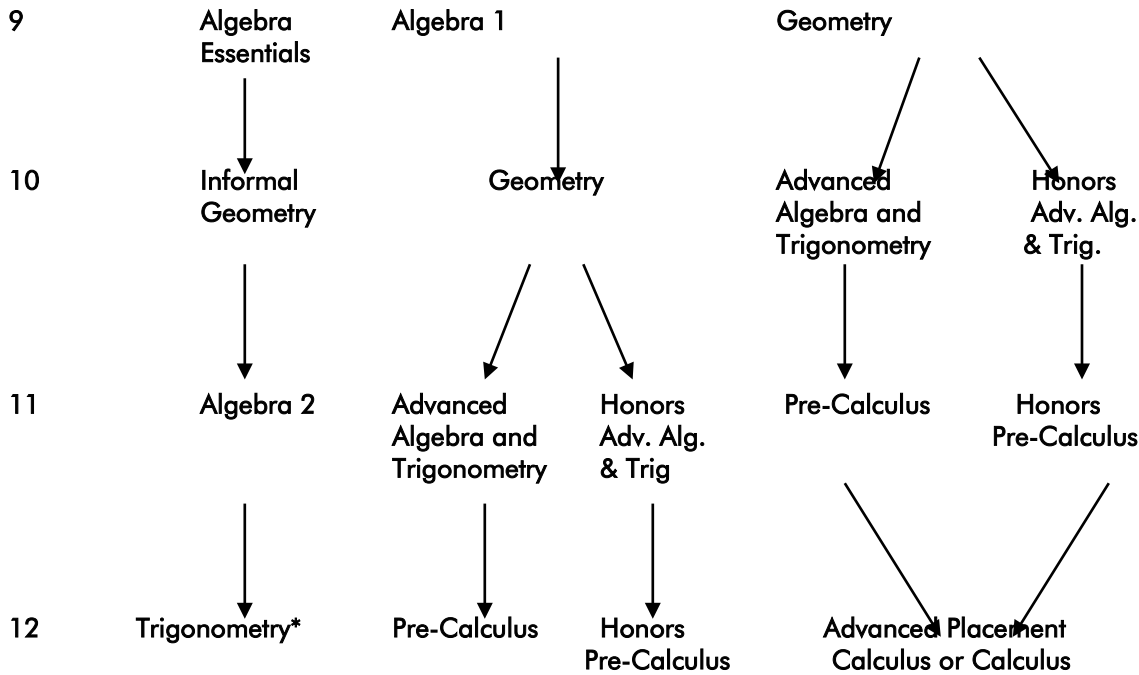
This course allows students interested in specific areas of Home Economics to design units that meet their individual needs and talents. It allows the student with little or no experience to study a variety of subject areas in one semester, yet it provides the student having experience with in-depth, advanced study opportunity. The student will choose from an extensive list of study areas. Coursework includes a service project, to be determined by the instructor.

## *Mathematics*

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### *Mathematics Sequence of Study:*

Grade    Courses



- Available at the Junior and Senior level is a one-semester course in **Probability and Statistics** for ½ credit
- Trigonometry is a ½ credit course

**All mathematics students will learn to communicate mathematically through the use of journals and written assignments. Graphing calculators and computers are technological tools that will be used to help students gain a deeper understanding of the concepts being taught in each mathematics course.**

**An Honors Mathematics Program is available to qualifying students. To continue in the program, a minimum of a “B” average must be maintained each year. Student eligibility will be evaluated at the completion of each semester. All courses in the Honors sequence require teacher approval. Students in the Honors Mathematics Program are required to attend math meets.**

### Algebra Essentials

Elective  
 Length: Two semesters  
 Prerequisites: Placement by Mathematics Department

Grade: 9  
 Fulfills Math graduation requirement  
 Credit: .5 per semester

Algebra Essentials is an extension of arithmetic in which the fundamental operations are applied to positive and negative numbers and algebraic expressions. The student learns to factor, apply arithmetic operations to polynomials, graph, and solve equations and inequalities and will be introduced to the appropriate use of technology. These topics are further examined through real world applications.

### Algebra 1

Elective  
 Length: Two semesters  
 Prerequisites: Placement by Mathematics Department

Grade: 9  
 Fulfills Math graduation requirement  
 Credit: .5 per semester

In Algebra 1, real numbers and their properties are studied as they apply to such topics as solving linear equations and inequalities and systems of equations in two variables. Arithmetic operations are applied to polynomials and rational expressions. Factoring of polynomials, functions and their graphs, and radicals are



also studied. Emphasis is placed on real-world applications and the appropriate use of technology throughout the course.

## Geometry

Elective

Length: Two semesters

Prerequisites: Algebra Essentials or Algebra I  
and recommendation of mathematics teacher

Grade: 9, 10

Fulfills Math graduation requirement

Credit: .5 per semester

This course is devoted to plane geometry with short introductions to solid geometry and coordinate plane geometry. Logical thinking is used to help students understand proofs and the writing of proofs. Students are encouraged to make generalizations based on observations. Algebra is integrated throughout the course. Students learn relationships between geometric figures and how to solve problems concerning them. Emphasis is placed on real-world applications throughout the course.

## Informal Geometry

Elective

Length: Two semesters

Prerequisites: Algebra Essentials

Grade: 10, 11

Fulfills Math graduation requirement

Credit: .5 per semester

Informal Geometry introduces a student to a practical understanding of geometry and how it relates to real life. The course emphasizes intuitive development rather than formal two-column proofs, however, some proofs are written. Students explore, experiment, and discover geometric concepts through a variety of construction and measurement activities and other practical exercises. Algebraic principles are applied to geometric concepts throughout the course.

## Honors Advanced Algebra and Trigonometry

Elective

Length: Two semesters

Prerequisites: "A" average in Geometry with teacher's  
recommendation

Grade: 10, 11

Fulfills Math graduation requirement

Credit: .5 per semester

This is the second course in the Honors Mathematics Program. The course covers the same material as is taught in Advanced Algebra and Trigonometry but in greater depth. Supplemental topics may include matrix applications, applications in science and technology, as well as advanced topics in trigonometry.

## Advanced Algebra and Trigonometry

Elective

Length: Two semesters

Prerequisites: Successful completion of an Algebra and  
Geometry course and recommendation of  
mathematics teacher

Grade: 10, 11

Fulfills Math graduation requirement

Credit: .5 per semester

This course continues the development and understanding of concepts taught in Algebra 1 with special emphasis on polynomial functions and relations; rational and irrational expressions; systems of equations, exponents, and logarithms, and statistics. Throughout the course, the emphasis is placed on technology as a

means to solving problems. Approximately three quarters are spent on the above topics and the remaining quarter on trigonometric and circular functions and relations.

## Algebra 2

Elective

Length: Two semesters

Prerequisites: Successful completion of an Algebra and Geometry course and recommendation of mathematics teacher

Grade: 11, 12

Fulfills Math graduation requirement

Credit: .5 per semester

The material covered is similar to the algebraic portion of Advanced Algebra and Trigonometry. Application problems are used to connect topics to the real world. It is intended for students who have taken Algebra Essentials or those who need the Algebra 1 concepts strengthened and expanded.

## Pre-Calculus

Elective

Length: Two semesters

Prerequisites: Successful completion of Algebra, Geometry, and Advanced Algebra and Trigonometry with teacher's recommendation

Grade: 11, 12

Fulfills Math graduation requirement

Credit: .5 per semester

This course is a preparation for calculus on the college level. The main topics include relations and functions; linear programming and matrices; the theory of equations and graphs; circular and trigonometric functions and relations; their graphs and inverses; vector analysis; sequences and series; exponential and logarithmic functions; probability and simple statistics; limits; and elementary differential and integral calculus. Emphasis is placed upon real-world applications throughout the course. Appropriate use of technology is integrated into many lessons throughout the course.

## Honors Pre-Calculus

Elective

Length: Two semesters

Prerequisites: "B" average or better in Honors Advanced Algebra and Trigonometry with teacher's recommendation

Grade: 11, 12

Fulfills Math graduation requirement

Credit: .5 per semester

This is the third course in the Honors Mathematics Program. The course covers the same material as is taught in Pre-Calculus but in greater depth. Supplemental topics may include graph theory and its applications, matrices with real-life applications as well as several other discrete mathematics topics. The use of technology is integrated throughout the course.

## Probability and Statistics

Elective

Length: One semester

Prerequisites: Successful completion of Algebra and Geometry

Grade: 11, 12

Fulfills Math graduation requirement

Credit: .5

Statistics are used in almost all fields of everyday life. It is the purpose of this one-semester course to educate the student to be knowledgeable about the vocabulary, concepts, and procedures of statistics. Topics covered will include frequency distributions and graphs, data description (measures of central tendency), and counting techniques (permutations and combinations). In addition to being used in games of chance, probability theory is used in the fields of insurance, investments and weather forecasting as well as in

other areas. The basic concepts of probability will be explained. These concepts include probability experiments, samples spaces, the addition and multiplication rules of probability and the probabilities of complementary events. The student will use appropriate technology throughout the course.

## Advanced Placement Calculus

Elective

Length: Two semesters

Prerequisites: Placement by Mathematics Department

Grade: 12

Fulfills Math graduation requirement

Credit: .5 per semester

This course is divided into three major sections: elementary functions including the properties and limits of algebraic, trigonometric, exponential and logarithmic functions; differential calculus including the derivative and its applications; and integral calculus including antiderivatives, applications of antiderivatives and techniques of integration, and the definite integral and its applications. Students are strongly encouraged to take the Advanced Placement examination for college credit.

## Calculus

Elective

Length: Two semesters

Prerequisites: Placement by Mathematics Department

Grade: 12

Fulfills Math graduation requirement

Credit: .5 per semester

This course is similar to Advanced Placement Calculus. The topics covered will be the same, however, the depth of the topics will differ and students will not be expected to take the Advanced Placement examination for college credit.

## Trigonometry

Elective

Length: One semester

Prerequisites: Completion of 2<sup>nd</sup> Year Algebra  
and teacher recommendation

Grade: 12

Fulfills Math graduation requirement

Credit: .5

Trigonometry is a one semester course. Students will learn trigonometric skills and concepts. This course is the study of measures associated with right and non-right triangles. Trigonometric functions relating to real world applications are studied. Topics included are trigonometric functions, their graphs and inverses, solving right and non-right triangles, circular functions and trigonometric identities.

## Modern Language

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Spanish 1  
 Spanish 2  
 Spanish 3  
 Spanish 4  
 Spanish 5

Elective

Grade: 9, 10, 11, 12

Length: Two semesters

Prerequisites: All courses are sequential/teacher signature required

Credit: .5 per semester

The overall objective of the Modern Language Department is to provide the college-bound student, the future traveler, the foreign exchange students, the potential business traveler or diplomat, or any student of language, with a firm foundation in the listening, speaking, writing, and reading skills upon which further language study can take place.

- Year 1: A basic course which offers an introduction to the language being studied including sentence patterns, everyday vocabulary, functional grammar, and appropriate pronunciation.
- Year 2: A follow-up of first-year language study with a wider range of situations and experiences in speaking and listening as well as additional vocabulary. Grammar receives greater stress.
- Year 3: An extension of skills and information previously acquired with greater emphasis on fluency and grammatical correctness.
- Year 4: Further development of all four language skills with emphasis on increasing vocabulary and reading skills. Study of basic grammatical concepts completed.
- Year 5: Emphasis on communication skills; oral reports and introduction to important characters and themes of the literature; a review of more difficult grammatical usage and its extension to other structures as a preparation for further language study.

Language is clearly tied to the way people think and act. Therefore, much emphasis is placed on culture through:

- Viewing of films, slides, and videos
- Working with recordings of native speakers at authentic speed
- Opportunities for travel to target countries
- Foreign pen pals and email contacts
- Preparation of foreign meals or visits to restaurants
- Guest lecturers and work with exchange students
- Reading and listening to literary selections
- Projects on customs, dress, and places of interest where the language is spoken

Any student having studied a modern language during seventh and eighth grade with a cumulative grade of "A" or "B" will ordinarily be placed in the second year of language study at Roncalli High School.

## Alternative Online Foreign Language

Elective

Length: Two semesters

Prerequisites: None

Grade: 11,12

Credit: .5 per semester

Roncalli High School offers juniors and seniors the opportunity to take a foreign language through SevenStar an online, accredited, diocesan approved online education system. The program offers Chinese, French, Latin, and German. Classes will be scheduled to meet in the computer lab during the regular school day and will be supervised by a member of Roncalli's faculty. At this time, we are limiting our enrollment to 20 students on a first come, first served basis. Administrative approval is required to register

## Music/Fine Arts

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### Mixed Choir

Elective

Length: Two semesters

Prerequisites: None

Grade: 9,

Fulfills Fine Arts graduation requirement

Credit: .5 per semester

Mixed Choir is the entry level choir – open to freshman students. Its ultimate purpose is to perform a variety of excellent music and to develop the skills necessary to become a good musician. These skills include breath support and vocal production, sight singing, intonation, diction, and comprehension of musical terms and notation. The Mixed Choir participates in the Fall, Christmas, and Spring Concerts, as well as the Solo and Ensemble Contest and the District Choral Festival. Attendance at all concerts and the Choral Festival is required.

### Beginning Band

Elective

Length: Two semesters

Prerequisites: None

Grade: 9, 10, 11, 12

Fulfills Fine Arts graduation requirement

Credit: .5 per semester

Beginning Band is open to students interested in instrumental music. The goal of this program is to progress as quickly as possible so that students are ready to be a member of the performing organizations. Students in Beginning Band meet with the instructor once a week for a private lesson and use the other days for practice during that block. The instructor is available to meet with the student during practice times.

### Concert Band

Elective

Length: Two semesters

Prerequisites: Prior band experience  
or Beginning Band/Teacher  
signature required  
Percussion: Audition

Grade: 9, 10, 11, 12

Fulfills Fine Arts graduation requirement

Credit: .5 per semester

Concert Band is the instrumental performing organization on campus whose purpose is to provide the instrumentalist the opportunity to develop as a musician. Concert Band achieves this goal through performing activities including Marching Band, Pep Band, Solo and Ensemble activities, District Band Festival, and concerts. In all of these ensembles, students are exposed to music and composers of the highest caliber. Music history and theory are integrated into classroom instruction. Attendance at marching performances, Graduation, District Concert Festival, and all concerts is required. Students are expected to attend a bi-weekly lesson with the instructor. Percussionists need to take "Percussion Ensemble" and audition for concert Band before taking this class.

## Colorguard

Elective

Length: One semester (Fall)

Prerequisites: None

Grade: 9, 10, 11, 12

Fulfills Fine Arts graduation requirement

Credit: .5

Colorguard is the flag corps of the marching band and is open to male and female students. Colorguard contains elements of movement, drama, marching, and artistic freedom. Students will work with a choreographer and rehearse with the marching band. Students will have the opportunity to participate in the summer band program and any summer field trips. Attendance at all home football games, marching band concert, holiday parade, and two pep band performances is required.

## Concert Choir

Elective

Length: Two semesters

Prerequisites: None

Grade: 10, 11, 12

Fulfills Fine Arts graduation requirement

Credit: .5 per semester

Concert Choir is an advanced performing organization for sophomores, juniors, and seniors. It exposes students to the best of choral literature while continuing to develop the basic skills of musicianship. The individual's musical growth is the primary purpose of this course. Concert Choir members participate in the Fall, Christmas, and Spring Concerts, as well as the District Solo and Ensemble Contest and District Choral Festival. Attendance at all concerts and the Choral Festival is required.

## Oratorio Choir

Elective

Length: Two semesters

Prerequisites: Audition

Grade: 11, 12

Fulfills Fine Arts graduation requirement

Credit: .5 per semester

Oratorio choir is an audition only choir open primarily to juniors and seniors with rare exception for a maximum of 40 members. The music for this group is of an advanced nature including some of the major works from the 17<sup>th</sup> Century thru present day. Singers will be expected to be proficient at sight reading, notation, and interpretation of a musical score. Oratorio Choir members participate in the Fall, Christmas, and Spring Concerts, the Madrigal Dinner, as well as the Solo and Ensemble Contest and District Choral Festival. Attendance at all Concerts and the Choral Festival is required.

## Music Theory and Composition

Elective

Length: One or Two semesters

Prerequisites: Consent of a music instructor

Grade: 11, 12

Fulfills Fine Arts graduation requirement

Credit: .5 per semester

Music Theory and Composition is a course designed to help the individual student develop their creativity through a greater understanding of music theory. Students will be guided as individuals, based on their individual ability, through the process by using a computer to learn theory and compose music. This course may be taken multiple times with the student applying prior knowledge gained from previous experience. This course is project based. It is recommended that students participate in a school music ensemble while enrolled in this course.

## Survey of Film and Theater Arts

Elective

Grade: 11, 12

Length: One semester  
Prerequisites: None

Fulfills Fine Arts graduation requirement  
Credit: .5

This course will enable students to become critical viewers of film and theater by familiarizing the students with the technical and literary elements of both media. Students will also read several major works. Literary analysis, technical aspects of theater, film discussion, history, and analysis will also be studied. Written essays, critical reviews, and oral interpretation are stressed. This course does not fulfill English graduation requirement.



## Physical Education and Health

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### Health

Graduation Requirement  
Length: One semester  
Prerequisites: None

Grade: 9, 10, 11, 12  
Fulfills Health requirement  
Credit: .5

The importance of health education has never been greater. Knowledge gained in health education affects attitudes and consequently behavior. The course focuses on the relationship that exists between physical, mental, and social health. Our decisions affect all areas of health. Healthy decisions help students feel good about themselves, feel comfortable with others, and cope with the challenges of life. This course will cover such topics as disease, mental health, alcohol and drug abuse, nutrition, exercise, and stress. NOTE: If you have taken health in middle school (7th or 8th grade) you are not required to take health in high school. However, you may take health as an elective.

### Physical Education 9

Freshmen Requirement  
Length: One semester  
Prerequisites: None

Grade: 9  
Fulfills Phy. Ed. requirement  
Credit: .5

This course introduces the student to a variety of team and individual sports, with emphasis on fundamental skills, fitness and conditioning, simple game strategy, sports knowledge, and team play. Units include badminton, basketball, rollerblading, volleyball, soccer, softball, flag football, horseshoes, weight training, speed and agility, and fitness testing. Freshman Physical education will also include a daily 30-minute session of strength training and conditioning. Students will work towards a healthy lifestyle by implementing a self-imposed goal. Documenting all workouts will be part of the semester grade.

### Physical Education 10

Sophomore Requirement  
Length: One semester  
Prerequisites: None

Grade: 10  
Fulfills Phy. Ed. requirement  
Credit: .5

This intermediate course emphasizes skills and techniques in the following units: badminton, basketball, rollerblading, volleyball, soccer, softball, flag football, horseshoes, weight training, speed and agility, and fitness testing. Sophomore Physical Education will also include a daily 30-minute session of strength training and conditioning. Students will work towards a healthy lifestyle by implementing a self-imposed goal. Keeping a record of the progress will be part of the semester grade.

### Nutrition and Fitness

Elective  
Length: First semester  
Prerequisites: None

Grade: 11, 12  
Fulfills Phy. Ed. requirement  
Credit: .5

Mix cooking with physical fitness as you study the significance of lifestyle on your health, athletic performance, and weight maintenance. The class will attain practical fitness goal and nutrition information and apply healthy food choices to snacking, home cooking, and eating out. Assume control and responsibility for living a long and healthy life. Experience a variety of fitness and cooking activities. Develop your optimum level of physical fitness as we explore fitness concepts and prepare food to enhance body composition. Classes will alternate between studies and experiences with nutrition topics and participation in fitness workouts.

## Individual and Team Sports

Elective

Length: One semester

Prerequisites: None

Grade: 11, 12

Fulfills Phy. Ed. requirement

Credit: .5

Students will learn and practice various skills necessary to be successful in a variety of team and individual sports. This course provides an opportunity for students to experience sports and activities that will promote the concept of physical fitness for a lifetime. Units include basketball, badminton, volleyball, softball, and self-defense along with off-campus activities that include inline skating, golf, bowling, tennis, horseshoes, and Frisbee golf. There might be an additional cost for the field trips and materials. The course will educate students on the basic rules, strategies, and knowledge of team and individual sports.

## Student Athletic Trainer

Elective

Length: Second semester

Prerequisites: Consent of Mr. Mueller

Grade: 11, 12

Fulfills Phy. Ed. Requirement

Credit: .5

This course provides students with knowledge, skills, and understanding for the prevention, treatment, and rehabilitation of injuries typically seen by Athletic Trainers. It will provide a foundation of basic human anatomy and physiology and provide the students with 1st Aid, CPR, and AED certification through the American Heart Association. It will also touch upon other disciplines such as nutrition, conditioning, and administration while developing important organizational and leadership qualities.

## Strength Training and Conditioning

Elective

Length: One semester

Prerequisites: Consent of Mr. Mueller

Grade: 11, 12

Fulfills Phy. Ed. Requirement

Credit: .5

The class is a co-ed course for both athletes and non-athletes. It includes instruction in the basic principles of strength training and conditioning. Students must be prepared to work towards a healthy lifestyle using the strength training and conditioning principals taught in the course. Test and measurements of fitness, strength, and conditioning, as a means of evaluating progress, will be part of this course. There is limited enrollment and the class may only be taken once per school year, twice total.

## Basic Outdoor Education

Elective

Length: see below – Outside the regular school day

Prerequisites: Administration approval, limited enrollment

Grade: 11 or 12

Fulfills Phy Ed Graduation Requirement

Credit: .5

A well-planned camping trip is a learning adventure which develops personal values and concepts, group cooperation, and appreciation for the natural environment. Students under the direction of their leaders will determine goals for the trip and identify ways to accomplish them. A journal will be kept throughout the outdoor experience. Possible activities during the camping weekend - Set up camp - Service project – Navigation skills using a map and compass - Fishing– Canoeing. There will be two classroom sessions to prep for the camping trips. First camping trip for two days and one night will be a weekend in September, and the second trip for two days and one night will be a weekend in November.

**Alternate Physical Education Elective**

Student athletes, having successfully completed Physical Education 9 and 10, and who participate in two WIAA sanctioned sports in each of two academic years, may earn a ½ credit of Physical Education to complete the graduation requirement. The student must be a full participant and finish the season in each sport and submit a form signed by the Athletic Director, verifying this information upon completion of each season. The form must then be submitted to the guidance office to be included on the student's transcript. This option will be graded as pass/fail. Full participation and submission of the proper, signed forms, on time will ensure a grade of "passing".

## Religious Studies

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### Religion 9

Freshmen requirement  
Length: Two semesters  
Prerequisites: None

Grade: 9  
Fulfills Religious Studies requirement  
Credit: 1.0

This class studies the sacramental nature of our faith, including an in-depth examination of the seven sacraments. We will also discuss the sacramental aspect of the human body as created in the image of God. The freshman year will include a class on Christian Scriptures, including the Gospels and the Epistles.

### Religion 10

Sophomore Requirement  
Length: Two semesters  
Prerequisites: None

Grade: 10  
Fulfills Religious Studies requirement  
Credit: 1.0

During their sophomore year, students will cover the topics of Theology of the Body and Social Justice. In Theology of the Body, students will consider the sacramental nature of our lives; particularly, how God's plan for humanity is revealed through our sexuality. Social Justice examines the social teaching of the Catholic Church, based on scripture.

### Religion 11

Junior requirement  
Length: Two semesters  
Prerequisites: None

Grade: 11  
Fulfills Religious Studies requirement  
Credit: 1.0

Church History will look at the significant events and important persons that have shaped the history and experience of the Roman Catholic Church. Scripture studies will be a one semester class focusing primarily on the Old Testament.

### Religion 12: Apologetics

Senior requirement  
Length: One semester  
Prerequisites: None

Grade: 12  
Fulfills Religious Studies requirement  
Credits: .5

This course will help students come to a fuller understanding of the teachings of the Catholic Church in order to learn, live and love the Catholic faith. It will provide students with a clearer sense of how to answer questions regarding the Catholic faith.

### Senior Theology

Elective  
Length: One semester

Grade: 12  
Fulfills Religious Studies requirement

Prerequisites: None

Credit: .5

Senior Theology explores the origins of faith. The class examines the difference between theology, faith, and religion to expose the true nature of God's plan for us. The primary text is "Meet the Living God." Other readings are also required.

## **Service and Spirituality**

Elective

Length: One semester

Prerequisites: None

Grade: 12

Fulfills Religious Studies requirement

Credit: .5

In Service and Spirituality, students will learn the true definition of "the common good" as well as the history of civic responsibility and the obligations of being a "participatory citizen." Studying documents of our Faith Fathers, our Nation's Founding Fathers and religious texts from other world religions, students will address the fundamental values and ideas shared by all in regard to service and civic responsibility. Students will gain a cursory understanding of the purpose, funding, and operations of governmental and non-profit "Third Sector" groups who work in service of mankind. They will gain an appreciation for the impact that service groups make on our communities and will learn how to "jump-in" for themselves.

## **World Religions**

Elective

Length: One Semester

Prerequisites: None

Grade: 12

Fulfills Religious Studies requirement

Credit: .5

In this class, we will examine the origins, belief systems, and practices of the world's major non-Christian religions: Hinduism, Islam, Buddhism, and others. We will also study non-Catholic religious traditions within Christianity, and their relationship to Catholicism.

## Science

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### Foundations of Science

Required: Freshmen  
 Length: Four Quarters  
 Prerequisites: None

Grade: 9  
 Fulfills Science graduation requirement  
 Credit: .25 per quarter

This course integrates the basic principles of physics, chemistry, biology and earth science. It is designed to acquaint the student with the major topics in each of these fields while emphasizing the supporting laboratory techniques used to study these topics. Students will apply the principles and skills they have mastered to attain a proficiency at processing science. This is essential to the success of further studies in the science.

### Biology

Required  
 Length: Two semesters  
 Prerequisite: Foundations of Science or equivalent

Grade: 10, 11, 12  
 Fulfills Science graduation requirement  
 Credit: .5 per semester

This course is designed to be the introductory life science course in the high school science curriculum. Students will engage in discussions, laboratory activities, and various classroom activities to gain an understanding of the process of life science. Major topics and themes to be explored include the molecular basis of heredity; the cellular basis of life; biological evolution; botany; zoology; human biology; and ecology. Technology will be integrated into all aspects of the curriculum.

### Chemistry

Elective  
 Length: Two semesters  
 Prerequisites: Foundations of Science or equivalent

Grade: 10, 11, 12  
 Fulfills Science graduation requirement  
 Credit: .5 per semester

Chemistry is a laboratory-based science course dealing with the structure of matter and the changes matter undergoes. This course stresses atomic theory, the periodic table, stoichiometry, chemical formulas and chemical reactions. Lab safety is a key component of this course.

### Advanced Placement Physics 1

Elective  
 Length: Two semesters  
 Prerequisites: Foundations of Science or equivalent and Geometry

Grade: 10, 11, 12  
 Fulfills Science graduation requirement  
 Credit: .5 per semester

You will explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. In early May, students will have the opportunity to take an AP exam for college credit.

Much of the time will be spent exploring these topics through laboratory investigations. Typical projects include building and racing a motor boat and the Adopt-a-Physicist program.

### Environmental Science

Elective  
 Length: Two semesters

Grade: 11, 12  
 Fulfills Science graduation requirement

Prerequisites: Biology

Credit: .5 per semester

Students will be introduced to the major ecological concepts and environmental issues that affect the world in which they live. They will learn about technological developments that have created environmental problems as well as technologies that are helping to solve them. Students will develop a personal environmental ethic that reflects an understanding of stewardship for the earth.

## **Human Biology**

Elective

Length: Two semesters

Prerequisites: Biology  
Chemistry

Grade: 11, 12

Fulfills Science graduation requirement

Credit: .5 per semester

Human Biology includes a detailed study of the structure and function of each of the systems of the human organism. The study of each of these systems is accompanied by extensive laboratory work including a very detailed anatomical study and physiological testing. Students will be using the latest technologies in data collection and analysis. This course is recommended for anyone wishing to pursue a career in a health-related field. College credit is available through St. Mary's University of Minnesota.

## **Advanced Placement Chemistry (17-18)**

Elective

Length: Two semesters

Prerequisites: Chemistry

Grade: 11, 12

Fulfills Science graduation requirement

Credit: 1.0 per semester

This course is designed to provide upper ability science students an opportunity to pursue an introductory college chemistry course. Problem-solving and inductive laboratory investigations of inorganic chemistry are emphasized. A unit on organic chemistry is also introduced. This class is fast paced and structured as a college-level chemistry course. Advanced Placement testing is strongly advised.

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## *Social Studies*

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## **World History**

Requirement

Grade: 9

Length: Two semesters  
Prerequisites: None

Fulfills Social Studies requirement  
Credit: .5 per semester

The primary purpose of the World History class is to focus on the geography, history, and cultures of the various regions of the world. You will learn to identify, compare, and contrast the reasons for the rise, development, and decline of various civilizations throughout history. We will examine the scientific, cultural, religious, intellectual, and technological contributions that have been made by individuals and societies and how these contributions impacted, and continue to impact, the world.

## Mock Trial

Elective  
Length: November-February  
Prerequisites: None

Grade: 9, 10, 11, 12  
Scheduled before and/or after school  
Credit: .5

Mock Trial is sponsored by the State Bar of Wisconsin. Each year a case is written to allow students to learn firsthand what it is like to prepare and present a legal case before Wisconsin courts. By studying courtroom procedure and clarifying federal and state laws, the legal system as a whole will become demystified. Students learn to think quickly on their feet, to sharpen acting skills, to develop an ability to think and work as part of a team. This is not counted as part of a student's eight daily credits.

## American History

Requirement  
Length: Two semesters  
Prerequisites: None

Grade: 10  
Fulfills Social Studies requirement  
Credit: .5 per semester

This is a survey course of American History from discovery and exploration of North America through the 20<sup>th</sup> Century. The first semester includes Colonial America, the American Revolution, the Civil War, and Reconstruction. The second semester includes 20<sup>th</sup> Century wars, the Great Depression and the development of American institutions as we know them.

## Economics

Requirement  
Length: One semester  
Prerequisites: None

Grade: 11, 12  
Fulfills Social Studies requirement  
Credit: .5

This course will include basic macro and microeconomic principles and the role of individuals in economic systems. Some attention will be given to global economic systems and the role of the U.S. and U.S. consumers in the global economy. The roles and influence of the U.S. government and Federal Reserve, and how these affect banking and consumers will be explored. Students will become skilled at evaluating investments.

## Government

Requirement  
Length: One semester  
Prerequisites: None

Grade: 11, 12  
Fulfills Social Studies requirement  
Credit: .5

This course will introduce the student to the principles of government and democracy, the provisions of the Constitution, the Bill of Rights, and the composition and functions of the three branches of government. The course is designed to equip the student to live as an informed and active citizen.



## Introduction to Sociology

Elective

Length: One semester

Prerequisites: None

Grade: 11, 12

Social Studies Elective

Credit: .5

This is a survey course designed to introduce the student of the 21st century to the fundamental concepts, description, and analysis of societies, cultures, the socialization process, social institutions, and social change. The student will broaden his or her worldview while learning how differing cultural, political and religious beliefs shape our perceptions and motivations, our strength and weaknesses, and the way we behave and think.

## Advanced Placement United States History

Elective

Length: Two semesters

Prerequisites: Government should be taken before or concurrently with AP History

Grade: 11, 12

Social Studies Elective

Credit: .5 per semester

Advanced Placement United States history is a college level introductory survey course of American History. An emphasis is placed on analytical thinking and the ability to express thought in written form. Students taking this class need a high level of motivation and desire to succeed. Students are expected to take the Advanced Placement exam for college credit in May.

## Psychology

Elective

Length: One semester

Prerequisites: None

Grade: 11, 12

Social Studies elective

Credit: .5

This course will explore many major principles, concepts, and theories of human mental processes and behavior. Students will come to better understand themselves, their lives and others. This will be achieved by exploring such topics as states of consciousness, sensation and perception, learning and memory.

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## Academy

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### Academy

Requirement

Length: Two semesters

Prerequisites: Sequential

Grade: 9, 10, 11, 12

Fulfills Graduation Requirement

Credit: .25 per year

The students will be required to create an ACP or Academic Career Plan based on their interests, strengths, and particular education plan. Students will maintain a digital and hard copy of their ACP. The purpose of this requirement for graduation is to encourage students to complete and showcase quality academic work,

discover their strengths, set meaningful achievement goals, and understand the relationship between academic achievement in high school and postsecondary career and educational opportunities. The goal of the program is to produce responsible Roncalli High School graduates who will begin their adult life with the knowledge, skills, motivation, and a self-directed plan for career and lifelong success.

## ***RONCALLI HIGH SCHOOL ALTERNATIVE COURSE CREDIT OPTIONS***

### **Alternative Course Credit Options**

Roncalli High School requires four full years and 28 credits for graduation. Listed below are options for accumulating elective credits, which includes courses on and off of campus. Roncalli will accept credits earned from public and private high schools and credits from college courses, including online courses. Off-campus course options must have the prior approval of the principal. The Roncalli budget is based upon every student being full time and therefore, four years of tuition and fees are the norm. Course fees and tuition at other institutions are the responsibility of the individual student or family.

### **Alternative Course Options**

1. Study Skills - This course is designed to assist students with improving their reading comprehension skills, critical thinking skills, and study strategies which are needed to succeed in high school. As an introduction to the concepts and methods needed to increase study efficiency, the course acquaints students with better study habits. Students will examine their own study habits and discover what practices may or may not be effective. The course allows students to practice the study skills, study habits, and self-management techniques needed for mastering their homework assignments and commitments in all courses. Topics include listening, efficient textbook reading, time management, note-taking, test-taking strategies, test anxiety, and memory strategies. The students will practice implementing these skills with their daily school work from their current classes during this block. This course may be taken for one or two semesters. Approval is required. (all grade levels)
2. Advanced Placement (AP) Courses –Calculus, Chemistry, Physics, English, and U.S. History. AP Chemistry is offered on alternate years. Students can take the AP exam for approximately \$85. (juniors and seniors)
3. Human Biology – This is a dual enrollment course and students can earn 3 college credits through St. Mary's University in Winona, MN for an approximate fee of \$210. Students need to have a cumulative GPA of 3.0 to take the class for college credit. (juniors and seniors)
4. Other high schools – Roncalli will accept credits from other high schools. Generally, these would be classes not offered at Roncalli. These options must be approved by the principal prior to granting credit. (juniors and seniors)
5. Youth Apprenticeship - Students will spend part of the school day at a work based site in addition to taking classes (either high school or college) in that particular field. Students must go through an application process for this county-wide program. (juniors and seniors)
6. College Courses – A student may choose to take coursework at any college or university including on-line courses. These courses should be beyond the scope of the Roncalli curriculum. All fees and tuition for these courses are the responsibility of the student and/or family. Because dual credit is granted, the full Roncalli tuition and fees are still required. If the class is offered in the evening, the student will be given a block of time for study time. (seniors)
7. Career Internship – The student will experience a specific career at a business, agency, school, etc. by observing and working during a block of time. This “hands-on learning” will give students a better sense of a career by working with a mentor. (seniors)
8. Senior Project – This course is designed to allow a student to conduct an independent exploration of a topic or talent of particular interest, under the guidance of a faculty advisor. The student will develop, plan and manage his/her own learning experience resulting in a demonstration of mastery in the chosen curricular area. This course may be taken for one semester, half credit, or two-semester full credit, course. Approval is required. (seniors)
9. The Great Courses – The Great Courses are one semester, half credit, independent study electives open only to seniors. Students who choose to take a Great Courses class will be given a block of time in which to view lecture segments on DVD and read a corresponding text. Each student will have a faculty advisor who, with the student, will determine a culminating activity that will demonstrate mastery of the material. Approval is required. (seniors)

The following Great Courses are available:

The Art of Reading and Exploring the Writer's Craft

The Foundations of Western Civilization

The Great Ideas of Philosophy

The Art of Critical Decision Making

Biology and Human Behavior