



**COTTER**  
S C H O O L S

WHERE STANDARDS, VALUES, *and you* MATTER

# **Academic Course Catalog**

## **2017-2018**

**Cotter High School**  
**Grades 9-12**  
**Cotter Junior High School**  
**Grades 7-8**

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## MISSION

*Cotter Schools is a private, independent, coeducational school in Winona, Minnesota that has been guided by Catholic beliefs and values since 1911.*

*As an international learning community, serving grades 7-12, we hold our students to the highest academic standards and challenge each of them to develop their full potential academically, physically, spiritually and socially.*

*We believe in the intrinsic goodness of all persons, and strive to model the values of faith, service, and community as we encourage and support our students to become more than they can imagine.*

## COTTER GRADUATE PROFILE

### *Men and Women of Intellectual Competency*

**Cotter Schools graduates** are problem solvers who think critically and creatively. They are young men and women who are communicators, collaborators, and cooperative learners. Cotter graduates are lifelong learners who are curious about the world around them and the future.

### *Men and Women of Health and Wholeness*

**Cotter Schools graduates** are aware of healthy habits of living such as mindfulness, fitness and nutrition and are formed in the use of the tools for following through on those habits.

### *Men and Women with an Appreciation of the Arts*

**Cotter Schools graduates** have an appreciation of beauty and the arts (performing, instrumental, vocal, visual) and recognize the importance of the aesthetic in their personal lives and in the world around them.

### *Men and Women of Faith, Compassion and Respect*

**Cotter Schools graduates** have an appreciation of a relationship with God and have respect for and knowledge of Catholic and Christian beliefs and practices. Cotter graduates understand the life-changing effects of compassion on themselves and witness to this through respect for others.

### *Men and Women of Service and Justice*

**Cotter Schools graduates** engage in a lifetime of service; they choose to do the right and just thing in all situations and mentor others in doing the same.

## GRADUATION REQUIREMENTS

To be eligible for a diploma from Cotter High School, each student must complete the required credits of academic study and eighty (80) hours of Community Service. See Program Scheduling and listings under each department for specific courses required for graduation.

|                                   |                                  |
|-----------------------------------|----------------------------------|
| English                           | 4.0 Credits                      |
| Health                            | 0.5 Credit                       |
| Mathematics (including Algebra 2) | 3.0 Credits                      |
| Physical Education*               | 0.5 Credit                       |
| Religion                          | 4.0 Credits                      |
| Science                           | 3.0 Credits                      |
| Social Studies                    | 3.5 Credits                      |
| Visual & Performing Arts          | 1.0 Credit                       |
| World Language                    | 2.0 Credits                      |
| Electives                         |                                  |
| Community Service                 | 80 hours (10 hours per semester) |

**Credits required to graduate:** Class of 2017 and beyond – 24.0 Credits

\*Physical Education - 0.5 credit is required to fulfill graduation requirements. Students may take a Physical Education course or satisfy the requirement by participating in two different sports at Cotter before senior year.

### **Community Service Requirement: (Grades 9-12)**

A foundational principle embraced at Cotter High School is that each person is intrinsically good and is loved by God. This principle motivates us to serve others. The Community Service component of the Cotter educational experience allows students to see first-hand this truth of our humanity. Cotter students have much to offer; and the community service program provides creative channels for students to serve and give of themselves for the betterment of their community.

All students are required to complete **10 hours of community service per semester.**

## PROGRAM SCHEDULING

### Freshman Program

- English 9 1.0 Credit
- Introduction to Chemistry & Physics 1.0 Credit
- Mathematics 1.0 Credit
- Visual/Performing Art 1.0 Credit
- Religion 9 1.0 Credit
- World Civilization 1.0 Credit
- World Language 1.0 Credit
- Community Service 20 Hours

### Sophomore Program

- Biology 1.0 Credit
- Health Education 0.5 Credit
- Mathematics 1.0 Credit
- Religion 10 1.0 Credit
- World Geography 0.5 Credit
- World Language 1.0 Credit
- Written Com/Oral Communication 1.0 Credit
- Electives – optional 1.0 Credit
- Community Service 20 Hours

### Junior Program

- Chemistry 1.0 Credit
- Religion 11 1.0 Credit
- Mathematics (required through Alg. 2) 1.0 Credit
- Research Writing/American Literature  
or AP Language & Composition 1.0 Credit
- U.S. History or AP U.S. History 1.0 Credit
- Electives - required 1.0 Credit
- Electives – optional 1.0 Credit
- Community Service 20 Hours

### Senior Program

- Economics, Political Science, or  
Honors Political Science 1.0 Credit
- Literature & Composition  
or AP Literature & Composition 1.0 Credit

- Religion 12 or  
Skills for Christian Leadership 1.0 Credit
- Electives- required 3.0 Credits
- Elective – optional 1.0 Credit
- Community Service 20 Hours

## THE COUNSELING CENTER

- Mr. Dave Forney – Personal Counselor, 453-5106, [dforney@cotterschools.org](mailto:dforney@cotterschools.org)
- Mrs. Mitzi Storm – Personal and Academic Counselor, 453-5000 Ext. 5023, [mstorm@cotterschools.org](mailto:mstorm@cotterschools.org)
- Mr. Steven Stevenson – Academic Counselor, 453-5000 Ext. 5028, [sstevenson@cotterschools.org](mailto:sstevenson@cotterschools.org)

For personal concerns, students may see the counselor of their choice by obtaining a pass from the Counseling Department Administrative Assistant, Mrs. Deb Lisowski.

**Registration and Schedule Changes:** Your child’s counselor will be meeting with your child to review and help select the most appropriate courses considering his/her goals and interests. This sheet will be sent home; we ask you to review it and contact us if you have any questions. An international student’s sheet will be provided to their advisors. Along with the required and elective courses, 1 credit of back-up courses should be entered. If these courses are granted, the student is expected to take these courses. If a student wishes to change a course for which she or he has registered, the student must complete a Schedule Change Form, which also requires a parent or advisor signature, and return it **before** the semester begins. Students placed in a level that is later deemed to be an inappropriate level may be adjusted beyond that time based on teacher recommendation.

**Dropping a Class:** If a student wishes to drop a semester or yearlong elective course, he/she may do so up until the time of the first progress report as long as he/she has 6 classes remaining. A Schedule Change form and fee must accompany the request. No class may be added at this time. Dropping a course beyond this time will result in an academic penalty.

**On-line courses and Make-up courses:** Students are initially required to take their required courses at Cotter. If a student fails a required course, the student may repeat the course the following year at Cotter, take an on-line course, or enroll at the Winona Area Learning Center for summer school. Elective courses may also be taken on-line through an approved online program. The counselors have information on how to apply for these programs.

**Earning College Credit:** Students may take advanced courses through a variety of programs that, upon successful completion, have the potential to earn college credit.

- **Advanced Placement (AP) Courses:** These rigorous courses are held at Cotter Schools, and students prepare for the AP exam in May. Depending on the student's score and the college or university that the student attends, college placement or credits may be awarded.
  - AP U.S. History
  - AP Calculus AB
  - AP Calculus BC
  - AP Literature and Composition
  - AP Physics
  
- **Program for Advanced College Credit (PACC):** Students who enroll in these courses are concurrently enrolled in St. Mary's University. The courses are held at Cotter and taught by Cotter instructors, and if students earn a C or better in the class, they receive college credit from St. Mary's University at a significantly discounted price per credit.
  - AP Literature and Composition - 3 credits
  - Political Science - 3 credits
  - AP U.S. History - 3 credits per semester (or 6 credits for the year)
  - AP Calculus AB - 4 credits
  - AP Calculus BC - 4 credits
  - Honors Human Biology - 4 credits
  
- **Project Lead the Way (PLTW):** These courses are taught by PLTW certified instructors at Cotter. Students who successfully complete the course with an 80% or better, and earn a score of 4 or higher on the PLTW end of course assessment can receive college credits from St. Cloud State University. (Currently, \$100 for 3 credits)
  - Introduction to Engineering and Design
  
- **Post Secondary Education Option (PSEO):** This program is available to juniors and seniors who meet the eligibility requirements, which are specific to each college. PSEO courses may only be taken on a part-time basis since students must take all of their required courses at Cotter. Students will not receive credit twice for the same course material repeated at the college level. PSEO applications for the fall semester at Saint Mary's University or Winona State University need to be completed before the end of January, and MN State SE Technical applications should be completed by May.
  
- **Retroactive credit for world language through freshman college placement testings is also an option for some students.**

## COTTER HIGH SCHOOL COURSES

### ENGLISH

Department Director: Mr. Michael Costello

507-453-5000, Ext. 5103, [mcostell@cotterschools.org](mailto:mcostell@cotterschools.org)

The focus of the English curriculum is learning effective communication through the development of reading, writing, listening, and speaking skills. Through the study of literature, students strengthen critical thinking skills, employ collaborative learning, command a variety of writing styles, and improve their proficiency as oral presenters. Furthermore, the study of language and literature encourages the development of Christian values.

#### **Required Credits for Graduation – 4.0**

|   |         |
|---|---------|
| English 9, Honors English 9, ESL or Transitional English                                | 1.0 Cr. |
| Written Comm./Oral Comm., Honors Written Comm./Oral Comm., ESL or Transitional English  | 1.0 Cr. |
| Research Writing/American Literature, AP Language & Composition or Transitional English | 1.0 Cr. |
| Literature & Composition or AP Literature & Composition                                 | 1.0 Cr. |

#### **Transitional English**

(Grades 9-12)

Year

1.0 Credit

This course provides transition for those students moving from the English as Second Language program to the grade level English classes. English for international students focuses specifically on addressing the unique writing needs and developing the composition skills of students for whom English is not their native language. In addition, this course strengthens the necessary reading comprehension skills and understanding of literary terms required in grade level English classes. Students are placed in transitional English based on their placement testing score and on teacher approval.

#### **English 9 - Required**

(Grade 9)

Year

1.0 Credit

This course will emphasize developing and extending skills in critical thinking, writing, reading, listening, and speaking. Throughout the year, students will be engaged in the four basic types of writing: narrative, descriptive, expository, and persuasive. Literature study of novels, short stories, poetry, and nonfiction will include review of significant literary elements. *Romeo and Juliet* provides an introduction to Shakespearean dramas. *Night* by Elie Wiesel uses the memoir form to focus on the Holocaust experience. In addition, students will research, write and deliver a persuasive speech; this project will introduce research writing and citing sources in MLA format.

#### **English 10 – Required**

(Grade 10)

Year

1.0 Credit

The first semester of this course refines the composition and literary skills taught in English 9. Beginning with the paragraph, students learn to structure and compose five paragraph essays of various sorts. Students also participate in the study of a novel (*To Kill a Mockingbird*), various short stories, a drama (*Our Town*), and several pieces of non-fiction. Second semester centers on



development of various communication skills, including understanding and overcoming stage fright; developing effective listening strategies; conducting interviews; engaging in group discussions; organizing, researching, and delivering various types of speeches; and choosing and orally interpreting various kinds of material.

### **Teen Press – Flex Activity**

(Grades 9 & 10)

Flex Hour Semester/Year

Spend one flex period a week learning interviewing techniques, video editing, and researching subjects and scheduling interviews locally, and perhaps, regionally. Students must be willing to attend some events or conduct interviews outside the school day, though these will be set up around students' existing schedules.

### **English 11: Research Writing /American Literature - Required** (May be replaced by AP Language and Composition)

(Grade 11)

Year

1.0 Credit

This course is an introduction to both academic forms of writing and the world of ideas present in the literary tradition of the United States. In the first semester students will discover early themes and writing styles of some America's greatest writers, including Poe, Hawthorne, Thoreau, and Dickinson. Writings include the various forms of expository and argumentative writing that culminate in the composition of a documented research paper. Semester two consists of a thematic exploration of modern American literature as well as a thematic exploration of the seminal concepts unique to the American experience. Students will discover the prose and poetic themes of some of America's outstanding authors including Fitzgerald, Porter, Whitman, Faulkner, Wright, and Steinbeck.

### **Advanced Placement (AP) Language and Composition – Restricted** (Replaces English 11)

(Grade 11)

Year

1.0 Credit

This course is designed to challenge those students who have above average language arts skills as well as the ability and inclination to study and discuss various conventions of language in-depth. The exploration of non-fiction writing of various times and places in our world will be the basis of this course; writing requirements will include essays on narration, description, exemplification, process, definition, classification, comparison and contrast, causes and effect, and a 10 page research paper. Reading selections will include various works by such writers as George Orwell, Anne Dilliard, E.B. White, David Birnbaum, Garrison Keillor, Amy Tan, Ellen Goodman, and Martin Luther King Jr. This course will also focus on preparing students for the Advanced Placement Language and Composition exam, an exam that each student will be required to take when it is offered in the spring. Prerequisite: B+ or better in English 10. All course and test accommodations must be approved by College Board. For transferring ELL students, a minimum IBT TOEFL score of 100 is required, an SAT Writing score of 600, or PSAT Writing score of 60. Limit of 15 students per class.

### **English 12: Literature and Composition – Required** (May be replaced by AP Literature and Composition)

(Grade 12)

Year

1.0 Credit

The literary journey of this class will expand on the American experience of junior year English. The readings include a variety of American and world literature, including essays, novel, poems, short stories and plays. These readings will help students to continue developing a sense of our

literary heritage while honing reading, discussing and writing skills. An important tool in this process will be an enriched critical vocabulary. Writings will include critical essays, personal narratives, poetry, stories, and editing of scripts. In the first semester, students will write an essay that may be used in the college application process. In the fourth quarter, a research paper and persuasive speech will be completed as part of the senior year capstone project.

### **Advanced Placement (AP) Literature and Composition – Restricted – PACC option**

(Replaces English 12)

(Grade 12)

Year

1.0 Credit

This is a two-semester course for students of superior ability and motivation. Students will read a wide range of serious, imaginative literature from a number of genres and eras. These readings will help students to continue developing a sense of our literary heritage while honing reading, discussion, and writing skills. An important tool in this process will be an enriched critical vocabulary. Writings will include expository, analytical, and argumentative essays, personal narratives, poetry, and stories. Students will assemble and edit a writing portfolio as part of this course. A research paper and persuasive speech will be completed as part of the senior year capstone project. This course may also be taken for PACC credit through SMU. See “College credit” under Counseling Center. Pre-requisite: ACT English and Reading test combined sub-scores of 48 or combined sub-scores in Critical Reading and Writing of 1100 on the SAT, and teacher recommendation. All course and test accommodations must be approved by CollegeBoard. Limit of 15 students per class.

### **Journalism & Publications**

(Grades 10-12)

Year

1.0 Credit

Journalism & Publications is an elective course that provides the practical hands-on application of journalism concepts and skills through team leadership, story generation and editing, page layout and production. Through the curriculum, students will understand how to gather and produce quality stories to be used in a variety of publications. They will learn the importance of media ethics, including journalistic integrity and responsibility. This class is responsible for the student publication, *The Cotter Chronicle*, and will be introduced to video editing and web content management systems to assist in the production of this publication. The structure of this class will enhance student leadership development. This class may be taken consecutive years.

### **Creative Writing**

(Grades 11-12)

Semester or Year

0.5/1.0 credit

Creative writing – fiction and poetry. The class would use a workshop model. Local authors will present their work and give students assignments based on these readings. Students will keep a daily journal and produce a portfolio of work. There will be a performance night at the end of the semester in which students read a selected work.

## **ENGLISH as a SECOND LANGUAGE PROGRAM**

Program Coordinator: Mrs. Ulrike Schorn-Hoffert, 507-453-5090, [uschorn@cotterschools.org](mailto:uschorn@cotterschools.org)

Cotter High School offers several levels of ESL (English as a Second Language) to meet the different needs of English Language Learners (ELLs). Skills in the areas of reading and writing, listening and speaking are taught and practiced through thematic, content-based units along with explicit grammar instruction. Various aspects of the target culture will be an integral part of all course units. The Cotter ESL program aims to provide students with level-specific English language tools necessary for academic success while also reinforcing their social and conversational language proficiency. All new ELLs will be assessed at the beginning of the school year in the areas of reading, writing and oral language to determine the best placement for each student. Student placement throughout the school year is based on this initial assessment and ongoing teacher evaluation. ESL credits earned at Cotter will be applied towards English credits for graduation.

### **ESL I (High beginning)**

(Grades 9-12)

2.0 credits

All four areas of language learning (reading, writing, listening, speaking) are addressed with special emphasis on developing confidence in speaking and comprehension skills of spoken and written material. Specific sessions address vocabulary enrichment using the VOCABULARY POWER series. Reading selections at this level include a variety of adapted fiction and non-fiction materials, especially tales and simple legends.

### **ESL II (Low intermediate)**

(Grades 9-12)

1.0 credit

ESL II students meet for one period each day and will continue to focus on vocabulary, grammar and reading comprehension strategies along with written work that is based on thematic units using both fiction and non-fiction materials. Academic language will be used increasingly to facilitate moving into ESL III or Transitional English the following year depending on student skills. We will continue specific vocabulary building lessons and activities based on the VOCABULARY POWER series.

### **ESL III (high intermediate/ low advanced)**

(Grades 9-12)

1.0 credit

At this level of learning English, students are expected to show strong communication skills in spoken and written English. The course content alternates advanced grammar and vocabulary lessons with thematic units using a variety of authentic non-fiction texts as well as short selections of fiction. Students will also be introduced to some basic literary terms and are encouraged to use critical thinking strategies as they respond to a variety of themes and stories. Students will continue their English studies the following year in the Transitional English Course or regular English class depending on academic readiness.

*\*Independent reading assignments are part of each ESL course to promote successful reading strategies and ongoing vocabulary building. Students are expected to complete independent reading work and will fill out a variety of reading logs or book reports.*

## HEALTH EDUCATION/PHYSICAL EDUCATION

Department Director: Mr. Nicholas Whaley, 507-453-5000, Ext. 5110, [nwhaley@cotterschools.org](mailto:nwhaley@cotterschools.org)

The primary purpose of secondary school physical education at Cotter High School is to assist each individual to develop the skills, attain the knowledge, and acquire the attitudes that will result in a lifetime of participation in physical activity. It is our mission to help our students incorporate meaningful physical activity into their lives. Regular participation in appropriate physical activity is important to attain an optimal level of health and well-being, and achieve a high quality of life.

### **Required Credits for Graduation – 1.0**

|                    |            |
|--------------------|------------|
| Health Education   | 0.5 Credit |
| Physical Education | 0.5 Credit |

\*Credit to satisfy the Physical Education requirement may be earned by participating in a Physical Education course anytime during grades 10-12. A student may also earn credit to satisfy the requirement by competing in and completing two different sports seasons at Cotter or co-op program with Winona Senior High. If a student has not fulfilled the two Sport Rule before senior year, he/she must take Physical Education senior year.

### **Physical Education - Required** \*The 2 Sport Rule may be used as a substitute for this course.

|               |          |            |
|---------------|----------|------------|
| (Grade 10-12) | Semester | 0.5 Credit |
|---------------|----------|------------|

Physical Education is a vital component in the development of a student's physical, mental, and social well-being. Through this course students will have the opportunity to experience a variety of health and fitness related skills/activities that will provide enjoyable experiences for life-long physical fitness. In conjunction with health class students will receive instruction in proper exercise techniques and practices, good nutritional habits, basic anatomy and elementary cardiovascular physiology. Additionally, students will be exposed to the rules and strategies of various fitness activities all while participating in individual skill practice and modified games/competitions.

### **Health Education - Required**

|            |          |            |
|------------|----------|------------|
| (Grade 10) | Semester | 0.5 Credit |
|------------|----------|------------|

The health habits created during junior high and high school will impact a student's entire life. This course will provide students with knowledge, attitudes, and skills to make health-promoting decisions while incorporating the physical, mental, emotional, social, and spiritual dimensions of health. In some form this course will also address the six major categories of risk behaviors that teens face today as identified by the United States Center for Disease Control (CDC).

## LEARNING CENTER

Department Director: Mr. David Williams, 507-453-5000 Ext. 5039,  
[dwilliams@cotterschools.org](mailto:dwilliams@cotterschools.org)

### **Learning Center**

(Grades 9-12) 1<sup>st</sup> and/or 2<sup>nd</sup> Semester

Learning Center offers academic assistance to students with a variety of needs. Staff are available to work with students in building the skills needed for academic success including the following: study skills, time management, note taking, organization, and testing strategies. Staff will also work with students to develop an *Individual Learning Plan* to provide a framework for a successful classroom experience. Staff and tutors are available to help students with completing assignments and preparing for tests. The Learning Center offers a small group environment allowing extended individual attention as needed.

## MATHEMATICS

Department Director: Mr. Seth Haun, 507-453-5000, Ext. 5096, [shaun@cotterschools.org](mailto:shaun@cotterschools.org)

The Mathematics Department offers courses designed to provide a sound mathematical background needed in life as well as to prepare the student for college mathematics courses. The objectives of the mathematics curriculum are to cultivate the power of independent thinking, to increase the ability to analyze and solve problems, and to develop an understanding of the nature and structure of mathematics as needed to pursue higher Mathematics and Sciences. A student wishing to pursue a degree at a 4-year college should complete Algebra II at a minimum. Pre-calculus is recommended.

In math, with the material of the second semester being built on the material of the first semester, there is a separate grading policy. If a grade of "F" is earned the first semester, it is possible to obtain credit for the first semester by earning a "C" or better for the second semester. A "D-" will replace the "F" so credit is granted for both semesters. Placement of students into their first mathematics course is determined by their scores on an entrance placement test, and results of standardized achievement tests taken during seventh and/or eighth grade.

### **Required Credits for Graduation – 3.0**

Students must successfully complete Algebra 2 or a higher level math course. Exceptions may be made on an individual basis with proper documentation. It is recommended that college bound students complete 4 credits.

#### Required Mathematics Sequence

|             |            |
|-------------|------------|
| Pre-Algebra | 0 Credit   |
| Algebra 1   | 1.0 Credit |
| Geometry    | 1.0 Credit |
| Algebra II  | 1.0 Credit |

Elective Mathematics Courses

|                     |            |
|---------------------|------------|
| College Algebra     | 1.0 Credit |
| Pre-Calculus        | 1.0 Credit |
| Statistics          | 1.0 Credit |
| AP Calculus AB (I)  | 1.0 Credit |
| AP Calculus BC (II) | 1.0 Credit |
| Semester Electives  | 0.5 Credit |

**Pre-Algebra**

(Grade 9) Year No Credit

This course is designed to be a bridge between Arithmetic and Algebraic thinking. This course aims to move from concrete thinking to abstract thinking. The major concepts in algebraic thinking will be introduced. An emphasis is placed on problem solving, reasoning skills, and using algebra in the real world. During the course, students will also strengthen their arithmetic skills.

**Algebra 1 - Required**

(Grade 9-10) Year 1.0 Credit

This one-year course is designed to cover the standard topics of Algebra. Students are carefully eased into word problems and develop a systematic approach based on the type of problem. There is constant review of all algebraic skills.

**Geometry – Required**

(Grades 9-11) Year 1.0 Credit

Students will use properties of geometric shapes combined with algebra to discover unique relationships found in polygons. Students will learn how to graph, transform, and calculate the area of polygons. Theorems and postulates will be used to reason and create geometric proofs. Students will also explore Trigonometry. Prerequisite: Proficiency in Algebra

**Algebra II - Required**

(Grades 9-12) Year 1.0 Credit

Algebra 2 builds on sequential approaches to content and learning from preceding courses. Geometric and algebraic concepts are extended and connected to topics in discrete mathematics. Functions are developed through tabular and graphical approaches. Special emphasis is given to the concepts of systems of equations, probability, polynomials and quadratics. A graphing calculator is recommended but not required for this course. Prerequisite: Geometry or equivalent on placement exam. May be taken at the same time as Geometry with math teacher's recommendation.

**Statistics**

(Grade 12) Year 1.0 Credit

This course is intended for seniors interested in the fields of business, social science, natural science, mathematics, and the many other areas now requiring knowledge of probability and statistics. Statistical ethics, probability distributions, hypothesis testing, and regression are the major topics covered in this course. Prerequisite: Algebra II, seniors only.

**College Algebra**

(Grades 11-12)

Year

1.0 Credit

This course covers some of the topics presented in a college level algebra course. This course continues coverage of linear systems, quadratics, rational equations and radical equations. Time is spent on matrices and real world finances. Prerequisite: Completion of Algebra II.

**Pre-Calculus**

(Grades 9-12)

Year

1.0 Credit

This course combines a wide range of exercise sets, meaningful applications to non-mathematical disciplines, and much more to help students understand and apply higher-level mathematics. Five units include Relations, Functions and Graphs; Trigonometry; Advanced Functions and Graphing; and Matrices. Concepts are reinforced through a variety of examples and exercises. Calculus concepts and skills are integrated throughout the course. Recommended: An Algebra II grade of C or higher or equivalent on placement exam. If a student has not earned a C or higher, it is recommended that Algebra II be retaken or College Algebra be taken before taking advanced courses. Exceptions may be granted based on teacher recommendation.

**Advanced Placement (AP) Calculus AB – PACC option**

(Grade 10-12) Elective

Year

1.0 Credit

This is a standard advanced placement AB Calculus course. It covers college level material using an AP Calculus textbook. College credit may be earned through the Advanced Placement Program. Completion of the AP Calculus AB exam is strongly encouraged for all taking this course. Recommended: Grade of “B” or better in Pre-Calculus or equivalent on placement exam. Exceptions may be granted based on teacher recommendation. All course and test accommodations must be approved by CollegeBoard.

**Advanced Placement (AP) Calculus BC – PACC option**

(Grade 10-12) Elective - Restricted

Year

1.0 Credit

This is an advanced placement BC Calculus course. It covers college level material using an AP Calculus textbook. The course covers both St. Mary’s University syllabus for Calculus II and the additional AP topics needed for the BC curriculum. College credit may be earned through the Advanced Placement Program. Completion of the AP Calculus BC exam is strongly encouraged. Recommended: AP Calculus AB and teacher approval. All course and test accommodations must be approved by Collegeboard.

**Discrete Mathematics** (Every other year - 2016, 2018)

(Grade 11-12) Elective

First Semester

0.5 Credit

This course will cover topics that can be addressed using discrete as opposed to continuous solutions. One of the aims throughout the course will be to develop proof writing skills. Specific topics that will be covered include basic logic, lists and sets, relations and partitions, permutations and symmetry, and discrete probability. Prerequisite: AP Calculus AB concurrent or completed.

**Elementary Linear Algebra** (Every other year - 2016, 2018)

(Grade 11-12) Elective-Restricted                                  Second Semester          0.5 Credit

This is an introduction to elementary linear algebra. Topics include systems of linear equations and their solutions, vectors, matrix operations and inverses, determinants, and an introduction to vector spaces. Prerequisite: AP Calculus AB and teacher approval.

**Vectors and Multivariable Calculus** (Every other year - 2017, 2019)

(Grade 11-12) Elective-Restricted                                  Second Semester          0.5 Credit

Topics for the course include a short review of equations in polar and parametric form and then cover vectors in 2-space and 3-space; partial derivatives and multiple integrals; vector calculus. Graph equations in various coordinate systems (polar, cylindrical, spherical). Perform Calculus operations on functions of several variables. Prerequisite: AP Calculus BC concurrent or completed.

**Non-Euclidean Geometry** (Every other year - 2017, 2019)

(Grade 11-12) Elective-Restricted                                  First Semester                  0.5 Credit

In this class, students will examine the postulates of Euclid. They will then study differing forms of Geometry in which Euclid's "Parallel Postulate" is negated. This may include Spherical Geometry and Hyperbolic Geometry. Students will study graphs in different Geometries and different properties involving curved surfaces. Prerequisite: AP Calculus AB concurrent or completed.

**Number Theory**

(Grades 11-12) Elective-Restricted                                  Second Semester          0.5 Credit

This college level course is an introduction into the study of number theory. Number theory is the study of the properties and relationships between types of numbers; we will examine the positive integers for a majority of the semester. In the course students will investigate cryptography and modulo operations. Students will be expected to write proofs and be able to communicate their answers both orally and in written form.

**RELIGION DEPARTMENT**

Department Director: Mr. Steven McGlaun, 507-453-5000, Ext. 5064,  
[smcglau@cotterschools.org](mailto:smcglau@cotterschools.org)

Cotter High School is a faith-based Catholic community dedicated to teaching and living Catholic Christian values in ways that help students develop as faith-filled, ethical persons. Three fundamental aspects within our religion curricula are essential: academics, spiritual growth, and service. These elements are manifest in the following ways: students take four years of religion classes, engage in required service, and participate in an annual retreat.

Through course offerings, the Religion Department provides the academic information and foundation for each student to develop his/her faith-life. The Cotter High School Campus Ministry Program offers students opportunities and experiences that will help develop their personal



spirituality and enrich their appreciation of God’s love and presence in his/her life. Service opportunities and requirements are currently directed by the Religion Department as well.

### ***Circle of Grace***

To ensure that every student learns and understands their intrinsic goodness, the *Circle of Grace*, a Winona Diocese curricular requirement, is a component of all religion classes. Students and teachers learn about their own sacredness, the sacredness of others, and how to seek help through their relationships with trusted adults (taken from the “Introduction to *Circle of Grace*.”) Part of each grade level 7-12, each year.

### **Curriculum Requirements**

Students are required to take a Religion class every semester.

Required Credits for Graduation = 4.0.

|                           |   |
|---------------------------|---|
| Introduction to Religion: | 1.0 Credit (for international students) |
| Religion 9:               | 1.0 Credit                              |
| Religion 10:              | 1.0 Credit                              |
| Religion 11:              | 1.0 Credit                              |
| Religion 12:              | 1.0 Credit                              |
| Community Service:        | 80 hours (20 per year)                  |

### **Introduction to Religion**

(Grades 9-12) Year 1.0 Credit

Placement in this course only occurs through the Counseling Office. This course is designed for students who have no background in Christian faith formation, or any knowledge of the Christian belief system and culture. This course will provide students with the background and specialized vocabulary needed for further religion courses. An introduction to Catholic practices, beliefs, and teachings will be presented to help students appreciate as fully as possible the Catholic rites and celebrations at Cotter.

### **Introduction to Sacred Scripture – Required**

(Grade 9) Year 1.0 Credit

The purpose of this course is to give students a general knowledge and appreciation of the Old and New Testaments of the Bible. This will include such topics as Revelation, the development of Sacred Scripture, understanding of the Old Testament and its relationship to Christian beliefs and values, the historical and social context of both Testaments, and an introduction to the mystery of Jesus Christ, the living Word of God.

### **The New Testament: The Mission of Jesus Christ - Required**

(10th Grade) Semester 0.5 Credit

The purpose of this course is to help students understand what it means to be a disciple of Christ and what Christian discipleship entails. Discipleship is explored through the study of the life and ministry of Jesus Christ.

**The Church: Its Signs and Symbols - Required**(10<sup>th</sup> Grade)

Semester

0.5 Credit

The purpose of this course is to help the students understand that the Church is the living Body of Christ commissioned to be a witness to the Gospel in the world today. Students will be introduced to the fact that the Church is founded on Christ, established through the Apostles, and sustained by the Holy Spirit.

**Christian Morality: Our Response to God's Love - Required**

(Grade 11)

Semester

0.5 Credit

This course will focus on the development of virtue and character and moral decision-making. It will provide an opportunity to consider the value of the Christian view of life and living, with Jesus' command to love as its norm. Students are provided a method of moral decision making which will help them continue in their formation of conscience and guide them in making moral and ethical decisions in their daily lives.

**Social Justice: Responding to the Call of Jesus– Required**

(Grade 11)

Semester

0.5 Credit

This course will explore Catholic Social Teaching (CST) and its relationship to Christian living. Students will focus on understanding the seven principles of CST and how they inform our response to the needs of all of God's children. This course will utilize Church documents and other relevant writings in order to understand CST and look at ways to address current issues.

**World Religions - Required** (unless taking Skills for Christian Leadership)

(Grade 12)

Semester

0.5 Credit

This course is an introductory survey of religious traditions. Given our world today where we are exposed to so many different cultures, studying the different religions provides for the student more insight into different cultures and thereby a better understanding of our global community. There is great wisdom in each of these faith expressions which, when examined respectfully, can enrich and deepen one's own faith understanding.

**Christian Vocations: The Call of Christ – Required** (unless taking Skills for Christian Leadership)

(Grade 12)

Semester

0.5 Credit

The purpose of this course is to help students to understand the vocations of life: how Christ calls each person to live out their commitment in a specific life style. In this course, students learn how the vocations to married life, single life, priestly life, and consecrated life are similar and how they differ. Students learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community.

**Skills for Christian Leadership** (Fulfills one semester 12<sup>th</sup> grade religion requirement)

(Grade 12)

Semester

0.5 Credit

Focus on liturgy, prayer, community service & community building at Cotter Schools.

Prerequisite: Admission to this course is dependent on department approval. Students who wish to enroll must submit an essay addressing why you want to take this course and a description of your prayer and faith life. Students should be organized, open-minded and responsible, as well as have

an active prayer and faith life. It is not necessary to be Catholic, but students must have an understanding and openness to Catholicism.

## SCIENCE

Department Director: Mrs. Sally Frisby, 507-453-5000, Ext. 5829, [sfrisby@cotterschools.org](mailto:sfrisby@cotterschools.org)

The Science Department offers studies in Life, Chemical, Physical and Earth Science to better know the world in which we live. Students are encouraged to expand scientific interests beyond the classroom. A foundation is given for further study in science and for careers in science and related fields.

### **Required Credits for Graduation – 3.0**

|                            |            |
|----------------------------|------------|
| Intro to Chemistry/Physics | 1.0 Credit |
| Biology                    | 1.0 Credit |
| Chemistry or Physics       | 1.0 Credit |

\*Students may take either Chemistry or Physics to complete the science requirement. Please note that students interested in a health career may be required by their college to have completed high school chemistry.

### **Introduction to Chemistry & Physics - Required**

(Grade 9) Year 1.0 Credit

This course is designed to heighten interest in the study of matter and energy in the world around them with an introduction to chemistry and physics. Students will be engaged in numerous lab activities, traditional classroom instruction, demonstrations, and creative computer projects and research. The 1st Semester of study focuses on chemistry topics with an emphasis on the composition, properties and behavior of matter. Semester 2 covers the physics topics of forces and motion. The year concludes with an exciting field trip and project related to forces of motion in action.

### **Biology - Required**

(Grade 10) Year 1.0 Credit

This class is a comprehensive program that includes the study of ecosystems and environmental issues, cytology (study of cell structures, functions, energy, growth, and reproduction), genetics and biotechnology, evolution, and the classification of Earth's biodiversity. The course deals with the study of life on all levels and follows evidence regarding change in living things.

### **Chemistry - Required** (May take Physics in place of Chemistry to satisfy the third year of science)

(Grades 10-12) Year 1.0 Credit

This is a yearlong course intended to introduce students to the basic principles of Chemistry, and prepare them for entrance into other chemistry and science related courses. The course material is rigorous and more conceptual with the overarching goal of developing a student's ability to think. Topics covered include data analysis, properties of matter, atomic theory, electronic structure, periodicity, chemical bonds, molar relationships, stoichiometry, and chemistry in our environment. Throughout the year, students will be actively engaged in the lecture and laboratory components

of this course. Prerequisite: Transitional English or mainstream English. Tenth graders may take this course in addition to Biology if they have completed or are concurrently enrolled in Algebra II.

**Physics - Required** (May take Chemistry in place of Physics to satisfy the third year of science)  
(Grade 11-12) Year 1.0 Credit

This year long course is designed to provide a framework for later course work and also for receiving fundamental information about the everyday world around us. This is a hands-on course with a laboratory component. Classical Mechanics, including acceleration, forces, projectiles and energy is emphasized first semester. Waves, sound, and light, electricity, magnetism, and the origins of modern physics are emphasized second semester. This is a lab-based course that satisfies the college requirement of a lab-based science. Prerequisite: A grade of “C” or better in Biology, Algebra II. Students with a B or better in Biology may take Physics concurrently with Chemistry.

### **Physical Geology - Elective**

(Grades 10-12) Semester 0.5 Credit

This course is designed to take a closer look at our dynamic earth, focusing especially on geology in Southeastern Minnesota. A study of many of the earth’s ever-changing processes will be covered through hands-on lab exercises, computer-based projects, and traditional classroom instruction. Topics will include the rock cycle, weathering, glaciation, earthquakes, plate tectonics and volcanoes. Students will also identify and study the physical properties of important rock minerals and learn of important geologic resources.

### **Astronomy – Elective**

(Grades 10-12) Semester 0.5 Credit

The aim of this course is to introduce the student to the exciting universe that our world is a part of. Students will be required to read, discuss, and explore space through computer lab experiences that will give them the opportunity to extend their scientific knowledge about astronomy and put space at their fingertips. Topics explored will include the Earth-Moon system, the Solar System, Stars/galaxies and beyond. The use of mathematics will be required in determining the physical nature of celestial bodies. By investigating backyard astronomy concepts students will develop a working knowledge of the facts and relationships of different space principles, laws and theories. Nighttime viewing is required. Tenth graders should have completed or concurrently be enrolled in Algebra 2.

### **Honors Human Biology – Elective – PACC option**

(Grades 11-12) Year 1.0 Credit

This course studies the structure (anatomy) and function (physiology) of the human body from the cellular level through the organ systems. Those systems included are the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, lymphatic, digestive, urinary, and reproductive. The study of disease is included to enhance an understanding of the normal in light of the abnormal. An ongoing and complete dissection of a cat is required of the student as is college-prep study, testing, lecture and laboratory techniques. Prerequisites: a grade of B or higher in Biology, be enrolled in grade-level English, and have a minimum 3.5 GPA.

**Environmental Science - Elective**

(Grades 11-12)

Semester

0.5 Credit

Environmental Science will focus on people's place in the environment and how we affect it. We will look at the inter-relationships of the Earth and on the impacts that we have on the many aspects of the world we live in. We will focus on what is happening today as well as the following: What is Environmental Science? Ecosystems, Populations, Land Use, Energy resources, Water quality, Climate change, Food and agriculture, Economics and policy.

**Introduction to Engineering (PLTW) - Elective**

(Grades 11-12)

Year

1.0 Credit

Engineers make a world of difference! Students are introduced to the engineering design process, applying math, science, and engineering standards to identify and design solutions to a variety of real problems. They work both individually and in collaborative teams to develop and document design solutions using engineering notebooks and 3D modeling software. Are you ready to design the future?

**Honors Chemistry – Elective - Restricted**

(Grades 11-12)

Year

1.0 Credit

The Honors Chemistry course is designed to be the equivalent of a first-year college chemistry experience. This course is an in-depth study of the principles of chemistry. The lab experiments serve to supplement the learning in the lecture section of the course. Problem-solving skills, both on paper and in lab, are emphasized. The course provides instruction in each of the following content areas: atomic theory and structure, chemical bonding, molecular geometry, nuclear chemistry, gases, liquids and solids, solutions, chemical reactions, stoichiometry, kinetics, equilibrium, thermodynamics, acid/base chemistry, organic/biochemistry, periodic relationships, and electrochemistry. Prerequisite: One year of Chemistry with a grade of B or higher, recommendation of the chemistry instructor.

**Advanced Placement (AP) Physics – Elective - Restricted**

(Grades 12)

Year

1.0 Credit

This yearlong class is designed to prepare the student to take the “AP Physics C: Mechanics” and “AP Physics C: Electricity & Magnetism” exams. The first semester is devoted to topics in Newtonian Mechanics, as preparation for the AP Physics C: Mechanics exam. Topics include force: translational motion in one and two dimensions; torque; rotational motion; Newton's Law of Gravitation; orbits of planets & satellites; work; energy; linear momentum; angular momentum; translational and static equilibrium; conservation of energy and momentum, simple harmonic Motion (simple pendulum and mass on a spring); and other topics as needed. The second semester is devoted to those topics in electricity & Magnetism that are covered by the “AP Physics C: Electricity & Magnetism” exam. Topics include electric field and electric potential for point charges and for other simple charge distributions; Gauss's Law; capacitance; electric current & resistance; magnetic fields & forces; electromagnetic induction; Biot-Savart's Law and Ampere's Law; simple DC circuits; transient and steady state response of RC & LC circuits; resonant circuits; Maxwell's Equations; and other topics as needed. A course requirement is to take the AP Physics exam in May. Pre-requisite: Completion or co-requisite of AP Calculus, GPA of 3.5, a solid background in Physics and an ACT/PLAN Science sub-score of 24. All course and test accommodations must be approved by CollegeBoard. Registration capacity: 16 students.

## SOCIAL STUDIES

Department Director: Ms.Elizabeth Stevenson, 507-453-5000, x5028,  
[estevenson@cotterschools.org](mailto:estevenson@cotterschools.org)

The Social Studies Department seeks to help students understand the responsibilities and duties of living in a democracy. The Social Studies courses attempt to show how people, events, and governments interact to create history and shape our present historical condition.

### **Required Credits for Graduation – 3.5 (4.0 for international students)**

|                            |   |
|----------------------------|---|
| World History              | 1.0 Credit                                      |
| World Geography            | 0.5 Credit                                      |
| U.S. Social Studies        | 1.0 Credit - Required of international students |
| U.S. History               | 1.0 Credit                                      |
| U.S. Government & Politics | 0.5 Credit                                      |
| Economics                  | 0.5 Credit                                      |

**United States Social Studies** (Required for international students - for those not having taken U.S. History in the U.S. during junior high or middle school.)

(Grade 9,10 – although could be 11<sup>th</sup> grade if also enrolled in ESL II)      Year      1.0 Credit  
 This course is designed for international students who are not yet familiar with the social, cultural, and political history of the United States. Students will be introduced to elements of geography, history, and culture, as well as research practices. Some topics to be covered include the American Revolution, American Civil War, US Civil Rights Movement, US Constitution and Government, and U.S. Geography. As part of the course, we will compare U.S. history and laws to international history and laws. Students will also complete a major investigative project, exploring an element of American culture and engaging in academically honest practices of research and citation. Students will take an active role in developing a foundation for more in-depth U.S. History topics to be covered during junior year. Pre-requisite- ESL 2 or higher level of English

### **World History - Required**

(Grade 9)      Year      1.0 Credit

In this course students will explore the development of human societies and civilizations from prehistory to modern times. They will analyze how different parts of the world change over time, including the emergence and decline of political, economic, and social forms of organization. Students will learn how to think like historians by analyzing different interpretations of historical events and building their own arguments about history by writing a thesis statement and supporting it with evidence from primary and secondary sources. By the end of this year-long course students will be able to apply their knowledge of history to understand the modern world.

### **Human Geography - Required**

(Grades 10)      Semester      0.5 Credit

This course is designed to take an interdisciplinary approach to world geography. The objective is to relate human and physical geography to the economic, political, social, historical and cultural aspects of human activity. This course will provide the student with core knowledge about the

world's geographic regions, patterns, and characteristics and relate that knowledge to current events in today's rapidly changing world. This course will also help students develop certain basic skills in geography. These include map reading, the interpretation of geographic charts and diagrams, utilizing geographic information systems and the acquisition of the technical vocabulary of geography.

**United States History – Required** (may substitute AP US History)

(Grade 11) Year 1.0 Credit

This course in American History is designed to cover the stages in the development of the United States from Colonial America up to the present. Emphasis is placed on developing an understanding of the major elements involved, including political, cultural, and social influences and the role of citizens in these various stages. Reading, writing, thinking, concept development, technological research, and a sense of history are stressed.

**Advanced Placement (AP) US History - PACC option**

(Grade 11) Year 1.0 Credit

The purpose of the AP United States History course is to offer a first-year college-level course to high school students. While learning historical content surrounding seven themes and nine time-periods, students will develop historical thinking skills including comparing and contextualizing historical events, developing arguments using historical evidence, interpreting and synthesizing historical narratives, and using chronological reasoning. This course requires students to have a strong work ethic and the ability to work independently to cover the breadth and depth of information and concepts necessary for success. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Students will take the required AP exam in May and may earn college credit. Prerequisite: Students must have completed English 10 with a B or better and be recommended by their 10th grade Social Studies teacher. Students must meet with the instructor before summer vacation to pick up course materials.

**Economics – Required**

(Grade 12) Semester 0.5 Credit

Students will learn to apply economic concepts and principles to make sound and informed decisions in personal financial planning, budgeting, giving, spending, saving, investing, borrowing and insurance. They will analyze different economic systems. Students will use Microeconomic and Macroeconomic concepts to analyze markets and evaluate the performance of households, governments and central banks. At the end of this course students will be able to make more informed financial decisions in their own lives and will be able to better understand the fiscal and economic decisions of governments, corporations, and businesses.

**United States Government and Political Science – Required**

(Grade 12) Semester 0.5 Credit

In this course students will gain a strong understanding of the structure and function of the United States government and the rights and responsibilities of citizenship. They will analyze the creation of the United States government, including the political philosophies and historical situations that shaped the US Constitution. Students will examine how the interpretation of the US Constitution has changed over time. They will analyze how the United States government works at the local,

state, and federal levels, including the political process, elections and voting. They will analyze how the United States government interacts with other nations and international organizations. This course will emphasize the development of strong written and oral communication skills to prepare students for success in college and their careers.

### **Honors United States Government and Political Science - PACC option**

(Grade 12) Semester 0.5 Credit

Students will analyze the creation, structure and function of the United States government and the rights and responsibilities of citizenship. They will investigate the same topics as the non-Honors class (creation of United States government, US Constitution, local, state, and federal government, political process, international relations) but in greater depth. Honors students will be required to complete more challenging writing assignments and complete additional reading outside of class. Students will be challenged to think critically thinking as they analyze concepts and work to communicate effectively in written and oral formats. Students in this class will have the option to earn college credit for this course through St. Mary's University's PACC program.

### **Introduction to Psychology - Elective**

(Grades 11-12) Semester 0.5 Credit

This course studies many aspects of human behavior. It includes theories of personality development, experimental design, and learning theory. Application of psychological theory to everyday problems orients the student with various uses of psychology. Personality development, altered states of consciousness, motivation and emotions, sensation and perception, and psychological testing are explored, as well as various psychotherapies, including stress management. A supplemental "Baby, Think it Over" component is available to the students wishing to participate as well.

### **Sociology - Elective**

(Grades 11-12) Semester 0.5 Credit

This course is intended to introduce students to the study of sociology, including local and global societal structures. By the end of this course students should be able to understand human behavior of different groups and their impact on society; understand the nature of change and its effect on people and society; use essential skills to analyze, synthesize, and evaluate ideas and arguments; develop high level discussions of issues; use a scientific, systematic approach to understand ourselves as social beings; and take a more active and meaningful role in society. Study will include foundations and theories in sociology, the role of culture and socialization in creating a member of society, social groups & social control, social inequalities, and social institutions. Students will explore sociology through discussion, readings, quizzes, experiments, and projects.

### **Social Movements - Elective**

(Grades 11-12) Semester 0.5 Credit

Often change comes from the people and not from the government. In this course students will study the ways social movements have developed around the world. Students will study common elements of a variety of movements including the roots of social injustice, the dissemination of ideas, the development of leaders, support and sabotage, strategies of engagement, and measurement of success. Students will develop in-depth knowledge of a variety of social movements including the Indian Independence Movement, the Anti-Apartheid Movement, the



Civil Rights Movements, Women’s Liberation, the American labor movement, Cultural Revolution, Tiananmen Square, and Arab Spring. Students will exercise their critical reading and thinking skills, investigation skills, and communication skills through simulations, debates, and presentations.

### **U.S. Legal Studies - Elective**

(Grades 11-12, instructor permission)

Semester

0.5 Credit

This semester long course is an introduction to the United States legal system. Topics of study include our legal institutions at both the local and federal level, an examination of landmark and current Supreme Court cases and the social impact they had on our country's history, trial advocacy techniques through the participation in a mock trial, legal writing, and an exploration of legal careers and ways to utilize a legal degree.

### **Mock Trial – Flex Activity**

(Grades 9-12)

Flex Hour/Year

Mock trial is a competitive activity in which students will prepare a criminal case, portraying the roles of attorneys and witnesses in the case. It takes a combination of legal thinking, public speaking, and acting to successfully conduct a mock trial. This flex will be devoted to learning the skills necessarily for competition against other schools.

## **TECHNOLOGY**

### **Introduction to Computer Science - Restricted**

(Grades 11-12)

Semester

0.5 Credit

This class is an introduction to computer science and computer programming. The topics covered include: number systems (binary, octal, and hexadecimal), data types, loops, branching, and common command-line capabilities. Programming in a particular scripting language (e.g., Perl) will be covered extensively. DOES NOT count as one of the 3.0 science credits needed for graduation. Prerequisites: Algebra I. Registration capacity: 15 students

### **Electronics and Robotics - Restricted**

(Grades 11-12)

Semester

0.5 Credit

This class is an introduction to electronics, with specific application to small mobile robots and the sensors for such robots. Prior programming experience is assumed since reprogramming the robots is an integral part of the course. Prerequisites: Introduction to Computer Science. Registration capacity: 12 students

### **Honors Java Programming - Restricted**

(Grades 11-12)

Semester

0.5 Credit

This is an introduction to the Java computer programming language. Prior programming experience is assumed. This course is offered when there is sufficient demand for it. Prerequisites: Introduction to Computer Science. Registration capacity: 15 students

**Honors Programming in C++ - Restricted**

(Grades 11-12)

Semester

0.5 Credit

This class is an introduction to programming in C++. Prior programming experience is assumed.

Prerequisites: Introduction to Computer Science

Registration capacity: 15 students

**WORLD LANGUAGE**

Department Director: Mrs. Ulrike Schorn-Hoffert, 507-453-5090, [uschorn@cotterschools.org](mailto:uschorn@cotterschools.org)

The World Language Department wants to equip students with strong communication skills in all areas of the target language, including the study of the respective cultures. To be successful, students are expected to be engaged and focused participants using the target language increasingly for communication as they progress to more advanced levels. A solid foundation in English grammar will facilitate the transition to a second language. The grade levels indicated for each course are approximate guidelines. The respective language teacher together with the counseling department will assess and decide individual student need and placement to ensure the best environment for academic success. If a student passes the first semester, but fails the second semester of a language course, he or she may be required to repeat the full year in order to receive full credit.

**Required Credits for Graduation – 2.0** (2 credits must be within the same World Language)

**SPANISH LANGUAGE**

**Spanish I - Elective** (may be used to fulfill the World Language requirement)

(Grades 9-12)

Year

1.0 Credit

This novice low-level class is designed for beginners only. It introduces students to the fundamental concepts of Spanish grammar, vocabulary, phonetics and culture. Through a variety of activities, students will begin to acquire the skills of conversation, listening comprehension, reading and writing. The geography of the Hispanic world, especially South and Central America, will be an integral part of the topics covered. Oral participation is a key skill of this level with communication in the target language being the ultimate goal. Students will focus on acquiring thematic vocabulary. No Prerequisite.

**Spanish II – Elective** (may be used to fulfill the World Language requirement)

(Grades 9-12)

Year

1.0 Credit

This level introduces students to the novice-high concepts of grammar, vocabulary, phonetics and culture. The students will continue to develop skills for conversation, listening comprehension, reading and writing. The culture of the Hispanic world will be an integral part of the topics covered and will provide the source for vocabulary. Increased spontaneous participation and use of the target language in class are expected and necessary. Students will acquire additional thematic vocabulary and the use of additional verb tenses.

Prerequisite: Successful completion of Spanish I.

**Spanish III – Elective** (may be used to fulfill the World Language requirement)  
(Grades 9-12) Year 1.0 Credit

In this level we review the simple tenses and complete the compound tenses. Students will further develop their communication skills, both verbal and written. More advanced concepts of grammar, vocabulary, phonetics and culture will be explored. The culture of the Hispanic world, especially simple stories and myths, will be an integral part of the topics covered and will supply the impetus for additional vocabulary. Prerequisite: Minimum grade of C in Spanish II or teacher's approval.

**Spanish IV – Elective**

(Grades 10-12) Year 1.0 Credit

We begin with an intense review of all learned verb tenses. This level introduces students to the subjunctive and related verb tenses. The emphasized grammar will be the subjunctive, **ser/estar**, preterit/imperfect and **por/para**. In addition, more advanced concepts [detailing] of grammar, vocabulary, phonetics and culture will be explored. The topics for reading, discussion, projects and writing will be from contemporary and traditional literature focusing on authors and genres found on the Advanced Placement (AP) and other national assessment tools. Class is primarily conducted in Spanish and students are expected to speak Spanish as much as possible.

Prerequisite: Minimum grade of C in Spanish III.

**Honors Spanish V – Elective**

(Grades 11-12) Year 1.0 Credit

Verb tenses are systematically studied and mastered via daily exercises. Miscellaneous grammatical concepts are reviewed as part of the maintenance program. Class is conducted in Spanish: students are expected to use Spanish in the classroom. Classic and contemporary literature and civilization/culture articles will provide the topics for reading, discussions, projects and writing activities. Some direct preparation for the AP exam and other national standardized assessment tools will be provided. Participation in the AP testing program is optional and voluntary. Prerequisite: Minimum of grade C in Spanish IV.

## GERMAN LANGUAGE

German I is the first part of a two-year sequence with a German II course being offered the following year. Completing German I and II will fulfill the World Language requirement for Cotter students. The German I and II course sequence will be alternately offered every other year unless the schedule and student interest would warrant yearly courses.

**German I - offered every other year (offered 2018-19)**

(Grades 9- 12) Year 1.0 Credit

This is an introductory course designed to familiarize beginning students with selected areas of the German language and culture. Through the exploration of thematic units such as family, school life, eating customs, geography, etc. students will practice conversational skills, basic grammar concepts and learn content specific vocabulary and phrases. Aspects of culture in the German-speaking world are integrated into each unit. Successful communication at a basic level of German is the main goal of this language course.

**German II - (offered 2017-18)**

(Grades 10 - 12)

Year

1.0 Credit

Practice in the four areas of listening, speaking, reading and writing will continue based on selected components of the textbook DEUTSCH AKTUELL as well as other multimedia resources. We will expand our understanding of German vocabulary, grammar and cultural concepts aiming for improved communication skills. Students are encouraged to use German increasingly as the language of classroom conversation. As in German I, active participation, speaking effort in German and listening focus will greatly contribute to student success in this course. In addition German II students will occasionally be preparing and teaching basic German mini lessons to Junior High students to review and gain confidence in the language skills they have acquired so far. Prerequisite: successful completion of German I or equivalent language background.

**VISUAL & PERFORMING ARTS**

Department Director: Mrs. Cathy Snyder, 507-453-5000, Ext. 5053, [csnyder@cotterschools.org](mailto:csnyder@cotterschools.org)

**Required Credits for Graduation – 1.0** (Visual Arts, Choir, Band)

**INTRODUCTORY ART COURSES****Introduction to Creative Thinking - Elective**

(Grades 9-12)

Semester

0.5 Credit

Develop creative thinking skills and apply those ideas to creating works of art. Learning will include understanding of the art elements as they are used in various art media. Students will have an opportunity to create as well as respond to and appreciate works of art in a critical manner.

**Computer Art - Elective**

(Grades 9-12)

Semester

0.5 Credit

This drawing & design course merges traditional art with technology, using the computer to explore the basic concepts of design: line, shape, space, texture, value, color, size and composition. Corel Painter and Wacom pressure-sensitive drawing tablets are used to create traditional-style artwork that integrates the unique features of the software, maximizing the advantages of the computer as the ultimate artist's tool.

**ADVANCED ART COURSES**

Completion of either Introduction to Creative Thinking or Computer Art is required to register for an advanced art course.

**Advanced Drawing – Elective**

(Grades 10-12)

Semester

0.5 Credit

Enhance creativity and increase artistic confidence by learning to see the way artists see. Learn techniques in value drawing, gestures, contour drawing, figures, portraits, and landscapes. Prerequisite: Intro to Creative Thinking or Computer Art.

**Printmaking/3d Construction – Elective**

(Grades 10-12) Semester 0.5 Credit

Explore a variety of means used to transfer an image with different printmaking techniques including silkscreen printing, monoprints, relief prints and collagraphs. Construct 3-dimensional art with clay, wire sculpture, plaster and paper. Enrollment is limited to 15 students. Prerequisite: Intro to Creative Thinking or Computer Art.

**Painting - Elective**

(Grades 10-12) Semester 0.5 Credit

This course takes an in-depth look at color theories and their uses in traditional acrylic painting. The first quarter consists of various exercises illustrating the properties of color, color schemes and brush techniques. The second quarter is devoted to exploring original ideas and completing more complex paintings on canvas, involving various techniques and subject matter. Prerequisite: Intro to Creative Thinking or Computer Art

**Graphic Design - Elective**

(Grades 10-12) Semester 0.5 Credit

Using the graphics industry standard software, Adobe Illustrator, students apply design concepts to creating professional quality commercial imagery, typography, logos, and advertising layouts. Through a variety of design projects, students discover designer/client relationships, target audience, the brainstorming process, conceptual design solutions, creating mock-ups for critique, and producing final artwork. This class is a must for anyone considering a career in the fields of design, marketing or business. Prerequisite: Intro to Creative Thinking or Computer Art.

**Motion Graphics - Elective**

(Grades 10-12) Semester 0.5 Credit

Students use Adobe After Effects, the premiere video compositing & animation software of the television and motion picture industries, to assemble still graphics, type, video and audio to create layered, moving imagery. Students will learn the tools to create the type of professional 2-d and frame-by-frame animation seen on TV and movies. People possessing these skills are in high demand for television, film and graphic design career markets. Prerequisite: Intro to Creative Thinking or Computer Art.

**Film & Video - Elective**

(Grades 10-12) Semester 0.5 Credit

Students practice the concepts, skills, and production methods which form the foundation of filmmaking: camerawork, lighting, composition, staging, scripting, storyboarding, editing, dialogue, graphics, music and special effects are applied to creating professional-level film sequences. Adobe Premiere software is used for video production and editing. This class culminates in a student-directed final film project. Prerequisite: Intro to Creative Thinking or Computer Art.

**Modern Photography - Elective**

(Grades 10-12)

Semester

0.5 Credit

Students explore a wide variety of subject matter and assignments to learn traditional photography skills, techniques and terminology: framing, lighting, exposure, bracketing, focus, depth of field, etc. Adobe Photoshop is used to retouch, color-correct, manipulate and add special effects to enhance the images. Students need to provide their own camera and disk/film media -- may be digital or traditional 35mm. Prerequisite: Intro to Creative Thinking or Computer Art.

**MUSIC – INSTRUMENTAL****Band - Elective**

(Grades 9-12)

Year

1.0 Credit

Band is open to all students in grades 9-12. Participation in this course includes participation in Concert Band and small ensembles for all students. The band rehearses four (4) days per week for one period. Lessons, concerts, contests, and public performances are a required part of the course. Students without prior band experience should make special arrangements with the band director. Each student must play a yearly audition for ensemble and chair placement. Band is a performance course and attendance at all performances is required.

**Jazz Band – Elective – Restricted**

(Grades 9-12)

Year

0.5 Credit

Jazz Band rehearses twice (2) or three (3) times a week for one hour. Instruction in basic theory and jazz improvisation are major components of this course. Jazz band is a performance course; students must be present for all concerts, contests, and public appearances. Enrollment is limited to 20 students. Prerequisite: Audition and concurrent participation in concert band.

**MUSIC – VOCAL****Chorus - Elective**

(Grades 9-12)

Year

1.0 Credit

Chorus is open to all students in grades 9-12. It consists of four basic aspects: building a unified choral tone, developing individual voices, improving music reading skills, and placing musical selections in an historical context. Lessons are required of every chorus member. Chorus is a performance-based course; students must be present for all concerts, contests, and public performances.

**Show Choir – Elective - Restricted**

(Grades 9-12)

Year

0.5 Credit

Show Choir is a choral music group with emphasis on popular music. Choreographed dance, movement, and staging are also an integral part of this music group. This is a performance course; students are expected to participate in all concerts, contests, or any other public performances. Prerequisite: Audition and concurrent participation in concert choir.

**Music Listening – Flex Activity** (this does not satisfy the Visual or Performing Arts credit)  
(Grades 9-12) Flex Hour/Year

This course will facilitate and expand the music listening experiences of students, primarily through the use of Western music-commonly referred to as classical music. The objective of the class is to inspire students to become life-long participants in the musical experience. Participation in the Minnesota Music Listening Contest held the 3<sup>rd</sup> Friday in January is mandatory.

## 2017-2018 COTTER JUNIOR HIGH SCHOOL

### ACADEMIC PROGRAM

To qualify for a certificate of completion from Cotter Junior High School, each student must complete the required number credits of academic study. Each incoming student is required to take one year of band **or** choir.

#### GRADE 7

Language Arts  
Life Science  
Mathematics  
Geography  
Religion  
Art (one semester), Physical Education (one semester)  
Electives: (Choose one or two) Band, Choir, Learning Center

#### GRADE 8

Language Arts  
Earth Science  
Mathematics  
American History  
Religion  
Physical Education and Health and Wellness Education  
Electives: (Choose one or two) Band, Choir, Learning Center

### PHYSICAL EDUCATION/HEALTH

#### 7<sup>th</sup> Grade Physical Education/Health

#### Required

Physical Education/Health is a vital component in the development of a student's physical, mental, and social well-being. Through this semester long course students will have the opportunity to experience a variety of health and fitness related skills/activities that will provide enjoyable experiences for lifelong physical fitness. In conjunction with health class students will receive instruction in proper exercise techniques and practices, good nutritional habits, and basic anatomy.

Additionally, students will be exposed to the rules and strategies of various fitness activities all while participating in individual skill practice and modified games/competitions.

### **8<sup>th</sup> Grade Health/Physical Education**

### **Required**

This year long course will provide students with knowledge, attitudes, and skills to make health-promoting decisions while incorporating the physical, mental, emotional, social, and spiritual dimensions of health. In some form this course will also address the six major categories of risk behaviors that teens face today as identified by the United States Center for Disease Control. Additionally, this course will encourage students to become better THINKERS, LEARNERS and COMMUNICATORS through the use of the TOP 20 Teens text and teaching materials. Lastly, students will be exposed to the rules and strategies of various fitness activities all while participating in individual skill practice and modified games/competitions.

## **LANGUAGE ARTS**

The focus of the Language Arts curriculum involves learning effective communication through the development of reading, writing, listening, thinking, and speaking skills. Through the study of literature, students strengthen critical thinking skills, employ collaborative learning techniques, command a variety of writing styles, and improve proficiency as oral presenters. Furthermore, the study of language and literature encourages the development of self-awareness and Christian values.

### **Language Arts - Grade 7**

### **Required**

Seventh grade English emphasizes interpersonal communication, critical reading, and personal writing skills. Students have ongoing and consistent practice in sentence structure, including grammar and spelling. Vocabulary expansion is integrated into the curriculum throughout the year. In addition, using various models, students will focus their study of literature on plot, character development, setting, point of view, figurative speech, and theme. Students will practice writing sequence of events, predicting outcomes and making inferences. Emphasis is placed on appreciation, enjoyment, understanding, critical thinking and development of stimulating reading and writing skills and habits. Poetry and reading a novel are integrated into the curriculum.

### **Language Arts - Grade 8**

### **Required**

This course develops strong critical thinking skills through the composition of well-structured expository, descriptive, and persuasive paragraphs. This class also reviews and builds on previously taught grammar and usage skills, then moves to incorporate increasingly complex patterns in students' writing. The writing process -- including an emphasis on revision -- and audience awareness exercises enhance students' abilities to tailor their voices in appropriate genres for various purposes. In addition, students read and analyze short stories, poetry, non-fiction, and Native American biographies. Word processing and the Internet will be components of individual units.



**Teen Press 7 & 8 – Flex Activity**

(Grades 7-8)

Flex Hour Semester/Year

Spend one flex period a week learning interviewing techniques, video editing, and researching subjects and scheduling interviews locally, and perhaps, regionally. Students must be willing to attend some events or conduct interviews outside the school day, though these will be set up around students' existing schedules.

**MATHEMATICS**

The Mathematics Department offers courses designed to provide a sound mathematical background needed to succeed in life as well as to prepare students for more advanced mathematical courses. The objectives of the mathematics curriculum include the following: to cultivate the power of independent thinking, to increase the ability to analyze and solve problems, and to develop an understanding of the nature and structure of mathematics as needed to pursue higher mathematics and sciences. In addition, the mathematics department envisions every student functioning at a level appropriate for his or her capacity to learn and to ensure each class includes challenges and successes for every student. Placement of students into their first mathematics course is determined by their scores on an entrance placement test, and results of standardized achievement tests taken during seventh and/or eighth grade.

**General Math Plus - Grades 7 and 8****Placement Required**

General math is a transition course for students who have completed sixth grade math but are not ready for Pre-Algebra. Basic mathematical concepts and skills are reviewed and reinforced. This course focuses on the following skills: fractions, decimals, percents and ratios; perimeter, circumference, area and volume; exponents, scientific notation and signed numbers. Students receive consistent guided practice with problem-solving techniques through word problems.

**Pre Algebra - Grade 7 and 8****Placement Required**

This course explains in depth the concepts necessary for the operations of Algebra 1. This includes basic operations of the real number system, polynomials, graphing of linear equations, equalities and inequalities. Throughout this course problem solving and real life applications are continually stressed.

**Algebra I - Grade 7 and 8****Placement Required**

This course is designed to cover the standard topics of Algebra I. Students are carefully eased into word problems and develop a systematic approach to problem solving. Constant review of all algebraic skills takes place. This course will provide an excellent background for the skills needed in technical and vocational training. Prerequisite: A grade of C or better in General Math or department director approval.

## RELIGION

The religion department strives to guide and challenge students in their process of becoming conscious, active, self-determined, integrated members of the Christian community, who will continue to carry on the good news and build the kingdom of God. In addition, the religion department seeks to help students develop a solid understanding of what it means to be Catholic, which will overflow into all aspects of the Cotter community. Courses are designed to maintain a strong academic focus on Church teachings, provide daily opportunities for prayer and spiritual enhancement, and remain flexible for opportunities for discussion of immediate concerns impacting our lives and the lives of those around us.

### Religion - Grade 7 & 8

### **Required**

First semester focuses on liturgy and sacraments celebrated in the Catholic Church. Students learn how symbols and rituals connect the past to the present and future in both secular and religious celebrations. Students learn to articulate a basic understanding of sacramentality. Each of the seven sacramental celebrations are studied, with a special focus on the meaning of their rituals, symbols, gestures and prayers. Students learn to identify and explain basic parts of the Mass and come to a deeper understanding of why Catholics do what they do at Mass.

Second semester focuses on morality and social justice through the lens of the Ten Commandments. Students will learn the process for moral decision making. Content of the course will focus on honoring and respecting God, family, life, sexuality, truth, and property. Students will gain a basic understanding of the social justice teachings of the Catholic Church and some of its implications for Christians today.

Community service is a required part of the religion program. Students will learn that Jesus calls his followers to lives of concern for their fellow human beings, particularly those in need.

## SCIENCE

The vision of the science department is to develop a comprehensive science program that fosters inquiry in students and helps students communicate scientific principles and ideas using technology and other media.

### **Gr. 7: Life Science – Required**

### **Semester**

Life Science is designed to introduce 7<sup>th</sup> graders to the study of living things. In this class we will discover how living things relate to one another and to their surroundings. We will begin our study of Life Science with the cell and its functions and build through the five kingdoms to plants and animals. Along the way we will learn about the processes that organisms exhibit how different organisms perform these processes. Most importantly we will be relating Life Science to ourselves and the world around us.

**Gr. 7: Design and Modeling (PLTW) – Required****Semester**

Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. They are then challenged and empowered to use and apply what they've learned throughout the unit to design a therapeutic toy for a child who has cerebral palsy.

**Gr. 8: Earth Science - Required****Semester**

Earth Science is the study of the planet Earth and its' place in space. In this class, all eighth graders will be introduced to the Earth Science branches of geology, meteorology, astronomy, oceanography and Environmental Science and will learn how these branches are connected.

**Gr. 8: Automation and Robotics (PLTW) – Required****Semester**

Students learn about the history and impact of automation and robotics as they explore mechanical systems, energy transfer, machine automation, and computer control systems. Using the VEX Robotics platform, students apply what they know to design and program traffic lights, robotic arms, and more.

**LEARNING CENTER****Learning Center – Grades 7 and 8****Elective**

The Learning Center class provides academic assistance as well as tutoring in various academic areas. It also provides students with guidance in the areas of study skills, organization, writing skills and other areas as needed. Students may be referred by faculty, parents and/or administration. A student can be concurrently enrolled in the Learning Center and band/choir, or a student may attend the Learning Center full-time.

**SOCIAL STUDIES**

The social studies department seeks to prepare students to be thoughtful, active citizens in our democratic society and to make them aware of the responsibilities that go along with citizenship. Students will obtain the tools of learning, learn to make rational decisions, and develop talents to assist them in their future careers. Teachers strive to help students become more knowledgeable and make them aware of the current events and how they impact our lives and the lives of those around us. The social studies' program helps students formulate a workable set of Christian values; to meet challenges; and to think, create, interpret and apply their knowledge to the world around them. Emphasis is placed on inquiry and understanding so that students can function productively in a multicultural, ever changing, and increasingly interdependent world.

**United States History - Grade 7****Required**

This course is designed to cover American history from colonial times to the Korean War. In addition to acquiring knowledge of the history of the United States, an emphasis will be placed on developing social studies' skills including analyzing primary and secondary documents, understanding graphics, evaluating cause and effect relationships, writing, and reading maps. A

primary goal of this course is to aid students in developing critical thinking skills and appreciating how they fit into the overall story that is US history.

### **Geography - Grade 8**

**Required**

This course is intended to be a survey of the cultures and geography of all areas of earth. The analysis of maps, the ability to organize information, interpret graphics, accurately placing countries on the world map, and appreciating all cultures will be emphasized. Students will be asked to consider how land affects the way in which ideas, social structures, and global trends are developed and intertwined.

## **VISUAL AND PERFORMING ARTS**

All students will have the opportunity to participate in the visual and performing arts as an essential element of a well-rounded education and personal growth. Through the arts, students are exposed to varied interests, knowledge and experiences, thereby becoming strong and productive adult members of society.

### **VISUAL ARTS**

#### **Art - Grade 7**

**Semester**

**Required**

This course is an introduction to the basic principles and elements of design. Emphasis will be placed on hands-on learning through a variety of media and art experiences. In addition, this class will incorporate art appreciation and technology-enhanced activities and assignments.

### **PERFORMING ARTS: MUSIC - INSTRUMENTAL**

#### **Band - Grades 7 and 8**

**Year**

**Elective**

Band is open to all 7<sup>th</sup> and 8<sup>th</sup> grade students. Students without prior band experience should make special arrangements with the band director at the beginning of the school year if they are interested in taking part in this class. The band rehearses four (4) days per week for one period. Individual lessons are required of every band member, and each student must play a yearly audition for chair placement. Grades will be based on regular lesson attendance, rehearsals, and participation. Band is a performance course; therefore, students must be present for all concerts, contests, and public performances. Junior High Jazz Band is an optional ensemble that meets once per week.

### **PERFORMING ARTS: MUSIC - VOCAL**

#### **Choir - Grades 7 and 8**

**Year**

**Elective**

Choir is open to all 7<sup>th</sup> and 8<sup>th</sup> grade students. The junior high choir will provide opportunities to learn, prepare, and present programs in the area of vocal music. Vocal techniques and tone production are studied in various styles of music, ranging from early sacred to popular selections. Opportunities to form smaller ensembles will be available for singing at such functions as school masses and community singing. Choir is a performance-based course; therefore, students must be present for concerts and public performances. Junior High Show Choir is an optional ensemble that meets once per week.