

# **Dakota Ridge High School**



## **Planning Guide 2018-2019**

**13399 W. Coal Mine Avenue  
Littleton, Colorado 80127  
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**<http://dakotaridge.jeffcopublicschools.org/>**

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# Counseling Information:

**Dakota Ridge High School** encourages all students to work together with their counselors, teachers, and parents to develop a 4-year academic plan. Ideally, this plan would align the student's academic and elective choices with their future career and life goals. See the back cover for a template example. The Naviance website (found on Counseling website) is an available resource for career and college planning, and all students are required to complete their own **Individual Career and Academic Plan (ICAP)** by using this website in conjunction with their counselor every year.

## Graduation vs. Higher Education Admissions Requirements (HEAR)

Students are required to earn **23 credits** in grades 9 - 12 to receive a Dakota Ridge High School / Jefferson County Schools diploma and be eligible to participate in the DRHS graduation ceremony. Additionally, the Colorado Department of Higher Education (DHE) has revised the **Admissions Standards Policy for 4-year, in-state, public universities**.

<u>DRHS Courses</u>	<u>Jeffco Graduation Requirements</u>	<u>"HEAR" 4-yr. CO public colleges Minimum Requirements</u>
English	4 credits	4 credits
Math ( <i>1 must be Geom or higher</i> )	3 credits	4 credits (minimum: through Algebra II)
Science	3 credits	3 credits (all lab-based)
Social Studies	3.5 credits	3 credits
World Language	0 credits	1 credit
P.E./Health	0.5 credits	0 credits
Fine/Practical Arts	0.5 credits	0 credits
Electives	<u>8.5 credits</u>	<u>2 credits "academic" (core) electives</u>
	<b>23 credits</b>	<b>17 credits</b>

- For more information about admission requirements see the following: <http://higherred.colorado.gov/Academics/Admissions/>.
- Two years acceptable "Academic Electives" include additional courses in: English, mathematics, natural/physical sciences and social sciences, foreign languages, art, music, journalism, drama, computer science, honors, Advanced Placement, International Baccalaureate courses, and appropriate CTE courses.

**For the classes of 2021 and beyond, demonstration of career and college readiness in English and Math criteria must be met through one or more of the approved options in the menu below:**

<b>Measure/Score</b>	<b>English</b>	<b>Math</b>
Accuplacer assessment	62	61
American College Testing (ACT)	18	19
ACT WorkKeys	Bronze or higher	Bronze or higher
Advanced Placement (AP)	2	2
Armed Services Vocational Aptitude Battery (ASVAB)	31	31
International Baccalaureate (IB)	4	4
Scholastic Aptitude Test (SAT)	430	460
Concurrent enrollment	Passing Grade	Passing Grade
Industry certificate	Individualized	Individualized
District capstone	Individualized	Individualized
Collaboratively-developed, standards-based performance assessment	Statewide scoring rubric	Statewide scoring rubric

\*The menu is subject to change and revision from the state. When changes are made, the district will update its policy to ensure adherence to the state's guidelines. For more information please go to:

<https://sites.google.com/a/jeffcoschools.us/graduation-requirements/menu-of-college-and-career-ready-demonstrations>

## Graduation Requirements, Exemptions, & Waivers

- In grades 9 - 12, students shall take at least 4 classes in core contents or 3 Advanced Placement courses or International Baccalaureate courses each semester. Principals may waive this requirement based on individual student circumstances.
- Exemptions from physical education class will only be granted if a student is unable to participate in a physical education class; the student must provide to the building principal a physician's statement stating the reason for the student's inability to participate.
- Senior high school principals can waive course requirements based on individual student circumstances. All requests must be made in writing and given to the principal for approval. Once approved the waiver must be included in the student's graduation plan.

## Dakota Ridge Valedictorian and Salutatorian Selection

The valedictorian will be the student(s) with the **highest adjusted GPA** and **outstanding citizenship**. The salutatorian will be the student(s) with the **2nd highest adjusted GPA** and **outstanding citizenship**. This proven system rewards students for successfully completing a most rigorous course load. The adjusted GPA will be calculated using the following procedure:

- 1) Final cumulative unweighted GPA will be determined at the end of second semester of the student's senior year.
- 2) Additional academic points will be awarded based on:
  - 1 point** for each semester of an Honors class successfully completed.
  - 2 points** for each semester of Advanced Placement, International Baccalaureate, and Post-Secondary Education option classes successfully completed.
- 3) Each academic point acquired will add .01 to the final cumulative unweighted GPA to determine adjusted GPA.
- 4) **The final selection of the valedictorian and salutatorian will be based on the above criteria and administrative discretion towards the end of second semester.**

## Transcript Rules

The following courses are the only courses that will appear on a **DRHS** transcript.

- Courses taken at DRHS.
- Any Jefferson County, Night School, Warren Tech, Jeffco's 21<sup>st</sup> Century Virtual Academy, or other Jefferson County Option School Coursework.
- Pre-approved correspondence and ACC or RRCC Night/Summer School courses.
- "Concurrent Enrollment Option" courses.
- Pre-approved DRHS early graduation contracted courses.
- Pre-approved fifth-year student credit recovery courses.
- Pre-approved Voluntary Community Service - maximum 1.0 elective credit for up to 180 hours.
- Pre-approved transfer credits from another Jeffco-approved, accredited U.S. high school, at principal's discretion.

**\*No more than 2.0 credits of "credit recovery" courses taken OUTSIDE of Jefferson County Public Schools will count towards graduation requirements.**

**\*\*Pre-approved, home-based or online education students must earn a minimum of 10.0 full credits during the student's Junior and Senior years at DRHS, and meet all graduation requirements, in order to earn a DRHS diploma, at principal's discretion.**

## NCAA Eligibility Requirements

Athletes who plan to enroll in college and participate in NCAA Division I or Division II athletics must register by the end of 11<sup>th</sup> grade to be certified by the NCAA Initial Eligibility Clearinghouse. Approved core courses are noted in the course descriptions. Please consult the NCAA Clearinghouse website at [www.eligibilitycenter.org](http://www.eligibilitycenter.org) or [www.ncaa.org](http://www.ncaa.org) for more details and planning.

### 16 Core Units for NCAA Athletic Certification:

English  
Math (*Algebra 1 and above*)  
Natural/Physical Science (*at least 1 lab course*)  
Additional English, Math or Science course  
Social Science  
Additional Courses [*in any of the above areas or*  
*Foreign language, comparative religion/philosophy*]  
**TOTAL CORE UNITS REQUIRED**

### Division I

4 years  
3 years  
2 years  
1 year  
2 years  
4 years  
**16 core courses**

### Division II

3 years  
2 years  
2 years  
3 years  
2 years  
4 years  
**16 core courses**

**Students must earn at least a 2.3 GPA in NCAA core courses (2.2 GPA for Div. II) to be eligible to compete in their first year at a Division 1 college. Ten (10) core courses must be completed before entering twelfth grade.**

**Adding/Dropping Classes:** All class adjustments must occur before the semester begins. In the final weeks of the previous semester, schedule change requests are considered via paper request to a committee for review of “academically compelling reasons” for a potential schedule change. This info is posted clearly on student registration forms. **District Policy:** Classes dropped during weeks 2-6 will result in a grade of “WF” (Withdraw Fail) or “WP” (Withdraw Passing) as indicated by the teacher. A class dropped after week 6 results in a semester grade of “F” and does affect the cumulative GPA.

**Advanced Placement:** The Advanced Placement (AP) program is a national academic program sponsored by the College Board. Classes are equivalent to introductory college courses that provide opportunities for high-achieving students to complete certain college requirements while still in high school. Most AP courses are year-long and culminate in a required national exam in May. Passing grades in AP courses are weighted in students’ cumulative GPA. Students may not drop Honors/AP/IB courses once they have committed to the course in May, except at semester break.

**Block Scheduling:** Class periods are 90 minutes in length and students attend 3-4 class blocks per day. Classes meet every other day. The school year consists of 36 weeks and is divided into two semesters. Grade reports to evaluate student progress are available through JeffcoConnect at the end of the 6th and 12th weeks each semester; final semester grades appear on transcripts which are also available on the Infinite Campus portal through JeffcoConnect.

**Class Rank:** A student's relative standing in his/her class is determined by comparing the cumulative grade point averages of all students in the class. Students will see a “weighted” class rank as well as an “unweighted” class rank, depending upon their enrollment in Honors, AP and/or IB classes.

**Course Load:** Students in grades 9 and 10 must take a minimum of 6 courses + Seminar and Study Hall during the 2-day block rotation. Juniors must take a minimum of 6 courses + Seminar; seniors must take a minimum of 5 courses + Seminar.

**Credit:** Recognition that a student has successfully passed a class (grade of “D” or higher), fulfilling a requirement towards high school graduation. *Please note that many selective colleges do not accept “D’s” as passing/credit on high school transcripts.* Typically, the amount of credit awarded for successfully completing one semester class is .5 credits.

**Cumulative Grade Point Average (GPA):** The average obtained by dividing the total number of grade points earned in high school courses by the total number of credits attempted. Weighted grades for successful completion of AP, IB, and Honors courses are factored into this calculation. DRHS operates on a 4.0 grade point scale, as follows:

<b>Grade Points:</b>	A = 4 grade points	<b>Weighted Grade Points:</b>	A = 5 grade points
	B = 3 grade points	<b>(definition below)</b>	B = 4 grade points
	C = 2 grade points		C = 3 grade points
	D = 1 grade point		D = 1 grade point
	F = 0 grade points		F = 0 grade points

**International Baccalaureate:** The IB Diploma Programme is designed as an academically challenging and balanced programme of education with final examinations that prepares students, normally aged 16 to 19, for success at university and life beyond. The programme is taught over two years and has gained recognition and respect from the world's leading universities. For more information on our IB programme please refer to the special programs section of the planning guide.

**Seminar:** The primary purpose of seminar class is to ensure that each student has a personal connection at school. In this structure, every student has an adult mentor who helps guide his/her students, serves as a communication point and assists in times of crisis (either large or small). Through seminar, students have opportunities to learn both ‘soft,’ or people, skills needed in post-high school education and workplace settings and ‘hard’ skills such as resume writing, interview skills, how to research colleges and scholarships, etc. The seminar structure also offers students a voice in the school, and the opportunity to leave an effective personal legacy via their contribution to the program. This concept is research-proven to be effective in raising academic scores and enhancing the overall environment within the school.

**Weighted Grades:** Grades are weighted in recognition of additional effort and learning required in classes beyond the typical level of difficulty for high school courses. The following courses will be weighted: AP, IB, and Honors courses offered within Jeffco Schools and Postsecondary Options courses that meet or exceed the level of AP when unavailable at the student’s home high school or when the student has completed the curriculum offered at the home high school (with principal’s discretion and prior approval).

## Minimum Recommended H.S. Coursework & National Test Scores Examples

### Sample Colleges

#### Most Selective:

Duke University  
Harvard University  
M.I.T.  
Stanford University  
U of California – Berkeley  
University of Notre Dame  
U.S. Military Academies

### Recommended Minimum H.S. Program of Study

**ACT: 33-36**

**Class Rank:**

**Acceptance:**

Language Arts\*

Mathematics\*

Social Studies\*

Science\*

Foreign Language

**SAT\*\*: 1400-1600**

**Top 10%**

**Accept fewer than 20% who apply**

4 years

3-4 years

3-4 years

3-4 years

3-4 years

#### Highly Selective:

Boston University  
College of William & Mary  
Colorado School of Mines  
Georgetown University  
New York University  
U of California – Los Angeles

**ACT: 29-34**

**Class Rank:**

**Acceptance:**

Language Arts\*

Mathematics\*

Social Studies\*

Science\*

Foreign Language

**SAT\*\*: 1200-1500**

**Top 10-35%**

**Accept 20-40% who apply**

4 years

3-4 years

3-4 years

3-4 years

3-4 years

#### Very Selective:

Baylor University  
Brigham Young University  
University of Colorado  
University of Denver  
University of Florida  
University of Miami

**ACT: 24-30**

**Class Rank:**

**Acceptance:**

Language Arts

Mathematics

Social Studies

Science

Foreign Language

**SAT\*\*: 1100-1300**

**Top 35-50%**

**Accept 30-75% who apply**

4 years

3-4 years

3 years

3 years

2-3 years

#### Selective:

Arizona State University  
Boise State University  
Colorado State University  
University of Nebraska  
University of Northern Arizona  
University of Northern Colorado

**ACT: 22-27**

**Class Rank:**

**Acceptance:**

Language Arts

Mathematics

Social Studies

Science

Foreign Language

**SAT\*\*: 1000-1200**

**Top 50%-65%**

**Accept 50-85% who apply**

4 years

3-4 years

2-3 years

2-3 years

2 years *recommended\*\*\*\**

#### Less Selective:

Adams State University  
Fort Lewis College  
Colorado Mesa University  
Metro State University of Denver  
University of Wyoming

**ACT: 21 & below**

**Acceptance:**

Language Arts

Mathematics

Social Studies

Science

Foreign Language

**SAT\*\*: 1000 & below**

**Accept 75% or more who apply**

4 years

3-4 years

2-3 years

2 years

2 years *recommended\*\*\*\**

#### Open Admissions:

Arapahoe Community College  
Red Rocks Community College

Northeastern Junior College  
Front Range Community College

\* *Advanced Placement strongly encouraged.*

\*\* *SAT score = sum of math & ERW sections; maximum score of 1600 for these two sections.*

\*\*\**Two years of foreign language may be required for some of these colleges.*

*Please research the admissions requirements for each of your prospective colleges!*

# **Course Descriptions**

# ART OVERVIEW

Students receive instruction based on Jeffco curriculum including application of media, concepts, art history, problem solving, skill building and craftsmanship. Curriculum and instruction meets the needs of both beginning art students and students focusing on a career. Competition includes the Jefferson County Sr. High Art Exhibit and Scholastics to list a few. The development of a portfolio is emphasized in advanced classes for scholarship application. Representatives from national and local art schools are invited to speak about their programs and career options. Job opportunities in the Arts are introduced.

**National Art Honor Society:** Students in all art classes may join the National Art Honor Society. We meet most Thursdays after school in AR 144. A minimum of 30 documented hours will be required. Students will gain professional connections and an understanding of what is required to enter their field of study. The development of a portfolio for application to a professional program is required. This program focuses on students who are contemplating and are serious about art school and a career in the arts.

The opportunity to letter in art, as well as earn a graduation cord is available for National Art Honor Society members.

## **CREATIVE ART – DRAWING**

**Course # 05156G05012**

**Semester Course  
Grade Level: 9 – 12**

**Fee: \$24 for pencils, erasers, colored pencils, ink, scratchboard, paper**

Creative Art—Drawing covers the same topics as Creative Art—Drawing/Painting, but focuses on drawing. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, charcoal, and so on), but may also focus on only one medium. Specifically, this class will focus on fundamental and realistic drawing skills for the still life, landscape and portrait. Basic approaches include mark-making, line quality, value, volume, toning, texture and the various methods that emphasize spatial qualities. Additionally students will become familiar with the Elements of Art & Principles of Design as they relate to images, both realistic and abstract. Students interested in an art career may enroll in National Art Honors Society.

## **CREATIVE ART – DRAWING INTER**

**Course # 05156G05022**

**Semester Course  
Grade Level: 9 – 12**

**Prerequisite: Drawing, (grade of “C” or better)**

**Fee: \$29 for pencils, erasers, tortillions, charcoal, pastels, prismacolor colored pencils, paper**

Creative Art—Drawing Intermediate will allow students who completed Beginning Drawing to expand their skills. Students will explore new mediums and techniques while focusing on observation and compositional elements. Much of the work will be done within the context of drawing from life to reinforce the student’s observational skills. Contemporary trends in art will be integrated within this course to enrich student knowledge and awareness. Students are also introduced to the historical design approaches, fundamentals of abstraction, and projects that develop a conceptual language. Students may take Drawing Intermediate or Drawing Advanced in any order if schedule is prohibitive. Students who are interested in an art career may enroll in National Art Honors Society.

## **CREATIVE ART – DRAWING ADV**

**Course # 05156E05012**

**Semester Course  
Grade Level: 10 – 12**

**Prerequisite: Drawing, (grade of “C” or better)**

**Fee: \$29 for pencils, erasers, paper, monocular, plaster casts**

Creative Art—Drawing Advanced is designed to provide the student with a more in-depth approach to drawing. Students will explore a wide range of media while strengthening drawing skills, focusing on a high level of expressiveness. Students will analyze their own work as well as study the merits and meanings of contemporary and historical works of art. This course emphasizes portfolio development for college applications and is specifically focused on the human figure as a basis for exploring different mediums, mark-making, layering, texture, spatial description, fragmentation and abstraction. **This class requires teacher approval because of the difficulty of subject matter.** The structural framework for this course includes in depth research, highly detailed sketchbook approach and critiques serving to emphasize the process of art making and the development of a strong visual language. Students may take Drawing Intermediate or Drawing Advanced in any order if schedule is prohibitive. Students who are interested in an art career may enroll in National Art Honors Society.



## **CREATIVE ART – PAINTING**

**Course # 05157G05012**

**Semester Course**

**Prerequisite: Drawing, (grade of “C” or better)**

**Grade Level: 9 – 12**

**Fee: \$37 for watercolor, acrylic, oil, paper, canvas, brushes**

Creative Art—Painting covers the same topics as Creative Art—Drawing/Painting, but focuses on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but may focus on only one medium. This course will allow students to develop skills for traditional and non-traditional painting techniques and apply conceptual approaches such as surrealism and abstraction to individual, original image ideas. Art history and theory are embedded into instructional conversations and demonstrations. Students who are interested in an art career may enroll in National Art Honors Society.

## **CREATIVE ART – PAINTING INTER**

**Course # 05157G05022**

**Semester Course**

**Prerequisite: Painting, (grade of “C” or better)**

**Grade Level 10 – 12**

**Fee: \$37 for watercolor, acrylic, oil, gesso, paper, canvas, brushes**

Creative Art—Painting Intermediate will allow students who completed Beginning Painting to expand their skills. Students will explore new mediums and techniques while focusing on observation and compositional elements. Contemporary trends in art will be integrated within this course to enrich student knowledge and awareness. Specifically this class is designed to practice and develop painting techniques that focus on the illusions of 3- dimension as they apply to the still life. Art history and theory are embedded into instructional conversations and demonstrations. Students who are interested in an art career may enroll in National Art Honors Society.

## **CREATIVE ART – PAINTING ADV**

**Course # 05157E05012**

**Semester Course**

**Prerequisite: Painting, (grade of “C” or better) & teacher approval**

**Grade Level: 10 – 12**

**Fee: \$37 for watercolor, acrylic, oil, paper, canvas, brushes**

Creative Art—Painting Advanced is designed to provide the student with a more in-depth approach to painting. Students will explore a wide range of media while strengthening painting skills, focusing on a high level of expressiveness. This class is designed to practice and develop painting techniques that focus on the illusions of 3- dimension as they apply to the portrait and figure. This course emphasizes portfolio development for college applications and is specifically focused on the human figure as a basis for exploring different mediums, mark-making, layering, texture, spatial description, fragmentation and abstraction. Students will analyze their own work as well as study the merits and meanings of contemporary and historical works of art.

**This class requires teacher approval because of the difficulty of subject matter.** Art history and theory are embedded into instructional conversations and demonstrations. Students who are interested in an art career may enroll in National Art Honors Society.

## **PHOTOGRAPHY**

**Course # 05167G05014**

**Semester Course**

**Prerequisite: Must have a manual 35mm SLR (single lens reflex) camera**

**Grade Level: 9 – 12**

**Fee: \$48 for photo paper, chemicals, supplies, plus cost of film**

In Photography, students will receive a fundamental course covering selection, care, maintenance, handling of cameras, film types, light metering, and compositional techniques. Emphasis will be on 35mm SLR camera techniques. Basic darkroom procedures such as film processing, contact printing, and enlarging will be covered. On-location shooting assignments will be made. Students must have a manual 35mm SLR camera to enroll in this course

## **PHOTOGRAPHY INTER**

**Course # 05167G05034**

**Semester Course**

**Prerequisite: Photography (grade of “C” or better)**

**Grade Level: 9 – 12**

**Must have a manual 35mm SLR (single lens reflex) camera**

**Fee: \$50 for photo paper, chemicals, supplies, plus cost of film**

Photography Intermediate emphasizes photography as an art form. Students will be encouraged to use photography as a creative and expressive tool through experimental darkroom techniques, multiple image exposure, hand coloring and other expressive processes which are used to produce strong visual images. Additionally, students will be introduced to the concept of the zone system for managing film and print exposure. Students must have a manual 35mm SLR camera to enroll in this course.

## **PHOTOGRAPHY ADV**

**Course # 05167E05012**

**Semester Course**

**Prerequisite: Photography Inter, (grade of “C” or better)**

**Grade Level: 10 – 12**

**Must have a manual 35mm SLR (single lens reflex) camera**

**Fee: \$50 for photo paper, chemicals, supplies, plus cost of film**

Photography-Advanced is designed to provide students with a more in-depth approach to photography. Instruction regarding the creative process becomes focused upon students developing their own artistic style. Historic styles and techniques and contemporary photographic trends will be analyzed as students critique their own work and begin to develop professional portfolios. In addition, students may explore the relationship of traditional darkroom photography to digital photography. Students must have a manual 35mm SLR camera to enroll in this course.

## **PHOTOGRAPHY STUDIO**

**Course # 05167E05032**

**Semester Course**

**Prerequisite: Photography Advanced, (grade of “C” or better) or teacher recommendation**

**Grade Level: 11 – 12**

**Must have a manual 35mm SLR camera**

**Fee: \$52 for photo paper, chemicals, supplies, plus cost of film**

Photography - Studio is designed to challenge the serious photography student. Emphasis is placed on perfecting photography, creative thinking, individual expression and problem solving, as well as developing an entry-level photography portfolio. Digital photography and manipulation of photographs using image-editing software can continue to be explored along with advanced darkroom photography techniques. Students are encouraged to display their work publicly. This course may be repeated multiple times for credit. Students will organize and show work in a student art show at the end of the semester. Students must have a manual 35mm SLR camera to enroll in this course.

## **DIGITAL PHOTOGRAPHY**

**Course # 11151G05012**

**Semester Course**

**Prerequisite: Must take beginning photography**

**Grade Level: 10 – 12**

**Fee: \$45 for paper, printing, and maintenance of equipment**

Digital Photography will introduce students to the use of digital cameras and digital image-editing software, primarily using Adobe Photoshop. The roles of scanning processes and equipment, image picture-taking modes and printing preparation, and various output devices will be explored in producing the photographic image. Advanced exposure techniques such as pre-visualizing and the application of visual elements and lighting techniques will be stressed. Students will also continue to investigate the history of photography.

## **CERAMICS/POTTERY**

**Course # 05159G05012**

**Semester Course**

**Fee: \$28 for clay and glaze**

**Grade Level: 9 – 12**

Ceramics/Pottery focuses on creating three-dimensional works out of clay and ceramic material. Particular attention is paid to the characteristics of the raw materials, their transformation under heat, and the various methods used to create and finish objects. Students who are interested in an art careers may participate in National Art Honors Society.

## **CERAMICS/POTTERY INTER**

**Course # 05159G05022**

**Semester Course**

**Prerequisite: Ceramics, (grade of “C” or better)**

**Grade Level: 9 – 12**

**Fee: \$28 for clay and glazes**

Ceramics/Pottery Intermediate will allow students who completed Beginning Ceramics/Pottery to expand their three-dimensional skills. Students will explore new mediums and techniques while focusing on observation and compositional elements. Contemporary trends in art will be integrated within this course to enrich student knowledge and awareness. Students who are interested in an art careers may participate in National Art Honors Society.

## **CERAMICS/POTTERY ADV**

**Course # 05159E05012**

**Semester Course**

**Prerequisite:** Ceramics Intermediate, (grade of “C” or better)

**Grade Level: 10 – 12**

**Fee: \$28 for clay and glazes**

Ceramics/Pottery Advanced is designed to provide the student with a more in-depth approach to three-dimensional work. Students will explore a wide range of media while strengthening their skills, focusing on a high level of expressiveness. Students will analyze their own work as well as study the merits and meanings of contemporary and historical works of art. Students who are interested in an art careers may participate in National Art Honors Society.

## **CREATIVE ART – SCULPTURE/3D**

**Course # 05158G05012**

**Semester Course**

**Fee: \$38 for wood, metals, plastics, etc.**

**Grade Level: 9 – 12**

Creative Art—Sculpture focuses on creating three-dimensional works. Students typically work with several media (such as clay, ceramics, wood, metals, textiles, and so on), but may focus on only one medium. At DRHS we will also study and create public art and installation art forms. Students who are interested in an art careers may participate in National Art Honors Society.

## **CREATIVE ART – SCULPTURE/3D INTER**

**Course # 05158G05022**

**Semester Course**

**Prerequisite:** Sculpture, (grade of “C” or better)

**Grade Level: 9 – 12**

**Fee: \$38 for wood, metals, plaster, etc.**

Creative Art—Sculpture Intermediate will allow students who completed Beginning Sculpture to expand their three-dimensional skills. Students will explore new mediums and techniques while focusing on observation and compositional elements. Contemporary trends in art will be integrated within this course to enrich student knowledge and awareness. Students who are interested in an art careers may participate in National Art Honors Society.

## **CREATIVE ART – SCULPTURE/3D ADV**

**Course # 05158E05012**

**Semester Course**

**Prerequisite:** Sculpture Intermediate, (grade of “C” or better)

**Grade Level: 10 – 12**

**Fee: \$38 for wood, metals, plaster, etc.**

Creative Art—Sculpture Advanced is designed to provide the student with a more in-depth approach to three-dimensional work. Students will explore a wide range of media while strengthening their skills, focusing on a high level of expressiveness. Students will analyze their own work as well as study the merits and meanings of contemporary and historical works of art. Students who are interested in an art careers may participate in National Art Honors Society.

## **JEWELRY**

**Course # 05166G05012**

**Semester Course**

**Fee: \$38 for metals, sandpaper, stones and solder**

**Grade Level: 9 – 12**

Jewelry courses apply art and design principles to the creation of jewelry. Typically, students explore using various media, such as ceramic, paper-mâché, glass, plastic, copper-enameled, brass, and silver. Course topics include exposure to jewelry of diverse world cultures and the history of jewelry design. Some Jewelry courses may concentrate on metalwork processes such as brazing, soldering, casting, welding, riveting, and finishing as they relate to the creation of jewelry. Students who are interested in an art careers may participate in National Art Honors Society.

## **JEWELRY INTER**

**Course # 05166G05022**

**Semester Course**

**Prerequisite:** Jewelry, (grade of “C” or better)

**Grade Level: 9 – 12**

**Fee: \$38 for metals, sandpaper, stones, and solder**

Jewelry-Intermediate will allow students who completed Beginning Jewelry to expand their skills. Students will explore new techniques while focusing on observation and compositional elements. Contemporary trends in jewelry will be integrated within this course to enrich student knowledge and awareness. At DRHS we will explore lost wax casting, dichroic glass, more stone setting techniques and use of industry standard tools, such as the flexible shaft machine. Students who are interested in an art careers may participate in National Art Honors Society.

## **JEWELRY ADV**

**Course # 05166E05012**

**Semester Course**

**Prerequisite: Jewelry Intermediate, (grade of “C” or better)**

**Grade Level: 10 – 12**

**Fee: \$38 for metals, sandpaper, stones and solder**

Jewelry-Advanced is designed to provide the student with a more in-depth approach to jewelry design work. Students will explore a wide range of media while strengthening their skills, focusing on a high level of expressiveness. Students will analyze their own work as well as study the merits and meanings of contemporary and historical works of art. At DRHS we will explore lost wax casting, dichroic glass, more stone setting techniques and use of industry standard tools, such as the flexible shaft machine. Advanced students will also try foldforming, more advanced annealing and forging techniques. Students who are interested in an art careers may participate in National Art Honors Society.

## **GRAPHIC DESIGN-Illustrator**

**Course # 05162G05014**

**Semester Course**

**Prerequisite: None**

**Grade Level: 10 – 12**

**Fee: \$45 for usb flash drive, paper, printing, software licensing, and maintenance of equipment**

Students will use Adobe Illustrator as it applies to design principles to solve visual problems. Students will become familiar with scanners, printers, industry standards, copyright issues and will be introduced to the history of graphic design. Students who are interested in an art career may opt for the Honors program. Students who are interested in art careers may enroll in National Art Honors Society.

## **IB VISUAL ARTS**

**1<sup>st</sup> year course # 05173H05014**

**05173H05024**

**Full Year Course**

**Grade Level: 11 – 12**

**2<sup>nd</sup> year course # 05173H05034**

**05173H05044**

**Prerequisite: Teacher approval**

**Fee: \$80 for painting, drawing, & mixed media supplies**

IB Visual Arts prepares students to take the International Baccalaureate Visual Arts exam at either the Standard Level or the Higher Level. The IB Visual Arts course helps develop students' aesthetic and creative faculties, offers training in awareness and criticism of art, and enables students to create quality works of art of their own. Students perform both studio and research work; the research component is designed to investigate particular topics or concepts of interest in further detail. This is a two year course of study.

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

# Business and Marketing at Dakota Ridge

## Course Recommendations and Pathways

### Business

Introductory Business

### Marketing

Marketing Principles  
Sports & Enter. Marketing

### Finance & Leadership

Personal Finance  
School-based Enterprise

### Business Technology

Research/Tech Writing (English course)  
Computer Programming (math course)

**Mission Statement:** To provide students with life-long business-oriented learning experiences and instruction, through the implementation of well-defined standards, in preparation for the challenges of college and the workplace.

### PERSONAL FINANCE

**Course # 12101G05011**

**Semester Course**

**Fee: \$20 to cover national DECA dues**

**Grade Level: 9 – 12**

Personal Finance equips students with the fundamentals of basic financial planning and money management essential in today's fast moving economy. This course is designed to give students the advantage of understanding financial planning concepts and investment principles as they enter the financial world as young adults. Students will create their own financial plan and budget, explore saving and investing strategies, be introduced to the intricacies of credit and managing debt, and identify ways to manage risk, including the wise use of insurance.

**This is a concurrent enrollment course, offering both HS and college credit through Arapahoe Community College.**

**Students need to pass with a "C" or higher, and complete all applications and paperwork by deadlines provided.**

**Contact the course instructor for more information on Concurrent Enrollment.**

### INTRODUCTORY BUSINESS

**Course # 12051G05012**

**Semester Course**

**Fee: \$20 to cover national DECA dues**

**Grade Level: 9 – 12**

Introductory Business is a course designed to provide students with essential knowledge of basic economics, types of businesses, career exploration, financial management, and roles of a consumer. Areas of business fundamentals covered include the Free Enterprise System, basic types of businesses, profit motive, how to plan a career, basic types of insurance, banking and financial services.

**This is a concurrent enrollment course, offering both HS and college credit through Arapahoe Community College.**

**Students need to pass with a "C" or higher, and complete all applications and paperwork by deadlines provided.**

**Contact the course instructor for more information on Concurrent Enrollment.**

### MARKETING PRINCIPLES

**Course # 12152G05014**

**Semester Course**

**Fee: \$20 to cover national DECA dues**

**Grade Level: 10 – 12**

Marketing Principles is a fast paced class, which prepares students for the future through many real-life experiences and introduces students to marketing practices, principles, and related careers. The class content may include units of study in salesmanship, advertising, and promotion, financing, human relationships, merchandising, free enterprise, and career exploration. Students will participate in a sales lab and a promotions lab.

The college bound or career bound student will enhance their chance to succeed by understanding the role marketing plays in their life. Students may apply what they have learned in real business situations through DECA by attending local, state, and national conferences. This class addresses all seven marketing standards.

**This course is a concurrent enrollment course, offering three intro to marketing college credits through Colorado Christian University. CCU courses are not guarantee transfer - CCU encourages students to contact institutions of interest prior to registering for CCU Dual Credit courses to understand how courses will transfer. It is up to each receiving institution as to how they transfer; either into a degree program or as an elective.**

## **SPORTS & ENTERTAINMENT MARKETING**

**Course # 12163G05012**

**Semester Course**

**Fee: \$20 to cover national DECA dues**

**Grade Level: 10-12**

Sports and Entertainment Marketing introduces students to and helps them refine marketing and management functions and tasks that can be applied in amateur or professional sports or sporting events, entertainment or entertainment events, and the sales or rental of supplies and equipment. Students will plan and implement a sports and an entertainment event.

**This course is a concurrent enrollment course, offering three intro to marketing college credits through Colorado Christian University. CCU courses are not guarantee transfer - CCU encourages students to contact institutions of interest prior to registering for CCU Dual Credit courses to understand how courses will transfer. It is up to each receiving institution as to how they transfer; either into a degree program or as an elective.**

## **SCHOOL-BASED ENTERPRISE**

**Course # 12999G05012**

**Full Year Course**

**12999G05022**

**Grade Level: 11 – 12**

**Fee: \$20 to cover national DECA dues**

**Prerequisites: Intro to Business or a Marketing course**

This is the capstone course designed for advanced Business students. In this course the students will learn to set up and **operate a business** of their choice. They will be responsible to be a part of the operations of the school store. Students will apply their knowledge of marketing, business, and accounting.

This course will also team up with the Big Idea program as well to partner up with community businesses and provide an environment for students to create and run a business. All students will be required to compete in the district DECA competition.

**This is a concurrent enrollment course, offering both HS and college credit through Arapahoe Community College. Students need to pass with a “C” or higher, and complete all applications and paperwork by deadlines provided. Contact the course instructor for more information on Concurrent Enrollment.**

## **IB BUSINESS AND MANAGEMENT**

**1<sup>st</sup> year course # 12059H05014**

**Full Year Course**

**12059H05024**

**Grade Level: 11 – 12**

**2<sup>nd</sup> year course # 12059H05034**

**12059H05044**

**Fee: \$60 textbook (Junior year only) and \$20 for national DECA dues**

IB Business and Management courses prepare students to take the International Baccalaureate Business and Management exam at either the Standard Level or the Higher Level. In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts and principles. All students will also be required to compete in the district DECA competition.

1st year -

(HL) foundation and learning the different aspects of business, marketing and finance.

(SL) Learning and applying their knowledge with paper 1 & 2 and IA at the end of this 1st year.

2nd year -

(HL) Applying their knowledge to case studies and real world application to prepare them for paper 1 & 2 and their IA.

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

# Engineering Department

## COMPUTER PROGRAMMING

Course # 10152G05012

Prerequisite: Geometry

Fee: Student must supply own jump drive and pay \$10 towards ESA membership

In Computer Programming, students learn how to write computer programs using a variety of programming languages, primarily Java based. Learning objectives include: types, variables and standard I/O, truth and branching, loops, strings and arrays, objects, and functions. Students earn HE MATH Credit for this course

Semester Course (Fall)

Grade Level: 10 – 12

## COMPUTER PROGRAMMING – ADVANCED

Course # 10152E05022

Prerequisite: Computer Programming (grade of “C” or better)

Fee: Student must supply own jump drive and pay \$10 towards ESA membership

In Computer Programming Adv, students learn advanced programming topics using industry standard Java. Optional advanced programming topics may include: standard template library, functions (methods in Java), references, pointers, classes, advanced classes and dynamic memory, inheritance and polymorphism. Students earn HE MATH Credit for this course

Semester Course (Spring)

Grade Level: 10 – 12

## AP COMPUTER SCIENCE PRINCIPLES

Course # 10157H05032 and 10157H05042

Prerequisite: Teacher approval

Fee: Approx. \$100 AP exam

In AP® Computer Science Principles, students will develop a range of skills vital to success in subsequent college courses, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. Rather than teaching a particular programming language or tool, the course focuses on using technology and programming as a means to solve computational problems and create exciting and personally relevant artifacts. Students design and implement innovative solutions using an iterative process similar to what artists, writers, computer scientists, and engineers use to bring ideas to life. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world. Students are required to register for and complete the Advanced Placement Exam for Computer Science Principles. Students earn HE MATH Credit for this course

Full Year Course

Grade Level: 11 – 12

NCAA Approved

## IB COMPUTING STUDIES

1st year course # 10159H05014 and 10159H05024

2nd year course # 10159H05034 and 10159H05044

Prerequisite: Computer Programming – Adv and teacher approval

Fee: \$50 for licensing fee for internet based curriculum (text, compiler, and testing)

IB Computer Studies courses prepare students to take the International Baccalaureate Computing Studies exam at either the Standard Level or the Higher Level. The courses emphasize problem analysis, efficient use of data structures and manipulation procedures, and logical decision-making. IB Computing Studies courses also cover the applications and effects of the computer on modern society as well as the limitations of computer technology. This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate. Students earn Fine Arts/CTE Credit for this course

This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.

Full Year Course

Grade Level: 11 – 12

NCAA Approved

## DRAFTING – GENERAL

(Basic CADD Applications)

Course # 21102G05014 or 21102G05024

Fee: \$40 for project materials and Technology Student Association membership fee

Drafting General (Beginning CADD) serves all emphasis areas of engineering graphics. Course content includes fundamentals of layout, construction and dimensioning techniques as applied to two-dimensional drawings; systems and database management; and production of computer-generated drawings to ASME, AIA and other applicable specifications. The majority of the student's work will be done on the computer using the same Computer Assisted Drafting & Design (CADD) software that is used in college.

Semester Course

Grade Level: 9 – 12

**DRAFTING – GENERAL–INTER  
(CADD Applications Intermediate)  
Course # 21102G05034  
21102G05044**

**Full Year Course  
Grade Level: 10 – 12**

**Prerequisite: Basic CADD Applications (grade of “C” or better)**

**Fee: \$40 for project materials and Technology Student Association membership fee**

Drafting General Inter (Intermediate CADD) serves all areas of technical graphics. Course content includes producing two-dimensional working drawings using applications of geometric construction, intersection and development methods and animation techniques. Databases and file management systems are used in the learning experience to improve and increase production time of technical drawings. The majority of the student’s work will be done on the computer using the same Computer Assisted Drafting & Design (CADD) software that is used in college.

**ENGINEERING DESIGN (PLTW)**

**Course # 21017G05012 and 21017G05022**

**Full Year Course  
Grade Level: 9 – 12**

**Prerequisite: Concurrent enrollment in Algebra I, or higher.**

**Fee: \$40 for project materials and ESA membership fee**

In Introduction to Engineering Design, the major focus is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer’s notebook, and communicate solutions to peers and members of the professional community. The main purpose of this course is to experience through theory and hands-on problem-solving activities what engineering is all about and to answer the question, "Is a career in engineering or engineering technology for me?"

**PRINCIPLES OF ENGINEERING (PLTW)**

**Course # 21004G05012 and 21004G05022**

**Full Year Course  
Grade Level: 10 – 12**

**Prerequisite: Concurrent enrollment in Geometry or higher**

**Fee: \$40 for project materials and Technology Student Association membership fee**

Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering, engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. Following Project Lead the Way’s (PLTW) suggested curriculum, Principles of Engineering courses focus on solving a wide range of engineering problems. Topics such as mechanisms, structure and material strength, and automation are explored as students research, strategize, and document the design process. Students will maintain an engineer’s notebook and a digital portfolio of their work in this class.

**ROBOTICS**

**Course # 21009G05012**

**Semester Course  
Grade Level: 9 – 12**

**Fee: \$30 for project materials and ESA membership fee**

This lab-based course is an introduction to robotics and related scientific and engineering topics. Students will learn the physics of how motors, moving parts, and sensors work. They will also design, build, program and test robots to carry out specific tasks. The class will culminate with an extended robotics challenge.

**ROBOTICS – ADV**

**Course # 21009E05022**

**Semester Course  
Grade Level: 9 – 12**

**Prerequisite: Robotics (grade of “C” or better)**

**Fee: \$30 for project materials and ESA membership fee**

This lab-based course is a continuation of Robotics. Students will learn and apply principles of mechanics, electronics, and pneumatics. They will apply engineering principles as they design and build robots, construct their own sensors and connect them, and program the robots in the programming language. The class will incorporate several extensive projects.



# English Overview

English is a spiraling curriculum covering a broad-based framework of four state standards throughout grades 9-12. The standards are addressed within the process and content which are integrated throughout the following components: oral expression and listening, reading for all purposes, writing and composition, and research and reasoning. Each grade level has organized instruction developmentally appropriate and a range of tasks and activities to meet state performance expectations and competencies. Additionally, in-depth academic rigors designed around standards will be addressed throughout an Honors and Advanced Placement Program offered at all grade levels. The English electives are designed around more specialized content that meets a specific range of standards and performance expectations.

## **AP/Honors Entrance Requirements:**

1. Reading test score in the 80th percentile on a nationally normed, standardized reading test
2. A grade of "A" or "B" in the previous semester's English course
3. Application prior to registration and conference with teacher
4. Teacher recommendation.

## **Freshman Year**

English/Lang Arts 9

English Lang/Arts 9 Honors/Pre IB or Pre AP

## **Sophomore Year**

English/Lang Arts 10

English Lang/Arts 10 Honors/Pre IB or Pre AP

## **Junior Year**

English Lang Arts 11

AP English Lang & Comp

AP English Lit & Comp

## **Senior Year**

### **Advanced or College Bound:**

AP English Lang & Comp

AP English Lit & Comp

English 12 Honors

English 12 Comp/Lit/College Bound

### **College/Vocational Marketing:**

English 12 Research/Technical Writing

### **2 Year College or Other Alternative**

English/Lang Arts 12

## **English Elective Courses**

Journalism: 10-12

Adv. Journalism 10-12

Theater-Acting/Performing: 9-12

Theater-Acting/Performing Inter: 10-12

Theater-Stagecraft: 9-12

Theater-Stagecraft Adv: 10-12

Broadcasting Technology 9-12

Advanced Broadcasting Technology 10-12

Publication Production-Yearbook: 10-12

**IB Courses and Pathways - Please refer to Special Programs section for complete descriptions**

## **ENGLISH/LANG ARTS 9**

**Course # 01001G05012**

**01001G05022**

**Fee: \$25 for course novels and online resource memberships**

English/Language Arts 9 incorporates the five aspects of language arts: reading, writing, speaking, listening, and viewing and utilizes both print and digital tools. Students engage with technology tools in order to read a diversity of texts and write for authentic audiences. Inquiry leads to written compositions that build upon and develop students' abilities to communicate effectively. Students apply comprehension and critical reading skills to both literature and nonfiction, and read assigned and independent texts both inside and outside of class.

**Full Year Course**

**Grade Level: 9**

**NCAA Approved**

## **ENGLISH/LANG ARTS 9 HONORS**

**DRHS PRE-IB or PRE-AP**

**Course # 01001H05012**

**01001H05022**

**Prerequisite: 8<sup>th</sup> grade English, (grade of "B" or better); score in the 80<sup>th</sup> percentile or higher on a reading assessment administered by DRHS, proficient or higher state assessment score, teacher recommendation**

**Fee: \$38 for course novels & vocabulary workbook**

English/Language Arts 9 Honors incorporates the five aspects of language arts: reading, writing, speaking, listening, and viewing. Genre studies lead to written compositions that build upon students' prior knowledge of grammar, vocabulary, word usage, and mechanics and develop students' abilities to write analysis, synthesis, and compare/contrast essays. Students apply comprehension and critical reading skills to both literature and nonfiction. The honors course prepares students for advanced coursework and engages students as higher order thinkers. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. The course expectations align with the District's Bridges to Curriculum documents and also prepare pre-IB and pre-AP students for the types of assessments they will experience in more advanced IB/AP coursework.

**Full Year Course**

**Grade Level: 9**

**NCAA Approved**

## **ENGLISH/LANG ARTS 10**

**Course # 01002G05012**

**01002G05022**

**Fee: \$35 for course novels & vocabulary workbook**

English/Language Arts 10 offers a balanced focus on composition and literature. Students read widely to improve their reading rate, vocabulary, and comprehension and develop skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message. Students apply knowledge of purposes and audiences by studying and producing various genres. Oral communication is practiced in group settings as well through presentations.

**Full Year Course**

**Grade Level: 10**

**NCAA Approved**

## **ENGLISH/LANG ARTS 10 – HONORS**

**DRHS PRE-IB or PRE-AP**

**Course # 01002H05012**

**01002H05022**

**Prerequisite: English/Lang Arts 9-Honors (grade of "A" or "B") or teacher recommendation**

**Fee: \$58 for multiple novels, fiction & nonfiction, & vocabulary workbook**

English/Language Arts 10 Honors offers a balanced focus on composition and literature. Students read widely to improve their reading rate, vocabulary, and comprehension and develop skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message utilizing both print and digital tools. Students engage with technology tools in order to read a diversity of texts and write for authentic audiences. Students apply knowledge of purposes and audiences by studying and producing various genres. Oral communication is practiced in group settings as well through presentations. The honors course prepares students for advanced coursework and engages students in and challenges their higher-order thinking. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. The course expectations align with the District's Bridge to Curriculum and also prepare pre-IB & pre-AP students for the types of assessments they will experience in more advanced IB/AP coursework.

**Full Year Course**

**Grade Level: 10**

**NCAA Approved**

**ENGLISH/LANG ARTS 11****Course # 01003G05012****01003G05022****Fee: \$35 for course novels & vocabulary workbook**

English/Language Arts 11 develops students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, which students apply to compositions that utilize research and rhetoric. Students read nonfiction and literary works as a means to understand the world and to inform their writing. Literary conventions and stylistic devices may receive greater emphasis than in previous courses. Participation in class dialogue and delivering presentations are expectations of this course.

**Full Year Course****Grade Level: 11****NCAA Approved****AP ENGLISH LANG & COMP****Course # 01005H05012****01005H05022****Prerequisite: Teacher recommendation; conference with teacher;****grade of "A" or "B" in previous English class; placement test; current English teacher signature****Fee: \$95 for AP textbook(s) and exam practice materials; approx. \$100 AP exam**

Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Language and Composition courses expose students to prose written in a variety of periods, disciplines, and rhetorical contexts. These courses emphasize the interaction of authorial purpose, intended audience, and the subject at hand, and through them, students learn to develop stylistic flexibility as they write compositions covering a variety of subjects that are intended for various purposes.

**Full Year Course****Grade Level: 11 or 12****NCAA Approved****AP ENGLISH LIT & COMP****Course # 01006H05012****01006H05022****Prerequisite: Conference w/teacher; current English teacher's signature;****grade of "A" or "B" in current English class****Fee: \$70 for cost of multiple texts; approx. \$100 AP exam**

Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Literature and Composition enables students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing) creation. Students should plan on a demanding workload and are required to take the AP exam given by College Board in May.

**Full Year Course****Grade Level: 11 or 12****NCAA Approved****ENGLISH 12: COMP/COLLEGE BOUND****Course # 01102G05012****01102G05022****Fee: \$35 course novels and writing handbook**

As an English/Language Arts 12 option, this course blends and combines purposes, patterns, and genres in writing while incorporating research and rhetoric techniques. Collaboration and critical thinking lead to more complex presentations and products, with students honing their comprehension skills while reading more complicated literary and nonfiction texts. Oral discussion and presentation are integral to student learning. English/Composition for the College Bound is designed to prepare seniors for post-secondary endeavors. Reinforcing the logic and critical-thinking skills that accompany good writing, these courses—which emphasize word choice, usage, and writing mechanics—provide continued and advanced instruction in writing for a variety of purposes and audiences.

**Full Year Course****Grade Level: 12****NCAA Approved****ENGLISH/LANG ARTS 12****Course # 01004G05012****01004G05022**

English/Language Arts 12 blends and combines purposes, patterns, and genres in writing while incorporating research and rhetoric techniques. Collaboration and critical thinking lead to more complex presentations and products, with students honing their comprehension skills while reading more complicated literary and nonfiction texts. Oral discussion and presentation are integral to student learning.

**Full Year Course****Grade Level: 12****NCAA Approved**

## ENGLISH 12: RESEARCH TECHNICAL WRITING (Comm Tech)

Course # 01105G05012  
01105G05022

Full Year Course  
Grade Level: 12  
NCAA Approved

**Prerequisites:** Encouraged to also be enrolled in marketing class and participating in DECA, or enrolled in a business class and participating in DECA, but not required.

**Fee:** \$14 for course book: *How to Win Friends & Influence People*

As an English/Language Arts 12 option, this class can best be described as a non-traditional English class. Research/Technical Writing (aka Comm Tech) courses prepare students to write research papers and/or technical reports, with an emphasis on business research (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style. Comm tech emphasizes writing for application (including resume writing, college application essays, and designing business and promotional plans), and offers students the opportunity to learn, study, and apply authentic skills that will be applicable to them in business careers. In other words, Comm Tech teaches students “real life” skills, including aspects of technical writing, presentation and public speaking skills, and job interviewing skills. Work in the class will focus on collaboration and critical thinking, leading to more complex presentations and products within the world of business, with students honing their comprehension skills while reading more nonfiction texts. Major units of study include writing college application essays, designing, creating, and writing business plans presented in the final form of “Shark Tank,” and participating in a Career Unit of study culminating in the end with mock interviews.

## ENGLISH/LANG ARTS 12 – HONORS

Course # 01004H05012  
01004H05022

Full Year Course  
Grade Level: 12  
NCAA Approved

**Prerequisites:** AP English 11 or approval from 11<sup>th</sup> grade English teacher

**Fee:** None

Honors English 12 is a year long concurrent enrollment course for which students can earn up to six college credits (through the CU Succeeds program). Students will explore thought and metaphor, as well as the connections between literary criticism and Western philosophy while delving into complex texts and Humanistic modes of expression. Learning activities emphasize higher order thinking skills over more traditional means of assessment. Students will be challenged through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials rather than simply more course work. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

**\*This course does offer CU Succeeds credit.**

## JOURNALISM

Course # 11101G05012  
11101G05022

Full Year Course  
Grade Level: 10 – 12  
NCAA Approved

**Fee:** \$35 for software, printed handbook, and CSMA fees

Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility and develop students’ skills in writing and editing stories, headlines, and captions. Photography, photojournalism, and video-journalism skills may be included. Students will report on various people and events on social media news pages. **This is a concurrent enrollment course, offering both HS and college credit through Arapahoe Community College. Students need to pass with a “C” or higher, and complete all applications and paperwork by deadlines provided. Contact the course instructor for more information on Concurrent Enrollment.**

## JOURNALISM ADV

Course # 11101E05012  
11101E05022

Full Year Course  
Grade Level: 10 – 12  
Not NCAA Approved

**Prerequisites:** Journalism, application and teacher approval

**Fee:** \$35 for software, printed handbook, and CSMA fees

Advanced Journalism is a practicum for the concepts and skills learned in Journalism. Students write news, editorials, sports and features; conduct interviews; generate and manipulate art; and explore on camera broadcast skills. This class is responsible for the student publication and social media news papers.. Given the involvement necessary outside of class, this course is considered co-curricular.

## **BROADCASTING TECHNOLOGY**

**Course # 11103G05012  
11103G05022**

**Full Year Course  
Grade Level: 9 – 12  
Not NCAA Approved**

**Prerequisites:** Application and teacher recommendation

**Fee:** \$35 to cover software, printed handbook and membership in the CSMA (Colorado Student Media Association)

In Broadcasting Technology, students will develop specific technical, computer and communication skills necessary for effective studio production including, but not limited to, studio camera, audio, lighting, VTR operation, computer graphics generation and nonlinear editing, script writing and editing, directing, teleprompting, and anchoring.

## **BROADCAST TECHNOLOGY ADVANCED**

**Course # 11103E05012  
11103E05022**

**Full Year Course  
Grade Level: 10 – 12  
Not NCAA Approved**

**Prerequisites:** One year of Broadcasting Technology

**Fee:** \$35 to cover membership in the CSMA (Colorado Student Media Association)

**and TSA (Technology Student Association) as well as an SD card and printed resources for students**

Advanced Broadcast Technology furthers student skill and leadership as learned in the first year of Broadcast Technology. Students will focus on areas of career interest within the broadcasting industry and use those interests and advanced skills to mentor first year broadcast students in a leadership position, as well as taking on a management role in the planning and operation of the news program, production teams, and the student's individual production and learning goals.

## **PUBLICATION PROD: YEARBOOK**

**Course # 11104G05034  
11104G05044**

**Full Year Course  
Grade Level: 10 – 12  
Not NCAA Approved**

**Prerequisites:** Application and teacher recommendation

Publication Production courses provide students with the knowledge and skills necessary to produce the school newspaper, yearbook, literary magazine, or other printed publication. Students may gain experience in several components (writing, editing, layout, production, and so on) or may focus on a single aspect while producing the publication.

## **THEATER – ACTING/PERF**

**Course# 05055G05014**

**Semester Course  
Grade Level: 9 – 12  
Not NCAA Approved**

**Prerequisite:** None

**Fee:** \$20 for current scripts, props, & costumes

Theater—Acting/Performance is intended to promote students' experience and skill development in one or more aspects of theatrical production, but they concentrate on acting and performance skills. This course is introductory in nature.

**This is a concurrent enrollment course, offering both HS and college credit through Arapahoe Community College.**

**Students need to pass with a "C" or higher, and complete all applications and paperwork by deadlines provided.**

**Contact the course instructor for more information on Concurrent Enrollment.**

## **THEATER – ACTING/PERF INTER**

**Course# 05055G05034**

**Semester Course  
Grade Level: 10 – 11  
Not NCAA Approved**

**Prerequisite:** Completion of Theater-Acting/Perf. and/or teacher approval

**Fee:** \$20 for current scripts, props, & costumes

Theater—Acting/Performance Intermediate is intended to promote students' experience and skill development in one or more aspects of theatrical production, but they concentrate on acting and performance skills. This course is for those who have had the initial acting course. The focus is on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions.

## **THEATER – STAGECRAFT**

**Course # 05056G05012**

**Semester Course  
Grade Level: 9 – 12  
Not NCAA Approved**

**Prerequisite:** None

**Fee:** \$30 for tool maintenance & repair, building supplies

Theater—Stagecraft requires an active, creative student willing to work at a variety of tasks in a hands-on environment.

Students will explore technical aspects of theater including lighting, sound, costumes, set design, and stage managing. Safety and responsibility are learned and are essential elements in this class. Due to the nature of the course, minimal out of class time is expected. 10 hours of out of class time are expected to help with the extra-curricular theatre program.

## **THEATER – STAGECRAFT ADV**

**Course # 05056E05012**

**Semester Course**

**Prerequisite: Completion of Theater-Stagecraft and/or teacher approval**

**Grade Level: 10 – 12**

**Fee \$30 for tool maintenance & repair, building supplies**

**Not NCAA Approved**

In Theater—Stagecraft Advanced, students will study the art of working in the backstage of a productions theater. Students will set and operate lights and sound for school productions. In addition, students will design & build sets for direct use in school productions. Safety and responsibility are essential elements in this course. This course offers older/more experienced students the opportunity to lead and train younger students as well. The ability to work independently and without constant supervision is critical to success in this class. Due to the nature of the course, minimal out of class time is expected. 10 hours of out of class time are expected to help with the extra-curricular theatre program.

## **IB THEATER ARTS**

**1<sup>st</sup> year course # 05062H05014**

**Full Year Course**

**05062H05024**

**Two Year HL Course if earning IB certificate/diploma**

**2<sup>nd</sup> year course # 05062H05034**

**Grade Level: 11 – 12**

**05062H05044**

**NCAA Approval Pending**

**Fee: Fee involved if taking the exam to earn IB certificate or for the IB diploma programme**

Students will understand the nature of the theater through study and performance. Students will learn of the major developments and techniques in the history of more than one culture, interpret and illuminate play scripts, understand the art of the stage, perform before an audience, produce work in at least one of the theatrical arts or crafts, understand the processes of theatrical production, and do a theatrical research project. By completing both years of the course, IB Theater Arts will prepare students for the Higher Level IB Theater Arts exam, earning the student an IB certificate.

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

# **FAMILY AND CONSUMER SCIENCES OVERVIEW**

## **GET THE FACS OF LIFE!**

**(Fine Arts Credit)**

The Family and Consumer Science classes encompass practical aspects of the real world regardless of what a student's future aspirations may become.

The core curriculum emphasizes standards around real life skills, personal finance, relationship skills, individual and personal interactions, adult lifestyles, child development, and family and parenting skills. Core academics, hands-on-learning, group work, FCCLA and traditional class work are incorporated into the FACS classes.

### **CULINARY NUTRITION**

**Intro to preparation and nutrition**

**Course # 19252G05011**

**Fee: \$40 for food in lab**

**Semester Course**

**Grade Level: 9-12**

The purpose of this course is to develop lifelong, healthy individuals with an understanding of healthy and nutritious preparation techniques utilizing various resources and skills. Emphasis is placed on implementing healthy nutritional choices, preparing nutrient-dense seasonal foods, sports nutrition, exploring careers related to culinary nutrition, and practicing wise consumer decisions. Throughout food lab experiences, students will be learning the principles of cooking and preparing foods, and acquire the knowledge about safety and sanitation, equivalents, and equipment needed to be successful in the kitchen.

**Students may not repeat this class.**

### **CULINARY ART SPECIALTY/CREATIVE**

**Entertainment and catering**

**Course # 16056G05012**

**Prerequisite: Culinary Nutrition, (grade of "C" or better)**

**Fee: \$50 for food in lab**

**Semester Course**

**Grade Level: 9-12**

This is an upper level foods preparation class that takes an advanced look at culinary skills. Students work in kitchen teams to develop skills through lab experiences which may include appetizers, soups, salads, sandwiches, cake decorating, candy making, event planning and much more. This course gives students the opportunity to use creativity in preparing and serving food. **Students may not repeat this class.**

### **CULINARY ARTS SPECIALTY/FOREIGN**

**Prepare meals**

**Course # 16056G05022**

**Prerequisite: Culinary Nutrition, (grade of "C" or better)**

**Fee: \$50 for food in lab**

**Semester Course**

**Grade Level: 9-12**

This advanced foods class explores the world of gourmet cuisine by preparing and exploring foods from regions around the world, their culture, history, food, and learning how those cultures influenced the food in the different regions of the U.S. Throughout the class, students develop and refine advanced culinary skills, participate in competitions, create two and three course meals, and complete a final food project/presentation. This course may be repeated.

### **TEEN CHOICES**

**Survive your teen years**

**Course # 19260G05011**

**Semester Course**

**Grade Level: 9-10**

Teen Choices includes large and small group activities designed to help the students understand themselves and their relationships with others. Students will develop techniques for handling friends, high school, dating, and other teen related issues. Topics to be covered include responsible decision making and problem solving, human development, sexuality issues, abstinence, effective communication, teens and the law, destructive behaviors, and addictions. Methods of handling social pressures and a teen's personal power will be emphasized. (Students may not repeat this class).

## **CHILD DEVELOPMENT/PARENTING**

**One of the most important classes you will ever take**

**Course # 19255G05011**

**Semester Course**

**Grade Level: 10-12**

The Child Development/Parenting course provides students with knowledge about the physical, mental, emotional, and social growth and development of children from conception to adolescence. Course content typically includes topics such as prenatal and birth processes, responsibilities and difficulties of parenthood, fundamentals of children's emotional and physical development, and the appropriate care of infants, toddlers, young children and school-aged children. Students interested in careers with children and/or psychology will find this class an excellent experience.

**Students may not repeat this class.**

## **LIFE MANAGEMENT**

**Ready for survival after high school?**

**Course # 19257G05012**

**Semester Course**

**Grade Level: 11-12**

Students in Life Management will demonstrate problem solving, communication skills, computation/estimation, career choice, paycheck management and decision making skills for living on their own. Students will apply knowledge to real work situations like managing resources and finances, paying bills, using credit, applying for loans, selecting apartments and cars, and balancing checkbooks to meet their short and long term goals. Becoming an effective consumer will be emphasized. In addition, topics covered may include investment planning, taxes, personal wellness, and time management.

**Students may not repeat this class.**

## **INTERPERSONAL RELATIONSHIPS**

**Learn how to live with your choices**

**Course # 19259G05011**

**Semester Course**

**Grade Level: 11-12**

Interpersonal Relationships helps young men and women establish personal goals for living, as well as develop positive and rewarding relationships. Students will demonstrate communication skills based on male/female roles in relationships and family situations. Students will examine relationship issues, marriage planning, communication, family decisions and crises, and stages of the life cycle through group discussions, simulations, and case studies. Use of critical thinking and positive interpersonal skills in family issues and other adult situations will be emphasized.

**Students may not repeat this class.**

## **EDUCATION EXPLORATION**

**What does it take to become a teacher?**

**Course # 19151G05011**

**Semester Course**

**Grade Level: 11-12**

Education Exploration is a semester course designed to provide students with an overview of professions within education. Students will discover their own learning style and how learning styles impact teaching and the delivery of lessons. Experiences with various education professionals will enhance the understanding of classroom planning, licensure requirements, and career opportunities within school systems. This course includes a minimum of 15 extended learning hours, which may be outside of class time.

**This class may not be repeated.**

## **EMPLOYABILITY SKILLS/WORLD OF WORK**

**How to get and keep a job!**

**Course # 22152G05012**

**22152G05022**

**Full Year Course**

**Grade Level: 11-12**

**Fee: \$30 per semester**

Diversified Occupations help students enter the workforce through career exploration, job search and application, and the development of positive work attitudes and work-related skills. This course typically covers such topics as career planning and selection, money management, communication skills, interpersonal business relationships and behaviors, and personal responsibility. Employment may be a required component of these courses, or students may be required to enroll concurrently in a work experience course.

**This year long course may not be repeated.**



## **WORKPLACE EXPERIENCE**

**On the job experience (OJE)**

**Course # 22998G05012**

**22998G05022**

**Full Year Course**

**Grade Level: 11-12**

**Prerequisite: Concurrent enrollment in Employability Skills class**

For Employability Skills, students work in the school or outside of the school building under the close supervision of a teacher during a regular class period to learn basic work skills. This may include running a classroom business, being a student assistant, working in the cafeteria, working in the community in a small group, community service activities like working in a food bank or running their own small businesses. Students will be required to work a minimum of 15 hours per week which equals 100 hours a semester. The job must be in the area of child care, food service, home management of institutional services, interior design, paramedical services, social services, textiles, or home furnishings. Students must be concurrently enrolled in the Employability Skills class and the teacher will coordinate the student on the job.

**Students may not repeat this class.**

## **STUDENT ORGANIZATION**

**FCCLA - Family Career Community Leaders of America**--This Career & Technical Education youth organization is designed to enhance student knowledge about living now and in their future world. Members develop leadership, self-confidence, and cooperation which are essential in today's world. Community Service projects and participation in the district and state conferences are opportunities for students to get involved and meet new people. This is a great opportunity to help out others, and involvement in this organization looks great on applications and resumes. Stop by anytime! Membership is open to all students who have ever taken or are taking a Family and Consumer Sciences class. Students must pay the membership fee if they participate in District and State conferences or competitions.

## MATH OVERVIEW

The Mathematics program at Dakota Ridge High School is a comprehensive program built on the framework of the six District standards: number sense, algebra, data analysis, geometry, measurement and computation. The standards are addressed in a spiraling fashion to provide instruction that is developmentally appropriate for all students. Dakota Ridge has also made a commitment to emphasize problem solving as a major component of the mathematics curriculum. We provide ample opportunities for students to meet the District graduation requirements as well as greater rigor for those who wish to pursue the study of mathematics into a more specialized content.

The core courses for our curriculum are Algebra 1, Geometry, and Algebra 2. After successfully completing these core math classes, students have a variety of choices in completing their mathematical studies at Dakota Ridge, from the traditional sequence of trigonometry, precalculus, and calculus, to applied business oriented classes such as statistics to technology oriented classes in elective computer science and programming. A TI-83 or 84 is required for Algebra 2 and beyond. Dakota Ridge has a limited supply of TI-83 calculators available for rental at \$20 per semester.

Skill Development Pathway	Traditional Pathway		
Algebra 1 with Tutorial	Algebra 1	Algebra 1	Accelerated Algebra 1
Algebra Intermediate	Geometry	Geometry	Honors Geometry
Algebra 2 (with support)	Algebra 2	Algebra 2 (Fall) & Stats (Spring)	Honors Algebra 2
Algebra 3	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> AP Stats or Algebra 3 or <b>PICK 2</b> PreCalc Trig Stats </div> <div style="flex-grow: 1;"> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px;"> IB Math Studies SL </div> <div style="border: 1px solid black; padding: 5px;"> Calculus </div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px;"> Honors Trig/PreCalc AP Calc B/C or AP Stats or IB Math SL </div> </div> </div> <div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 50%; transform: translate(-50%, -50%);">PreCalc &amp; Stats</div> <div style="position: absolute; bottom: 0; left: 50%; transform: translate(-50%, 50%);">PreCalc &amp; Stats</div> <div style="position: absolute; bottom: 0; left: 50%; transform: translate(-50%, 50%);">Trig &amp; PreCalc OR Trig &amp; Stats</div> </div> </div> </div>		

**Math Elective pathway (after completion of Algebra 2)**

11<sup>th</sup> and 12<sup>th</sup> grade math elective option

Computer Programming (Fall) & Computer programming Advanced (Spring)

AP Computer Science Principles

**Graduation and Higher Education Admissions Requirements:**

- To meet requirements for graduation, students must successfully complete a minimum of 3 years of math in high school at the level of Algebra 1 or above.
- To meet Higher Education Admissions Requirements (HEAR), students must complete 4 years of approved math courses.

## **ALGEBRA 1**

**Course # 02052G05014**

**02052G05024**

**Scientific calculator required**

Meets 9<sup>th</sup> grade standards by following 9<sup>th</sup> grade CAP documents. This course counts as first year of Graduation Requirements. The main goal of Algebra is to develop fluency in all grade level standards with an emphasis on working with proportional reasoning and linear equations. Students will extend their experiences with tables, graphs, and equations and solve linear equations, inequalities and systems of linear equations. They will also extend their understanding of the real number system to include irrational numbers. Students will generate equivalent expressions and use formulas in order to solve problems, as well as simplify polynomials in order to begin the study of quadratic relationships. To meet 21<sup>st</sup> century learning, students will use technology and models to investigate and explore mathematical ideas and relationships and develop multiple strategies for analyzing complex situations. An emphasis will be placed on analyzing situations verbally, numerically, graphically, and symbolically and application of mathematical skills to make meaningful connections to life's experiences.

**Full Year Course**

**Grade Level: 9 – 10**

**NCAA Approved**

## **ALGEBRA I ACCELERATED**

**Course # 02052E05012**

**02052E05022**

**Prerequisite: Teacher recommendation**

**TI-83 or 84 graphing calculator required**

This course follows the district approved Algebra curriculum and counts as the first year of graduation requirements. Assessment is used to determine students' prior knowledge of Colorado 9th grade standards and instruction is differentiated based on the needs of the students. Topics includes: properties and operations of the real number system including irrational numbers, proportional reasoning, solving and graphing first degree equations, inequalities and systems of linear equations, simplifying and factor polynomials and solving simple quadratic equations. An emphasis is placed on analyzing situations verbally, numerically, graphically, and symbolically. Students use technology and higher level critical thinking skills to investigate and explore mathematical ideas and relationships and develop multiple strategies for analyzing complex situations.

**Full Year Course**

**Grade Level: 9**

**NCAA Approved**

## **ALGEBRA – INTERMEDIATE**

**Course # 02069G05014**

**02069G05024**

**Prerequisite: Algebra 1 and/or teacher recommendation**

**Fee: \$3.45 for student consumable workbook**

**Scientific calculator required**

This course follows the district approved curriculum and counts as a year towards math graduation requirements. Intermediate Algebra connects and extends algebra and geometry concepts. This course focuses on modeling various situations using rigorous mathematics with an emphasis on real numbers and algebraic properties, graphing skills, and applications drawn from a variety of areas including algebra, statistics, geometry, and continuous and discrete mathematics. Topics include polynomials, factoring, exponents and their notation, matrices, linear functions, linear systems and inequalities, quadratics, exponential functions, geometric connections, trigonometry and topics in probability and statistics. Students apply mathematical skills and make meaningful connections to life's experiences.

**Full Year Course**

**Grade Level: 10-11**

**Not NCAA Approved**

## **GEOMETRY**

**Course # 02072G05014**

**02072G05024**

**Prerequisite: Successful completion of Algebra I**

**Fee: \$3.89 for skill building workbook, compass and straightedge**

**Scientific calculator required**

This course meets 10th grade Colorado standards by following the district approved Geometry curriculum and counts as second year of graduation requirements. This course develops the structure of Euclidean geometry and applies the resulting theorems and formulas to address meaningful problems. It includes properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems and proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; rules of angle measurement in triangles and concepts of coordinate geometry and trigonometry. Dynamic geometry software, compass and straightedge, and other tools are used to investigate and explore mathematical ideas and relationships and to develop multiple strategies for analyzing complex situations.

**Full Year Course**

**Grade Level: 9 – 10**

**NCAA Approved**

## **GEOMETRY – HONORS**

**Course # 02072H05012**

**02072H05022**

**Prerequisite: Algebra I (grade of “A”) and teacher recommendation**

**Fee: \$2.39 for compass and straightedge**

**Scientific calculator required**

This course meets 10th grade Colorado standards by following the district approved Geometry curriculum and counts as second year of graduation requirements. This course develops the structure of Euclidean geometry and applies the resulting theorems and formulas to address meaningful problems. It includes properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems and proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; rules of angle measurement in triangles and concepts of coordinate geometry and trigonometry. Dynamic geometry software, compass and straightedge, and other tools are used to investigate and explore mathematical ideas and relationships and to develop multiple strategies for analyzing complex situations. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized in the course.

**Full Year Course**

**Grade: 9 – 10**

**NCAA Approved**

## **IB MATHEMATICAL STUDIES**

**Course # 02131H05034**

**02131H05044**

**Prerequisite: 1st sem. Algebra 2 + 2nd sem. Stats**

This course prepares students for the IB Math Studies exam at the Standard Level. Topics include advanced statistics, probability, trigonometry, financial mathematics, logic, set theory, sequences and series, and a thorough introduction to differential calculus. In addition, students will prepare an internal assessment on a mathematical topic of their own choosing.

**Full Year Course**

**Grade Level: 11 or 12**

**NCAA Approved**

## **ALGEBRA II**

**Course # 02056G05012**

**02056G05022**

**Prerequisite: Successful completion of Algebra I and Geometry**

**TI-83 or 84 graphing calculator required**

This course follows the Algebra 2 district approved curriculum and counts as a third year of graduation requirements. Algebra 2 topics include operations with rational and irrational expressions, in-depth study of linear equations and inequalities, analyzing and solving quadratic functions including complex numbers, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. Students investigate and solve linear piece wise, absolute value, cubic, radical, exponential, logarithmic, and rational functions algebraically, numerically, and graphically, with and without a graphing calculator. Students analyze data and develop mathematical models to address real world problem situations.

**Full Year Course**

**Grade Level: 10 – 12**

**NCAA Approved**

## **ALGEBRA II – HONORS**

**Course # 02056H05012**

**02056H05022**

**Prerequisite: Algebra I/Geometry (grade of “B+” or better) and teacher recommendation**

**Fee: \$2.51 for student consumable workbook**

**TI-83 or 84 graphing calculator required**

This course follows the Algebra 2 district approved curriculum and counts as a third year of graduation requirements. Algebra 2 topics include operations with rational and irrational expressions, in-depth study of linear equations and inequalities, analyzing and solving quadratic functions including complex numbers, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. Students investigate and solve linear piece wise, absolute value, cubic, radical, exponential, logarithmic, and rational functions algebraically, numerically, and graphically, with and without a graphing calculator. Students analyze data and develop mathematical models to address real world problem situations. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

**Full Year Course**

**Grade Level: 10 – 12**

**NCAA Approved**

### ALGEBRA III

Course # 02057G05012  
02057G05022

Prerequisite: Algebra II

Fee: \$2.90 for student consumable workbook

TI-83 or 84 graphing calculator required

Algebra 3 is a senior level math class aimed at preparing students for a variety of post-secondary options. We believe that this course will improve the transition from high school into postsecondary and workplace settings through the adoption of college- and career-ready mathematics standards. Students taking this course will review and extend algebraic concepts for students that have already taken Algebra 2. Topics include all of the one semester topics along with operations with irrational exponents, conics, exponential and logarithmic functions, matrices and determinants, sequences, series and probability as well as some finance topics.

Full Year Course  
Grade Level: 12  
Not NCAA Approved

### PRE-CALCULUS

Course # 02110G05011

Prerequisite: Successful completion of Algebra II

TI-83 or 84 graphing calculator required

This one semester course includes the study of complex numbers, polynomial, logarithmic, exponential, and rational functions and their graphs; and limits and continuity; parametric equations and their graphs; and conic sections.

Semester Course  
Grade Level: 11 – 12  
NCAA Approved

### TRIGONOMETRY

Course # 02103G05011

Prerequisite: Successful completion of Algebra II

Fee: \$1.56 for student consumable workbook

TI-83 or 84 graphing calculator required

This one semester course combines trigonometry and advanced algebra topics and is intended for students who have attained Algebra 2 and Geometry objectives. Topics include: right trigonometric and circular functions, inverses, and graphs; trigonometric equations and identities; solutions of right and oblique triangles, and vectors. **This course does offer CU Succeeds credit for this class; CU Succeeds credit can be earned either semester.**

Semester Course  
Grade Level: 11 – 12  
NCAA Approved

### TRIG/PRE-CALCULUS – HONORS

Course # 02110H05012  
02110H05022

Prerequisite: Successful completion of Algebra II – Honors or Algebra II (grade of A) and teacher recommendation

Fee: \$1.47 for student consumable workbook

Student must supply own TI-83 or 84 and a calculus textbook for 2<sup>nd</sup> semester

This course combines trigonometry and calculus topics and is intended for students who plan on taking AP Calculus B/C or Calculus in college. Trig topics include: right trigonometric and circular functions, inverses, and graphs; trigonometric equations and identities; solutions of right and oblique triangles, parametric equations and their graphs, the polar coordinate system, & vectors. Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. The Calc course introduces calculus and includes the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of change problems).

Full Year Course  
Grade Level: 11 – 12  
NCAA Approved

### CALCULUS

Course # 02121G05012  
02121G05022

Prerequisite: Successful completion of Pre-Calc/Trig

Student must supply TI-83 or 84 and a calculus textbook

This course follows the College Board's suggested curriculum designed to parallel college-level calculus courses. Students are provided with an intuitive understanding of the concepts of calculus and experience with its methods and applications. Topics include: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of change problems); and integral calculus (including anti-derivatives, the definite integral and application of integrals).

Full Year Course  
Grade Level: 12  
NCAA Approved

## **AP CALCULUS B/C**

**Course # 02125H05012  
02125H05022**

**Full Year Course  
Grade Level: 12  
NCAA Approved**

**Prerequisite: Trig/Pre-Calc–Honors and AP teacher approval**

**Class Fee: \$16.29 for student consumable workbook and “Acing AP Calculus” workbook**

**Other Fee: Approx. \$100 for AP exam**

**Student must supply TI-83 or 84, and calculus textbook**

Following the College Board’s suggested curriculum designed to parallel college-level calculus courses, AP Calculus BC courses provide students with an intuitive understanding of the concepts of calculus and experience with its methods and applications, and also require additional knowledge of the theoretical tools of calculus. The courses assume a thorough knowledge of elementary functions, and cover all of the calculus topics in AP Calculus AB, elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of change problems); and integral calculus (including anti-derivatives and the definite integral). BC topics include: vector functions, parametric equations, and polar coordinates, parametrically defined functions, advanced techniques of integration and advanced applications of the definite integral; and sequences and series.

**Students should plan on a demanding workload and are required to take the AP exam given by the college board in May.**

## **INFERENCE PROBABILITY AND STATS**

**Course # 02202G05012**

**Semester Course  
Grade Level: 11 – 12  
NCAA Approved**

**Prerequisite: Successful completion of Algebra II and teacher approval**

**Fee: 1.50 for student consumable workbook**

**Student must supply TI-83 or 84**

This semester course provides a means by which the student will become a more effective communicator through the study of probability and statistics. It focuses deeply on descriptive statistics, with an introduction to inferential statistics. Topics include sample spaces, measures of central tendency, normal curve, sampling techniques, standard deviation, t-test, correlation coefficient, techniques for determining probabilities, and matrix algebra. Students will be able to conduct a hypothesis test for a population mean, a population proportion, and a population variance; construct confidence intervals for population parameters; and conduct regression analysis for variables. Technology will be emphasized through the use of graphing calculators. **This course does offer CU Succeeds credit.**

## **AP STATISTICS**

**Course # 02203H05012  
02203H05022**

**Full Year Course  
Grade Level: 11 – 12  
NCAA Approved**

**Prerequisite Successful completion of Algebra II and teacher approval**

**Fee: Approx. \$100 for AP exam and student must supply TI-83 or 84 and a statistics study guide**

Follows the College Board’s suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.

**Students should plan on a demanding workload and are required to take the AP exam given by the college board in May.**

## **COMPUTER PROGRAMMING**

**Course # 10152G05012**

**Semester Course (Fall)  
Grade Level: 10 – 12**

**Prerequisite: Geometry**

**Fee: Student must supply own jump drive and pay \$10 towards Technology Student Association membership**

In Computer Programming, students learn how to write computer programs using a variety of programming languages, primarily Java based. Learning objectives include: types, variables and standard I/O, truth and branching, loops, strings and arrays, objects, and functions.

## **COMPUTER PROGRAMMING – ADV**

**Course # 10152E05022**

**Semester Course (Spring)**

**Prerequisite: Computer Programming**

**Grade Level: 10 – 12**

**Fee: Student must supply own jump drive and pay \$10 towards Technology Student Association membership**

In Computer Programming Adv, students learn advanced programming topics using industry standard Java.

Optional advanced programming topics may include: standard template library, functions (methods in Java), references, pointers, classes, advanced classes and dynamic memory, inheritance and polymorphism.

## **AP COMPUTER SCIENCE PRINCIPLES**

**Course # 10157H05032**

**Full Year Course**

**10157H05042**

**Grade Level: 11 – 12**

**Prerequisite: Teacher approval**

**NCAA Approved**

**Fee: Approx. \$100 AP exam**

In AP® Computer Science Principles, students will develop a range of skills vital to success in subsequent college courses, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. Rather than teaching a particular programming language or tool, the course focuses on using technology and programming as a means to solve computational problems and create exciting and personally relevant artifacts. Students design and implement innovative solutions using an iterative process similar to what artists, writers, computer scientists, and engineers use to bring ideas to life. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world. Students are **required** to register for and complete the Advanced Placement Exam for Computer Science Principles.

# **MUSIC OVERVIEW**

Each course is constructed to teach music. Discipline, along with artistic and aesthetic knowledge in line with the current district and national content standards. Regular individual and ensemble practice is required. Private music lessons are strongly encouraged. Evaluation is accomplished through performance and/or comprehensive written work. Parental support of the Music Department is strongly recommended to aid in the overall success of all students involved.

Music class fees are used for purchases and repairs of instruments, miscellaneous small percussion equipment, small miscellaneous fine arts equipment, contest fees, class materials, supplemental music, transportation to festivals, competitions, and performances. A \$60 per semester fee is also required for those students who use school-owned instruments.

## **INSTRUMENTAL MUSIC**

### **SYMPHONIC BAND**

**Course # 05102G05036**

**05102G05046**

**Full Year Course**

**Prerequisite: Prior experience on a brass/woodwind instrument - no audition necessary**

**Grade Level: 9 – 1**

**Fee: \$90 class fee plus uniform fee (dress or tuxedo) and instrument fee (for students renting an instrument from DRHS)**

Symphonic Band is designed to promote more intermediate techniques for playing brass and woodwind instruments and cover a variety of band literature styles, primarily for concert performances. The Symphonic Band is made up of all woodwind and brass students. Music theory will be an integral part of the course. Extra rehearsals and performances outside of school are required. Performances include: basketball games, concerts and competitions. Participation in all concerts, performances, extra rehearsals, competitions, and basketball games (pep band) are required. These students may also participate in pit orchestra for the school musical. The purchase of a formal concert uniform is required.

**This course is for woodwind and brass students only.**

**Percussionists should register for Instrumental Ensemble: Percussion**

### **MARCHING BAND: COLOR GUARD**

**Course # 05103G05012**

**05103G05022**

**Full Year Course**

**Grade Level: 9 – 12**

**Prerequisites: Audition and teacher recommendation**

**Fee: \$90 class fee plus uniform fee (for color guard costume) & equipment fee**

Color Guard requires the development of dance, movement, and the use of flags and other equipment (rifle, saber, etc.) in conjunction with the marching band. Developing the techniques of choreographed movement to the music is a prime focus. The Color Guard is an auxiliary group that works with the Marching Band. This class will involve the use of dance, movement and the use of flags, rifles and other equipment. Performances include home football games and competitions. There will also be scheduled trips. Extra rehearsals and performances outside of school are required.

### **ORCHESTRA – STRINGS**

**Course # 05104G05034**

**05104G05044**

**Full Year Course**

**Grade Level: 9 – 12**

**Prerequisite: Prior experience on a string instrument - no audition necessary**

**Fee: \$90 class fee plus uniform fee (dress or tuxedo) and instrument fee (for students renting an instrument from DRHS)**

Orchestra Strings is designed to develop students' abilities to play string instruments, covering a variety of string and orchestral literature styles. This is a strings only class. The class emphasizes performance of various styles of literature from the standard orchestral catalog. String players of all levels may join this ensemble. There are also openings for pianists. All students will be accepted and placed. Theory will be an integral part of the course. Participation in all concerts, performances, extra rehearsals, competitions and trips are required. These students may also participate in pit orchestra for the school musical.



## **ORCHESTRA – CHAMBER ADV**

**Course # 05104E05034**

**05104E05044**

**Full Year Course**

**Grade Level: 9 – 12**

**Prerequisite: Students must perform a successful audition for the instrumental music director**

**Fee: \$90 class fee plus uniform fee (dress or tuxedo) and instrument fee (for students renting an instrument from DRHS)**

Orchestra Strings is designed to develop advanced students' abilities to play string instruments, covering a variety of string and orchestral literature styles. This is a strings only class. The class emphasizes performance of various styles of advanced literature from the standard orchestral catalog. String players of all levels may join this ensemble. There are also openings for pianists. Students must audition for the director of instrumental music. Theory will be an integral part of the course. Participation in all concerts, performances, extra rehearsals, competitions and trips are required. These students may also participate in pit orchestra for the school musical.

## **JAZZ/CONTEMPORARY BAND**

**Course # 05105G05014**

**05105G05024**

**Full Year Course**

**Grade Level: 9 – 12**

**Prerequisite: Concurrent enrollment in Symphonic Band, and students must perform a successful audition for the instrumental music director. Competitive Track**

**Fee: \$90 class fee plus uniform fee (dress or tuxedo) and instrument fee (for students renting an instrument from DRHS)**

Jazz/Contemporary Band helps students develop their techniques for playing brass, woodwind, & percussion, as well as guitars and keyboards, focusing primarily on contemporary jazz band literature styles, such as traditional jazz, Latin, and rock. Jazz improvisation is introduced and developed. This performing group specializes in jazz techniques and the performance of jazz, rock, and related literature. Objectives are improvisation and fundamental knowledge of jazz through study and performance of various styles and periods. Participation in all concerts, performances, extra rehearsals, competitions and trips is required.

## **INSTRUMENTAL ENSEMBLE**

**Percussion Ensemble**

**Course # 05106G05012**

**05106G05022**

**Full Year Course**

**Grade Level: 9 – 12**

**Prerequisite: Audition & teacher recommendation**

**Fee: \$90 class fee plus uniform fee (dress or tuxedo) and instrument fee (for use of DRHS-owned percussion equipment)**

This Ensemble is open to anyone with a background in piano, vocal, band or percussion. Students will learn various aspects of percussion instruments & perform as a percussion ensemble. Participation in all concerts, performances, extra rehearsals, competitions, & trips are required. This class will work on marching band & symphonic band percussion music during the entire school year. This class will meet during a separate period other than the symphonic band class period. **All student interested in this course must have teacher approval prior to signing up for this course.**

# **VOCAL MUSIC**

## **CHORUS – TREBLE**

**Course # 05110G05036**

**05110G05046**

**Full Year Course**

**Grade Level: 9 – 12**

**Prerequisite: None**

**Fee: \$45 for sheet music, field trips, & accompanist**

**Additional fee for uniform purchase: \$50-75**

Chorus- Treble is intended to develop vocal techniques and the ability to sing parts in a concert choir. Course goals may include the development of solo singing ability and will emphasize various ensemble literature styles. The choir will focus on choral tone, basic theory, sight singing, and historical context. The group will pursue excellence in performances in and outside of school throughout the year. We believe anyone can and should learn to sing!

**VOCAL ENSEM – TENOR/BASS**

**Course # 05111G05016**  
**05111G05026**

**Full Year Course**  
**Grade Level: 9-12**

**Prerequisite: None**

**Fee: \$45 for sheet music, field trips, & accompanist**

**Additional fee for uniform purchase: \$50-75**

Vocal Ensemble - Tenor/Bass provides the opportunity to sing a variety of choral literature and is designed to develop vocal techniques and the ability to sing parts. All who are interested in participating in the music program are encouraged to take this non-auditioned course. This class will focus on basic theory, sight singing, and historical context. The group will pursue excellence in performances in and outside of school throughout the year.

**CHORUS – TREBLE ADV**

**Course # 05110E05034**  
**05110E05044**

**Full Year Course**  
**Grade Level: 10 – 12**

**Prerequisite: None**

**Fee: \$45 for sheet music, field trips, & accompanist**

**Additional fee for uniform purchase: \$50-75**

Chorus - Treble Adv provides the opportunity to sing an advanced variety of choral literature for voices and is designed to develop more advanced vocal techniques. This class is for students in grades 10-12 who have previously sung in high school choir. This auditioned choir will focus on choral tone, basic theory, sight singing, and historical content. This group will pursue excellence in performances in and outside of school throughout the year. We believe anyone can and should learn to sing!

**VOCAL ENSEMB – SELECT**

**"Eagleaires"**

**Course # 05111E05012**  
**05111E05022**

**Full Year Course**  
**Grade Level: 10 – 12**

**Prerequisites: Men's & Women's Chorus & Audition**

**Fee: \$45 for sheet music, field trips, & accompanist**

**Additional fee for uniform purchase: \$75-115**

Vocal Ensembles-Select is intended to develop advanced vocal techniques and the ability to sing parts in ensemble or madrigal groups. Course goals may include the development of solo singing ability and may emphasize various ensemble literature styles. The group "Eagleaires" has been a tradition here since the school opened. This is the most advanced ensemble with fewer singers. The group will focus on basic theory, sight singing, and historical context. Eagleaires will pursue excellence in performances in and outside of school throughout the year. We believe anyone can and should learn to sing!

**IB MUSIC**

**Course #05115H05014**  
**#05115H05024**

**Full Year Course**  
**Grade Level: 11, 12**

**Prerequisites: Concurrent enrollment in an instrumental or vocal music class is strongly encouraged. Must discuss interest in course with Mr. Sorrel prior to registration.**

**Fee: \$45 for Prescribed Works Analysis Book (To be used as a class)**

IB Music prepares students to take the International Baccalaureate Music exam at the Standard Level (SL). IB Music courses develop students' knowledge and understanding of music through training in musical skills (listening, performing, and composing); exposure to music theory; and formulation of a historic and global awareness of musical forms and styles. Historical, theoretical, and practical studies are suggested by the IB Curriculum Board.

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

# PHYSICAL EDUCATION OVERVIEW

## Graduation Requirement .5 credit

Dakota Ridge Physical Education classes revolve around our desire to give students a sound base in physical fitness, nutrition, health, and some selected areas of study. Our goals are to provide students a positive experience in physical education, promote lifelong fitness, and to give students the knowledge to lead a physically active and healthy lifestyle. Studies show that daily physical education decreases the risk of disease, boosts self-esteem, reduces disruptive behavior and improves school performance. It is also linked to higher test scores in writing, reading and especially math. **All activity classes: aerobics, team sports, physical education, individual/dual sports, and all weight training classes may be taken as many times as a student desires. If a student would like to register for the same class each semester, they will need to contact their counselor to do so.**

### PHYSICAL EDUCATION

Course # 08001G05014

Semester Course

Fee: \$10 for P.E. uniform & consumable equipment

Grade Level: 9 – 12

Physical Education provides students the knowledge, experience and opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports and fitness/conditioning activities. This class will be the perfect introductory class to PE at Dakota Ridge. Students will experience equal time in the weight room and playing sports.

### FITNESS/CONDITIONING AEROBICS

Course # 08005G05018

Semester Course

Fee: \$10 for P.E. uniform & consumable equipment

Grade Level: 9 – 12

This is an introductory class which will focus on achieving cardiovascular endurance through aerobic activities and exercise. This class is designed for those *female* students wanting to get in shape, look good and feel great! Students will participate in fitness activities which include: resistance training, plyometrics, floor and step aerobics, cardiovascular exercise and core strengthening. Students will also learn about nutrition, caloric needs, heart rates, and create a personal fitness program which they will use to achieve all of their goals throughout the semester. This class can be taken every semester and as many times as the student desires.

### TEAM SPORTS

Course # 08002G05018

Semester Course

Fee: \$10 for P.E. uniform & consumable equipment

Grade Level: 9 – 12

Team Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one team sport (such as volleyball, basketball, soccer, and so on). This class will provide students with the opportunity to learn the basic skills and rules of a variety of team sports. This class can be taken every semester and as many times as the student desires.

### TEAM SPORT II

Course # 08002G05038

Semester Course

Prerequisite: Team Sports

Grade Level: 10 – 12

Fee: \$10 for P.E. uniform & consumable equipment

Team Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one team sport (such as volleyball, basketball, soccer, and so on). This is a class that will allow students the opportunity to increase their competitive skill level in a variety of team activities. This class is designed to teach strategy and techniques which will allow students to compete at a higher level of competition. This class can be taken every semester and as many times as the student desires.

### INDIVIDUAL/DUAL SPORTS

(Golf/Rec. Sports)

Semester Course

Course # 08003G05014

Grade Level: 10 – 12

Fee: \$95 for off-site facility usage fees

Individual/Dual Sports courses provide students with knowledge, experience, and an opportunity to expand their skills in more than one individual or dual sport. This class offers students a variety of individual and group sports that will carry over throughout their lives. Individual sports will primarily include golf, and activities at The Ridge Recreation Center. Fees and equipment associated with the activity will be the student's responsibility. Some equipment is supplied by the facilities (i.e. golf shoes). **Students must provide all transportation to and from the site.** This class can be taken every semester and as many times as the student desires.

**WEIGHT TRAINING- Intermediate****Course # 08009G05036****Semester Course****Prerequisite: Freshmen football player or the “Physical Education” class****Grade Level: 9 – 12****Fee: \$10 for P.E. uniform & consumable equipment**

Weight Training Inter helps students go beyond the normal work-out. Students are expected to have completed the basic Weight Training class or summer weight lifting if they are freshmen football players. Students need to demonstrate knowledge of the basics of resistance training techniques and should be able to design an individual weight-lifting program. This class can be taken every semester and as many times as the student desires.

**WEIGHT TRAINING - Female****Course # 08009G05026****Semester Course****Fee: \$10 for P.E. uniform & consumable equipment****Grade Level: 9 – 12**

Weight Training helps students develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning. This weight training class is for females wanting to achieve high levels of fitness and for female athletes. The weight training is specifically designed for females working at high intensities. This class can be taken every semester and as many times as the student desires.

**FOOTBALL (Sport Specific Activity)****Course # 08013G05014 Fall****Semester Course****08013G05024 Spring****Grade Level: 10<sup>th</sup>–12<sup>th</sup> first semester****9<sup>th</sup>–11<sup>th</sup> second semester****Prerequisite: Course instructor’s signature, football player****Fee: \$10 for P.E. uniform & consumable equipment**

This class is a weightlifting class designed to build the strength needed to compete in football competition. The focus will be on building mass, as well as conditioning, agility and plyometrics. In addition, students must commit time to assist with our Elementary School Mentor Program. This class will help make our students the best overall football players possible. It is highly recommended that this class be taken every semester of the football player’s high school career.

# Science

The Science program at Dakota Ridge High School is built around the six Jefferson County School District Science Standards, which are: recognizing patterns in nature, processes of science, science technology, earth and space, life sciences and physical sciences. The standards of recognizing patterns in nature, processes of science and science technology are addressed in all science classes. All science classes are taught with a hands-on approach with a heavy emphasis on incorporating experimental design by the students into the academic curriculum.

The required course sequence for the first three years of science is given below. Please refer to the Special Programs section of the planning guide for complete descriptions of IB Courses and Pathways.

In the 2017-2018 school year, I took	I was in ____ grade	So, next year I should take...
Physical Science	8 <sup>th</sup>	Biology
Biology	9 <sup>th</sup>	Chemistry*
	10 <sup>th</sup>	Chemistry*
Chemistry	10 <sup>th</sup>	Physics* or follow IB pathway
	11 <sup>th</sup>	Physics* and/or a science elective
Physics	11 <sup>th</sup>	Chemistry* and/or a science elective
<b>*Conceptual Physics, Conceptual Chemistry, or Honors level courses may be taken with teacher recommendation</b>		

Although three years of high school science are currently required in Jefferson County, entrance into colleges and universities usually require more than three years of high school science. It is **HIGHLY RECOMMENDED** that students take **one (or more)** of the following during their senior year.

AP Science Classes:

- AP Biology
- AP Chemistry
- AP Physics

Elective Science Classes:

- Marine Science
- Forensic Science
- Anatomy and Physiology
- Environmental Science
- I.B. Sports Exercise and Health Science

Elective and A.P. classes can be taken during the junior year **IN ADDITION TO** Physics if desired. This is recommended for students planning on pursuing a science degree in college.

## **BIOLOGY**

**Course # 03051G05012  
03051G05022**

**Full Year Course  
Grade Level: 9  
NCAA Approved**

Biology is designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. Biology is a laboratory-oriented course that is designed to provide experience with and understanding of living organisms. This understanding is attained through actual laboratory work. Films and other instructional media are also used to introduce and explore various biological concepts, such as cells, diversity, the distribution of living organisms, ecology, the study of microscopic organisms, animal and plant structure and function, reproduction, genetics, behavior, and evolution. The development of an inquiring approach to problems related to living things is a priority.

## **BIOLOGY – HONORS**

**Course # 03051H05012  
03051H05022**

**Full Year Course  
Grade Level: 9  
NCAA Approved**

**Prerequisite: Current science teacher recommendation**

**Fee: \$10 for lab materials**

Biology is designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. Strong reading ability and research skills are expected. This class includes lab work, individual and group research and project work. More advanced labs are undertaken by the honors students.

## **AP BIOLOGY**

**Course # 03056H05012  
03056H05022**

**Full Year Course  
Grade Level: 11 – 12  
NCAA Approved**

**Prerequisite: Biology, (grade of “B” or better), Chemistry (grade of “C” or better) or concurrent Chemistry enrollment**

**Fee: \$30 for lab materials. Students must purchase their own textbook and lab manual.**

**Prices range from \$40 used to \$100 new; approx. \$100 AP exam**

Adhering to the curricula recommended by the College Board and designed to parallel college level introductory biology courses, AP Biology stresses basic facts and their synthesis into major biological concepts and themes. These courses cover three general areas: molecules and cells (including biological chemistry and energy transformation); genetics and evolution; and organisms and populations (i.e., taxonomy, plants, animals, and ecology). AP Biology courses include college-level laboratory experiments. Students should plan on a demanding workload and will be **required** to take the Advanced Placement Biology Examination given by the College Board in May. Students may earn college credit and/or advanced placement in college. AP Biology labs will require time outside of the normally scheduled class.

## **IB Biology I**

**Course # 03057H05014  
03057H05024**

**Full Year Course  
Grade Level: 11  
NCAA Approved**

**Prerequisite: Honors Biology**

**Fee: Students must purchase the class textbook and quadrille lab notebook**

IB Biology courses prepare students to take the International Baccalaureate Biology exams at either the standard level (SL) or the higher level (HL). In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of living organisms from the cellular level through functioning entities within the biosphere. Laboratory experimentation is an essential component of these courses. Students are required to purchase their textbook at the approximate cost of \$100 - the text will be used for both years of the course. **\*This course offers Colorado Christian University concurrent enrollment credit. This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

## **IB Biology II**

**Course # 03057H05034**

**03057H05044**

**Full Year Course**

**Grade Level: 12**

**NCAA Approved**

**Prerequisite: IB Biology I**

IB Biology courses prepare students to take the International Baccalaureate Biology exams at either the standard level (SL) or the higher level (HL). In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of living organisms from the cellular level through functioning entities within the biosphere. Laboratory experimentation is an essential component of these courses. . Students are required to purchase their textbook at the approximate cost of \$100 - the text will be used for both years of the course. **\*This course offers Colorado Christian University concurrent enrollment credit. This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

## **CONCEPTUAL PHYSICS**

**Course # 03161G05012**

**03161G05022**

**Full Year Course**

**Grade Level: 11-12**

**NCAA Approved**

**Prerequisite: Teacher Recommendation**

**Fee: \$10 for lab materials**

Conceptual Physics introduce students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

## **PHYSICS**

**Course # 03151G05012**

**03151G05022**

**Full Year Course**

**Grade Level: 11-12**

**NCAA Approved**

**Prerequisite: C or better in Chemistry, Concurrent Enrollment in Algebra II or higher**

**Fee: \$10 for pool rental for cardboard boat races, batteries, tape, twine, & styrofoam**

Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena. This course is for students who have an interest in science but who do not necessarily plan to pursue a science-related career. Those taking this course should expect hands-on activities that are designed to engage the student in thinking about and understanding physics. Computers and related technologies are used whenever appropriate.

## **PHYSICS – HONORS**

**Course # 03151H05012**

**03151H05022**

**Full Year Course**

**Grade Level: 11-12**

**NCAA Approved**

**Prerequisite: Recommended concurrent enrollment in Pre-Calculus/Trigonometry or higher**

**Fee: \$10 for pool rental for cardboard boat races, batteries, tape, twine, & styrofoam**

Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. This course is designed for the motivated junior or senior and those interested in a science-related career. This course is considered good preparation for those who will pursue science in college. Lab activities are central to the curriculum and they are accompanied by extensive use of computers and related technologies.

## IB PHYSICS

1<sup>st</sup> year course # 03157H05014  
03157H05024  
2<sup>nd</sup> year course # 03157H05034  
03157H05044

Full Year Course  
Grade Level: 11-12  
NCAA Approved

**Prerequisites:** Recommended to be on SL Math Track

**Fee:** \$10 for lab materials. Students must purchase their own textbook

IB Physics prepares students to take the International Baccalaureate Physics exam at the Standard Level. In keeping with the general aim of IB Experimental Sciences courses, IB Physics promotes understanding of the facts, patterns, and principles underlying the field of physics; critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of scientific advances in physics upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the fundamental laws of nature and the interaction between concepts of matter, fields, waves, and energy. Laboratory experimentation is essential.

**\*This course offers Colorado Christian University concurrent enrollment credit.**

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

## AP PHYSICS C

Course # 03156H05014  
03156H05024

Full Year Course  
Grade Level: 11- 12  
NCAA Approved

**Prerequisites:** Recommended Honors Physics, Mandatory concurrent enrollment in Calculus

**Fee:** \$10 for lab materials. Students must purchase their own textbook and prices range from \$50 used to around \$150 new; approx. \$100 AP exam

Designed by the College Board to parallel college-level physics courses that serve as a partial foundation for science or engineering majors, AP Physics C courses primarily focus on 1) mechanics and 2) electricity and magnetism, with approximately equal emphasis on these two areas. AP Physics C courses are more intensive and analytical than AP Physics B courses and require the use of calculus to solve the problems posed. The AP Physics course is designed to be the equivalent of the **engineering** physics course taken during the first **college year** (first semester mechanics, second semester electromagnetism). Emphasis will be placed on knowledge related to kinematics, kinetics, energy, momentum, rotational motion, harmonic motion, electrostatics, electric and magnetic fields, electric potential, DC circuits, induction and inquiry based laboratory work. Students should plan on a demanding workload and are **required** to take the AP Physics C exam given by the college board in May.

## CHEMISTRY

Course # 03101G05012  
03101G05022

Full Year Course  
Grade Level: 10,11,12  
NCAA Approved

**Prerequisites:** Concurrent enrollment in Geometry or higher

**Fee:** \$15 for lab materials

Chemistry involves studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. This second level of chemistry is intended for the student serious about a science, engineering, or medical field career. This course is designed to provide students with a basis in chemistry concepts and laboratory skills. It is designed for students that are interested in science, and may be taking chemistry, or other science courses in college. It can be a stepping stone to AP Chemistry. Students taking this course should expect hands-on activities that are designed to help with the understanding of chemistry concepts.

## CONCEPTUAL CHEMISTRY

Course # 03105G05012  
03105G05022

Full Year Course  
Grade Level: 10,11,12  
NCAA Approved

**Prerequisites:** Teacher Recommendation

**Fee:** \$15 for lab materials

Conceptual Chemistry is a practical, non-quantitative chemistry course designed for students who desire an understanding of chemical concepts and applications. Like Chemistry, it involves studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. Students taking this course should expect hands-on activities that are designed to help with the understanding of chemistry concepts.



## **CHEMISTRY –HONORS**

**Course # 03101H05012**

**03101H05022**

**Prerequisite: Recommended concurrent enrollment in Algebra II or higher**

**Fee: \$15 for lab materials**

Chemistry involves studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. This third level of chemistry is intended for students who desire a greater challenge than provided in Chemistry and who plan to attend college.

**Full Year Course**  
**Grade Level: 10,11,12**  
**NCAA Approved**

## **AP CHEMISTRY**

**Course # 03106H05012**

**03106H05022**

**Prerequisites: Earth Science, Biology, Chemistry, Algebra II or higher**

**Fee: \$30 for lab materials and students must purchase their own textbook and lab manual.**

**Prices range from \$40 used to \$100 new; approx. \$100 AP exam**

Following the curricula recommended by the College Board, AP Chemistry usually follows high school chemistry and second-year algebra. Topics covered may include atomic theory and structure; chemical bonding; nuclear chemistry; states of matter; and reactions (stoichiometry, equilibrium, kinetics, and thermodynamics). AP Chemistry laboratories are equivalent to those of typical college courses. This course will provide students with a depth of understanding of chemistry fundamentals and a thorough competence in dealing with chemical problems. Emphasis will be placed on knowledge related to the structure of matter, states of matter, chemical reactions, descriptive chemistry and extensive laboratory work. Students should plan on a demanding workload and are required to take the Advanced Placement Chemistry Exam given by the College Board in May.

**Full Year Course**  
**Grade Level: 11-12**  
**NCAA Approved**

## **ENVIRONMENTAL SCIENCE**

**Course # 03003G05012**

**03003G05022**

**Fee: \$5 for lab materials**

Environmental Science examines the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling & regeneration, ecosystems, population & growth studies, pollution, & conservation of natural resources. **This course is designed to fit the needs of students who desire knowledge of Environmental Science but are not planning a career in science.** The course is designed to develop student awareness of environmental problems both natural and human-made. Environmental science is interdisciplinary & embraces a wide variety of topics from different areas of study including; ecology, world population, natural resources, climate change, endangered species, water rights & conservation. Lab activities are used to support student learning throughout the year.

**Full Year Course**  
**Grade Level: 11 – 12**  
**NCAA Approved**

## **MARINE SCIENCE**

**Course # 03005G05012**

**03005G05022**

**Prerequisites: Completion of or concurrent enrollment in Physics**

**Fee: \$20 for dissectible projects and aquarium field trip**

Marine Science focuses on the content, features, and possibilities of the earth's oceans. They explore marine organisms, conditions, and ecology and sometimes cover marine mining, farming, and exploration. This course is designed to cover all aspects of the oceans including geology, chemistry, physics and biology. Approximately one semester will be spent on the geological and physical characteristics of the oceans. This will include plate tectonics, tides, currents, waves and seawater chemistry. The second semester will explore marine biology. This will include how organisms and environment interact, food chain relationships, classification, and the anatomy and physiology of marine animals and algae.

**Full Year Course**  
**Grade Level: 11 – 12**  
**NCAA Approved**

## **FORENSIC SCIENCE**

**Course# 15055G05012**

**15055G05022**

**Prerequisite:** Completion of or concurrent enrollment in Physics

**CTE Certified (Career & Technical Education)**

**Fee:** \$20 for lab materials and field trip to Jeffco Criminalistics Lab

This course is an introduction to the field of forensic science. It is the application of science and encompasses various scientific disciplines. This course will introduce various methodologies and applications used in the forensic context. It will incorporate several branches of science including physics, chemistry, archeology, anthropology, geography, biology, psychology, criminology, and sociology. The course is designed to introduce the scientific strategies of crime scene investigation where students take on the role of investigators by collecting and interpreting evidence and data. Being a CTE course prepares students who are looking for career exploration & preparation to successfully transition into the workforce of forensic science. Excellent attendance is essential, as this is a lab-based course. Guest speakers and field trip opportunities are offered when available. **Students should be aware that this course may include sensitive and/or graphic material.**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

## **ANATOMY & PHYSIOLOGY**

**Course# 03053G05012**

**03053G05022**

**Prerequisite:** Completion of or concurrent enrollment in Physics

**Fee:** Students buy own anatomy coloring book

Usually taken after a comprehensive initial study of biology, Anatomy and Physiology presents the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals. Anatomy and Physiology is a pre-college seminar class that is built on academic rigor and prepares students for the challenge of a career in the medical field. The primary focus is on learning the gross anatomy and physiology of human organ systems with some comparative anatomy studies. To facilitate how systems function, students are immersed in learning histology and complex inner-workings of network physiology. Material will lead to pathology, disease, disease prevention and treatment. Microscope work, modeling, guest speakers, organ dissection, and human cadaver are requirements of the course. Students selected for this course bring motivation to achieve strong work ethic, exceptional study habits, and a rich desire to learn.

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

## **IB SPORTS EXERCISE & HEALTH SCIENCE**

**1<sup>st</sup> year course # 03065H05014**

**03065H05024**

**Prerequisites:** Completion of or concurrent enrollment in Physics

**Fee:** \$55 for IB textbook

IB Sports Exercise and Health Science standard level (SL) involves the study of the science that underpins physical performance. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition. Students cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyse human performance. Where relevant, the course will address issues of international dimensions and ethics by considering sports, exercise and health relative to the individual in a global context.

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

**Full Year Course**

**Grade Level: 11-12**

**NCAA Approved**

# Social Studies

<u>General Program</u>	<u>Honors/AP Program</u>	<u>Recommended IB Pathway</u>
<u>9th Grade</u>	<u>9th Grade</u>	<u>9th Grade</u>
US Government World Geography	Honors US Government* Honors World Geography*	Honors US Government* Honors World Geography*
<u>10th Grade</u>	<u>10th Grade</u>	<u>10th Grade</u>
Modern US History	AP US History **	AP US History**
<u>11th Grade</u>	<u>11th Grade</u>	<u>11th Grade</u>
World History Overview	AP World History**	IB History*** Standard Level
<u>12th Grade</u>	<u>12th Grade</u>	<u>12th Grade</u>
Economics	Economics (AP World History or AP US Government can be taken in addition to Economics)	IB History***

## Elective Social Studies Courses

Legal Systems: 10-12	Legal Systems II: 11-12	Criminology: 11-12
Psychology: 11-12	Partic Topics Psychology: 11-12	Sociology: 11-12
Eastern Religions: 11-12	Western Religions: 11-12	IB World Religions: 11-12
Student Government: 10-12	Student Government Aux.: 9-12	AP US Government**: 11-12

All AP courses\*\* (US, World, or Government) can be taken as electives senior year

\*Honors Requirements - Fill out application packet (available on DRHS and SRMS websites), recommendation form completed by current Social Studies teacher (part of packet), and provide copy of middle school transcripts

\*\* A.P. Requirements - First semester teacher recommendation and GPA evaluation

\*\*\*I.B. Requirement – Admission into IB programme

Please refer to the “Special Programs” section for complete descriptions of IB courses and pathways

**US GOV–COMPREHENSIVE**  
**Course # 04151G05011**

**Semester Course**  
**Grade Level: 9**  
**NCAA Approved**

U.S. Government—Comprehensive provides an overview of the structure and functions of the U.S. government and political institutions and examines constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. This course may examine the structure and function of state and local governments and may cover certain economic and legal topics. U.S. Government Comprehensive, 9<sup>th</sup> grade, provides students with an introduction to the structure of the American political system as framed by the Constitution. Students will explore the basic qualities and characteristics of the three branches of the national government. They will examine the relationship between federal, state, and local governments.

**U.S. GOV–COMPREHENSIVE – HONORS**

**DRHS PRE- IB or PRE-AP (recommended)**

**Course # 04151H05011**

**Prerequisite: See entrance requirements in description**

**Fee: None**

**Semester Course**  
**Grade Level: 9**  
**NCAA Approved**

U.S. Government—Comprehensive provides an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. This course may examine the structure and function of state and local governments and may cover certain economic and legal topics. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. Entrance into the 9<sup>th</sup> Grade Honors U.S. Government Comprehensive will be determined by a composite score ranking system based on 7<sup>th</sup> and 8<sup>th</sup> Grade Social Studies Grades and overall middle school GPA. Students applying must complete an Application Packet. All items contained in the Application Packet – Application Form, hard copy of middle school transcript, must be submitted in full before evaluation of the file will be made by the Dakota Ridge Social Studies Dept. Submission deadlines and downloads to the Application Forms are available on the Dakota Ridge website. Application forms may also be obtained by visiting the main office at Dakota. The goal is to prepare students for either AP (Advanced Placement) or IB (International Baccalaureate) course work.

**WORLD GEOGRAPHY**

**Course # 04001G05011**

**Semester Course**  
**Grade Level: 9**  
**NCAA Approved**

World Geography provides students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the environment; economic development, the interdependence of regions; and the movement of people, goods, and ideas. This course is a study of human geography through an in-depth look at the Basics of Geography, Cultural, Population and Political Geography as well as how humans interact with the environment. This will be accomplished through the use of human-environment interactions, geographic tool interpretations, patterns of geographic movement, and regional studies of current world issues. Jeffco Public Schools and Colorado State Standards apply to all aspects of the curriculum of this course.

## **WORLD GEOGRAPHY HONORS**

**DRHS PRE-IB or PRE-AP (recommended)**

**Course # 04001H05011**

**Semester Course**

**Grade Level: 9**

**NCAA Approved**

**Prerequisite: See entrance requirements in description**

World Geography provides students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the environment; economic development, the interdependence of regions; and the movement of people, goods, and ideas. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

Entrance into the 9<sup>th</sup> Grade Honors Geography will be determined by a composite score ranking system based on 7<sup>th</sup> and 8<sup>th</sup> Grade Social Studies Grades and overall middle school GPA. Students applying must complete an Application Packet. All items contained in the Application Packet – Application Form, hard copy of middle school transcript must be submitted in full before evaluation of the file will be made by the Dakota Ridge Social Studies Department. Submission deadlines and downloads to the Application Forms are available on the Dakota Ridge website. Application forms may also be obtained by visiting the main office at Dakota. The goal is to prepare students for either AP (Advanced Placement) or IB (International Baccalaureate) course work.

## **MODERN U.S. HISTORY**

**Course # 04103G05012**

**04103G05022**

**Full Year Course**

**Grade Level: 10**

**NCAA Approved**

Modern U.S. History examines the history of the United States from the Progressive Era through the present time. These courses typically include a historical review of political, military, scientific, economic, and social developments. At the end of the course, students will know and understand the chronological organization of U.S. history and will be able to group people and events into eras from 1900 through the present day, as described in the Jefferson County History standards. This course is designed to help students understand cause and effect relationships in our country's history. Students will investigate geographic, political, social, intellectual, economic and technological issues that define eras by using research methods. Additionally students will use documents to answer Document-Based Questions and build critical thinking skills.

## **AP U.S. HISTORY**

**Course # 04104H05012**

**04104H05022**

**Full Year Course**

**Grade Level: 10 – 12**

**NCAA Approved**

**Prerequisites: Suggested grade of B or higher in social studies courses**

**Fee: Purchase textbook on your own (Information provided at APUSH class meeting in April)**

**AP exam fee of \$100**

Following the College Board's suggested curriculum designed to parallel college-level U.S. History courses, AP U.S. History provides students with the analytical skills and factual knowledge necessary to address critical problems and materials in U.S. history. Students learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The course examines the discovery and settlement of the New World through the recent past. A.P U.S. History prepares the student for the national Advanced Placement exam. The class provides a detailed survey of American History from 1750 through 1980. Strong reading and writing skills are critical. Class time frequently involves small or large group discussions. The primary focus of the class will be on historical skills and application of content. This is a college level course, and students will be expected to perform college level work in order to succeed in this class. Students are required to take the A.P U.S. History exam, and may earn college credit and/or advanced placement.

**Students will not be permitted to drop the class after May of this year. Internet access is required to complete summer homework.**

## **WORLD HISTORY – OVERVIEW**

**Course # 04051G05012**

**04051G05022**

**Full Year Course**

**Grade Level: 11**

**NCAA Approved**

World History provides students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History may include geographical studies, but often these components are not as explicitly taught as geography. Students will know and understand the chronological organization of both Western and non-Western Civilizations and will be able to group people and events into the eras described in the Jefferson County History standards. Students will investigate geographic, political, social, intellectual, economic and technological issues that define the eras by using historical research methods.

## **AP WORLD HISTORY**

**Course # 04057H05012**

**04057H05022**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

**Prerequisites:** Suggested grade of “B” or higher in previous Social Studies courses.

**Teacher recommendation, GPA, and test scores may be used to determine enrollment**

**Purchase of student textbook required and AP exam fee of \$100**

Following the College Board’s suggested curriculum design to parallel college-level World History courses, AP World History examines world history from 8000 BCE to the present with the aim of helping students develop a greater understanding of the evolution of global processes and contacts and how different human societies have interacted. This course highlights the nature of continuity and change over time in an international context and explores cause and effect relationships. AP World History prepares the student for the national Advanced Placement exam. Strong reading and writing skills are critical. Class time frequently involves small and large group discussions. This is a college level course; the content and writing demands are rigorous. Students with a “C” or less at the semester may be asked to drop the class. Students are **required** to take the AP World History Exam and may earn college credit and/or advanced placement at a university. **Students will not be permitted to drop the class after May of this year.**

## **AP U.S. GOVT & POLITICS**

**Course # 04157H05011**

**04157H05021**

**Full Year Course**

**Grade: 11 – 12**

**NCAA Approved**

**Prerequisite:** Students are required to fill out AP application packet

**which includes: teacher recommendation and GPA evaluation**

**Students are required to purchase a copy of James Q. Wilson’s American Government, 14th Edition, plus \$100 AP exam fee**

Following the College Board’s suggested curriculum designed to parallel college-level U.S. Government and Politics courses, this course provides students with an analytical perspective on government and politics in the United States, involving both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. The course generally covers the constitutional underpinnings of the U.S. government, political beliefs and behaviors, political parties and interest groups, the institutions and policy process of national government, and civil rights and liberties. AP U.S. Govt & Politics prepares the student for the national Advanced Placement exam. The course provides an in-depth study of the Constitution, branches of government, development of political parties, ideology, civil rights and liberties. Strong reading and writing skills are critical. This is a college level course; students are expected to be highly motivated and actively involved in class discussions and supplemental readings. Students are **required** to take the AP exam. **Students will not be permitted to drop the class after May of this year.**

## **IB WORLD RELIGIONS**

**Course # 07017H05014**

**07017H05024**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

**Prerequisite:** Two successful years of social studies

**Fee:** Purchase class textbook on your own and \$15 for supplemental textbook

IB World Religions prepares students to take the International Baccalaureate World Religions exam at the Standard Level (SL). Students will be taught Eastern and Western World Religions in a manner that communicates abstract concepts in historical context with an understanding of diversity and sensitivity to individual beliefs. The study of religions benefits from an approach that considers the three fundamental features of religions: theoretical, practical, and sociological. Eastern World Religions will focus on Hinduism, Buddhism, and Taoism. Western World Religions will focus on Judaism, Christianity, and Islam. **This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

## **EASTERN RELIGIONS**

**Course # 07003G05011**

**Prerequisite: Two successful years of social studies**

**Fee: Purchase class textbook on your own and \$10 for supplemental textbook**

Similar to Comparative Religion, Eastern Religions courses provide students with an overview of various religions and belief systems but focus on those of the Eastern World. Particular religious or philosophical systems of study usually include Buddhism, Hinduism, and Taoism. Similar to Comparative Religion, Western Religions courses provide students with an overview of various religions and belief systems but focus on those of the Western World. Particular religious or philosophical systems of study usually include Judaism; Christianity and Native Indian belief systems, among others.

**Fall semester only**

**Grade Level: 11 – 12**

**NCAA Approved**

## **WESTERN RELIGIONS**

**Course # 07004G05011**

**Prerequisite: Two successful years of social studies**

**Fee: Purchase class textbook on your own and \$10 for supplemental textbook**

Similar to Comparative Religion, Western Religions courses provide students with an overview of various religions and belief systems but focus on those of the Western World. Particular religious or philosophical systems of study usually include Judaism; Christianity and Native Indian belief systems, among others.

**Spring semester only**

**Grade Level: 11 – 12**

**NCAA Approved**

## **ECONOMICS**

**Course # 04201G05011**

**Prerequisite: None**

**Fee: None**

Economics provides students with an overview of economics with primary emphasis on the principles of microeconomics, macroeconomics & the U.S. economic system. The course covers topics such as international economics & comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both. Using the Economic standards, students will learn how scarcity of resources leads to the need for choices around personal lives in governments and societies. Topics will include supply & demand, opportunity costs, economic cycles, costs and benefits, resources, international economics, comparative economic systems, banking & money, and markets. The role of the government in economics & vice versa will also be explored. Topics include: fiscal policy, monetary policy involving the Federal Reserve System, taxes, debts, and surpluses. Students will also learn how to use and interpret economic graphs, charts, statistics, and other tools of economic development.

**Semester Course**

**Grade Level: 12**

**NCAA Approved**

## **LEGAL SYSTEMS**

**Course # 04165G05011**

**Prerequisite: None**

**Fee: \$5 class workbook fee**

Legal Systems I examines the workings of the U.S. criminal and civil justice systems, including providing an understanding of civil and criminal law and the legal process, the structure and procedures of courts, and the role of various legal or judicial agencies. Although the course emphasizes the legal process, it may also cover the history and foundation of U.S. law (the Constitution, statutes, and precedents). Course content may also include contemporary problems in the criminal justice system. This course is a study of the American Criminal Justice System, including crime, police, courts, corrections, juvenile justice, and your rights. Current events, such as, gun control, privacy rights, and the death penalty will be discussed. Students are expected to participate in a ride-along with local law enforcement. This course is NOT a replacement course for Civics, with the exception of transfer students with counselor and teacher approval. This DRHS course is Part 1 of the Introduction to Criminal Justice concurrent enrollment course offered for college credit by Arapahoe Community College. You must pass this course with a minimum grade of a "C" to be eligible for Part 2 (Legal Systems 2).

**Semester Course**

**Grade Level: 10 – 12**

**NCAA Approved**

## LEGAL SYSTEMS II

Course # 04165G05021

Semester Course

Prerequisite: Legal Systems I with a minimum passing grade of “B”

Grade Level: 11 – 12

Fee: \$10 class workbook fee

NCAA Approved

Legal Systems II provides motivated students an in-depth study of the key components of the criminal justice system - law enforcement, courts and corrections – and how they interact with one another. Students will also explore the definition of crime in greater depth, historical developments, current practices in criminal justice, and the relationships between criminal justice and social justice. The course is structured to support students’ development of key skills in critical thinking, problem solving, research, reading, writing, speaking, presenting and teamwork. **This course is a concurrent enrollment course, offering college credits through Arapahoe Community College. Students must qualify for college enrollment by either: 1) Unweighted GPA of 3.0 AND “B” grade of second semester Junior English OR 2) SAT Evidence-based Reading & Writing score of 470 OR 3) Pass the ACC Accuplacer test. Students names will be released to this community college as all students are expected to register for free Community College Concurrent Enrollment Credit. This credit transfers as a guarantee transfer credit. This DRHS course is Part 2 of the Introduction to Criminal Justice concurrent enrollment course offered for college credit by Arapahoe Community College. You must pass this course with a minimum grade of a “C” to be eligible for the Introduction to Criminal Justice course (3 credits) at ACC.**

## CRIMINOLOGY - “Why did they do it?”

Course # 04259G05011

Semester Course

Prerequisite: Psychology, Sociology, or Legal Systems I with a minimum grade of “B”

Grade Level: 11 – 12

Fee: \$10 for a consumable workbook

Not Yet NCAA Approved

“Criminology – Why Did They Do It?” introduces students to the field of criminology or the study of crime. Students look at possible explanations for crime from psychological, biological and sociological perspectives: explore the categories and social consequences of crime; and investigate how the criminal justice system handles criminals and their misdeeds. The course explores some key questions: Why do some individuals commit crimes while others do not? What aspects of culture and society promote crime? Why are different punishments given for the same crime? What factors – from arrest to punishment – help shape the criminal case process? Additionally, we are going to use pop culture examples of theory, in the format of film. We will watch several films in this class, as a means of better understanding the theories, and analyzing the context of those theories, and the social conditions and institutions. **This course is a concurrent enrollment course, offering college credits through Arapahoe Community College. Students must qualify for college enrollment by either: 1) Unweighted GPA of 3.0 AND “B” grade of second semester Junior English OR 2) SAT Evidence-based Reading & Writing score of 470 OR 3) Pass the ACC Accuplacer test. Students names will be released to this community college as all students are expected to register for free Community College Concurrent Enrollment Credit. This credit transfers as a guarantee transfer credit IF passed with a “C” or better.**

## PSYCHOLOGY

Course # 04254G05012

Full Year

# 04254G05022

Grade Level: 11-12

NCAA Approved

Psychology aims to develop an awareness of how research findings can be applied to better understand human behavior and how ethical practices are upheld in psychological inquiry. One of the goals of the Modern Psychology course is to provide students with an opportunity to acquire a better understanding of how the human brain works and how this affects behavior. Students also learn to understand the biological, cognitive and sociocultural influences on human behavior and explore alternative explanations of behavior. They will also understand and learn a number of different psychological inquiry methods.

## IB PSYCHOLOGY

Course # 04257H5014

Full Year

04257H5024

Grades(s) 11, 12

Fee: \$85 course textbook

IB Psychology courses prepare students to take the International Baccalaureate Psychology exam at the Standard Level (SL). Course content includes developmental and social psychology, cognition and learning, and personality subject areas, which are approached from biological/physiological, behavioral, and humanistic points of view. These courses may include a study of research design and statistics and involve practical work in psychological research.

**\*Full year commitment required.**

**This course can be taken by IB students as part of their IB program and general education students to earn an IB certificate.**



**SOCIOLOGY**  
**Course # 04258G05011**

**Semester Course**  
**Grade Level: 11-12**  
**NCAA Approved**

Sociology introduces students to the study of human behavior in society. The course provides an overview of sociology, generally including, but not limited to topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society. Sociology looks at the behavior of individuals in groups and in the institutions--such as schools, courts and families--that people create in their society. The topics the class will investigate include the basic concepts of sociology, world and American culture, socialization, crime and deviance, racial and ethnic groups, religion and politics.

**IB HISTORY OF THE AMERICAS**

**Prerequisite: Acceptance into IB Program**

**Course # 04054H05014**

**04054H05024**

**Full Year**  
**Grade Level: 11**

**Students will need to purchase books on their own for this class. Teachers will get that information to students once registration in the class has been confirmed.**

IB History prepares students to take the International Baccalaureate History exam at either the standard level (SL) or the higher level (HL). In this course, students study political, military, economic, social, and cultural trends and explore the nature of historical documentation and the methods used by historians. The IB History course surveys 20th-century topics in an international context; provides a detailed regional study of a major area (Africa, Europe, the Americas, West and South Asia, East and Southeast Asia, or Australia); and enables students to undertake individual study on a subject of interest in greater detail and depth.

The process of assessing students will focus on the idea of effective communication. A varied approach to assessment will include written and oral demonstrations of knowledge, collaboration among IB Learners, and the use of creativity in independent learning and expressions of knowledge. Using this varied approach, there will be a heavy emphasis on taking risks, reflecting on one's own knowledge and varied perspectives. Learners will then be able to communicate those ideas through short responses and extended writing. The structure of the course will reflect the IB model of marking for students to understand both the internal and external assessments. Overall the approach to the course will be to create successful IB learners, while guiding them in the development of historical inquiry and the understanding of individuals and societies.

**IB HISTORY OF THE AMERICAS**

**Prerequisite: IB History of the Americas**

**Course # 04054H05034**

**04054H05044**

**Full Year**  
**Grade Level: 12**

**Students will need to purchase books on their own for this class. Teachers will get that information to students once registration in the class has been confirmed.**

IB History prepares students to take the International Baccalaureate History exam at either the standard level (SL) or the higher level (HL). In this course, students study political, military, economic, social, and cultural trends and explore the nature of historical documentation and the methods used by historians. The IB History course surveys 20th-century topics in an international context; provides a detailed regional study of a major area (Africa, Europe, the Americas, West and South Asia, East and Southeast Asia, or Australia); and enables students to undertake individual study on a subject of interest in greater detail and depth.

The process of assessing students will focus on the idea of effective communication. A varied approach to assessment will include written and oral demonstrations of knowledge, collaboration among IB Learners, and the use of creativity in independent learning and expressions of knowledge. Using this varied approach, there will be a heavy emphasis on taking risks, reflecting on one's own knowledge and varied perspectives. Learners will then be able to communicate those ideas through short responses and extended writing. The structure of the course will reflect the IB model of marking for students to understand both the internal and external assessments. Overall the approach to the course will be to create successful IB learners, while guiding them in the development of historical inquiry and the understanding of individuals and societies.

**LEADERSHIP****(Student Government)****Course # 22101G05012****22101G05022****Full Year Course****Grade Level: 10 – 12****(9<sup>th</sup> grade 2<sup>nd</sup> semester only)****Prerequisite: Nomination and application**

This course is open to students who were elected to the Student Government and/or appointed by executives/sponsor to represent the student body. This includes student body president, vice president, class officers (senior, junior and sophomore class presidents), as well as representatives for each grade level. The student representatives serve on all Dakota Ridge High School decision-making committees. They take part in the voting and decision making on behalf of all students, and they deliberate on student and school issues during their class time in an effort to solve problems for the DRHS student body as well as plan numerous school events.

As representatives of Student Government, students can expect to work collectively on producing activities for all students that leave a positive memory of high school. Students can also expect a rigorous course load focusing on developing leadership skills, understanding the process and rules of government, and the foundation of our democratic system. In addition, students can expect to perform duties inside and outside of the school that represent the student body as a whole. Student Government is an extended class that lasts from 1:15 to 3:30 p.m

# WORLD LANGUAGES OVERVIEW

The focus of World Languages is on the acquisition of communication skills including listening, speaking, reading, writing, and cultural awareness. Language courses are highly recommended for facilitating life in today's global community. Universities typically require two to four years of continuous study in a modern language (French, German, or Spanish) as an entrance requirement. Competitive universities give preference to students who have successfully completed three or more continuous years in the same foreign language. All levels are sequential and are full year courses. **All courses, at all levels, are conducted primarily in the target language. Any student taking Spanish and has successfully completed a full year course in middle school with a B or higher will need to take a placement test in the spring (or by appointment).**

The languages from which students may select include: **FRENCH, GERMAN, and SPANISH.**

**Native speakers should consider level 3 or higher. Please contact your counselor for additional information in terms of appropriate level placement.**

## **LEVEL I:**

**FRENCH # 06121G05012 & 06121G05022**

**GERMAN # 06201G05012 & 06201G05022**

**SPANISH # 06101G05012 & 06101G05022**

**Full Year Course  
Grade Level: 9 – 12  
NCAA Approved**

**Fee: Spanish \$23 French \$15 & German \$18 for workbook & supplementary materials**

Designed to introduce students to language and culture, level I language courses emphasize basic grammar and syntax, simple vocabulary, and pronunciation for all levels so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Culture is introduced through the art, literature, customs, and history of native-speaking people. **Students will be expected to use the target language to the maximum extent possible. Pre-IB or pre-AP students should enroll in Level I Honors.**

**\*This class is not for native speakers. Please contact your counselor for additional information in terms of appropriate level placement.**

## **LEVEL I HONORS (Accelerated Course)**

**DRHS PRE-IB:**

**FRENCH # 06121H05012 & 06121H05022**

**SPANISH # 06101H05012 & 06101H05022**

**Full Year Course  
Grade Level: 9 – 12  
NCAA Approved**

**Prerequisite: 0 to 1 year of French or Spanish and teacher recommendation and/or IB Coordinator approval.**

**Fee: Spanish \$23 & French \$15 for workbook & supplementary materials**

**In this fast-paced course, students will cover one-and-a-half years of language studies. Upon successful completion of this course, students will enroll in Level II Honors. The completion of the Level I & II Honors sequence is the equivalent of completing Levels I, II, & III.**

Designed to introduce students to language and culture, this course emphasizes basic grammar and syntax, simple vocabulary, and pronunciation so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of native-speaking people. The honors course sequence prepares students for advanced IB or AP course work and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

**\*This course is not for native speakers. Please contact your counselor for additional information in terms of appropriate level placement.**

## **LEVEL II:**

**FRENCH # 06122G05012 & 06122G05022**

**GERMAN # 06202G05012 & 06202G05022**

**SPANISH # 06102G05012 & 06102G05022**

**Full Year Course**

**Grade Level: 9 – 12**

**NCAA Approved**

**Prerequisite:** Successful completion of Level I at either junior high or high school, placement exam, and/or teacher recommendation.\*

**Fee:** Spanish \$23 French \$15 & German \$18 for workbook & supplementary supplies

**\*All entering 9th graders must take a placement test in the spring for Level 2 placement.**

**\*\*This class is not for native speakers. Please contact your counselor for additional information in terms of appropriate level placement.**

Level II language courses build upon skills developed in level I, extending students' abilities to understand and express themselves in the target language and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when listening to familiar topics. Students usually explore the customs, history, and art forms of native-speaking people to deepen their understanding of the culture(s). **Students will be expected to use the target language to the maximum extent possible.**

## **LEVEL II HONORS**

**DRHS PRE-IB:**

**FRENCH # 06122H05012 & 06122H05022**

**SPANISH # 06102H05012 & 06102H05022**

**Full Year Course**

**Grade Level: 9 – 12**

**NCAA Approved**

**Prerequisite:** Successful completion of Level 1 Honors with a "C" or better and teacher recommendation and/or IB Coordinator approval.

**Fee:** Spanish \$25 & French \$15 for workbook & supplementary supplies

**\*Students new to DRHS or new to the honors program will need to take a proficiency test or demonstrate proficiency via final exam scores.**

**In this fast paced-course, students will cover one-and-a-half years of language studies. The completion of the Level I and II Honors sequence is the equivalent to three years of language study. Students will enroll in French, Spanish IB1 or Spanish IV after successful completion of this course.**

Level II Honors courses build upon skills developed in previous classes, extending students' ability to understand and express themselves in the language and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of native-speaking people to deepen their understanding of the culture(s). The honors course sequence prepares students for advanced IB or AP course work and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

## **LEVEL III:**

**FRENCH # 06123G05012 & 06123G05022**

**GERMAN # 06203G05012 & 06203G05022**

**SPANISH # 06103G05012 & 06103G05022**

**Full Year Course**

**Grade Level: 10 – 12**

**NCAA Approved**

**Prerequisite:** Successful completion of Level II, (grade of "C" or better), and/or teacher recommendation

**Fee:** Spanish \$28, French \$21 & German \$20 for workbook & supplementary materials

Level III language courses focus on having students express increasingly complex concepts both verbally and in writing. Students will demonstrate increased ability to communicate in spontaneous situations. Comprehension goals for students may include attaining more facility and rapid understanding, being able to paraphrase or summarize written passages, and conversing easily within familiar situations. **Instruction, discussion, and student activities will be primarily conducted in the target language**

### LEVEL III HONORS

**SPANISH # 06103H05012 & 06103H05022**

**Prerequisite:** Successful completion of Level II Honors, (grade of “C” or better), and/or teacher recommendation if took level II standard

**Fee:** Spanish \$28

Level III language courses focus on having students’ express increasingly complex concepts both verbally and in writing. Students will demonstrate increased ability to communicate in spontaneous situations. Comprehension goals for students may include attaining more facility and rapid understanding, being able to paraphrase or summarize written passages, and conversing easily within familiar situations. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. **Instruction, discussion, and student activities will be primarily conducted in the target language.**

**\*\*Students who have successfully completed Spanish Honors I & II and are pursuing the IB diploma or AP test should enroll in the Level IV/IB1 course.**

**Full Year Course**

**Grade Level: 10 – 12**

**NCAA Approved**

### LEVEL IV:

**GERMAN # 06204G05012 & 06204G05022**

**SPANISH #06104G05012 & 06104G05022**

**Prerequisites:** Successful completion of Level III or Spanish III Honors, (grade of “C” or better), and/or teacher recommendation

**Fee:** Spanish \$75 and German \$20 for workbook

Level IV language courses focus on advancing students’ skills and abilities to read, write, speak, and understand the native language so that they can conduct simple conversations with sufficient vocabulary and an acceptable pronunciation, demonstrate comprehension of more complex auditory samples, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary. Students will actively discuss and research cultural themes related to the Spanish, French, or German speaking world. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language.**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

### AP GERMAN:

**Course # 06212H05012 & 06212H05022**

**Prerequisites:** Successful completion of Level IV

**Fee:** \$20 for workbook and \$100 AP Exam

Designed to parallel third-year college-level courses in German Language, AP German Language & Culture courses build upon prior knowledge and develop students’ ability to understand spoken German in various conversational situations, to express themselves (in German) accurately and fluently, and to have a command of the structure of the German language. Students will develop a vocabulary large enough to understand literature, magazine/newspaper articles, films and television productions, and so on.

**Both Spanish IB1 & IV students may be placed in the same class block. The entire range of Spanish grammar reviewed within contextual scenarios.**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

### IB LANGUAGE B – SPANISH I:

**Spanish # 06111H05014 & 06111H05024**

**Prerequisite:** Completion of Spanish III Honors or Spanish III standard with teacher recommendation

**Fee:** \$75 for textbook

This advanced, weighted, honors level utilizes university level materials and prepares students to take the IB Language B exam at the Standard Level (SL). However, students are not required to be IB students to enroll in this course. This course focuses on improving students’ accuracy and fluency in oral and written communication. If students successfully complete the 2 year IB Language B course sequence, they are eligible to earn an IB certificate. Additional IB fees will apply if enrolled in the IB diploma or certificate program. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language. Both Spanish IB1 and IV students may be placed in the same class block.**

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

**Full Year Course**

**Grade Level: 10 – 11**

**NCAA Approved**

### **IB LANGUAGE B – SPANISH II:**

**Course # 06111H05034 & 06111H05044**

**Prerequisite: IB Language B – Spanish I**

**Fee: \$45 for textbook**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

This advanced, weighted, honors level course prepares students to take the International Baccalaureate Language B exam at the Standard Level (SL). This course focuses on improving students' accuracy and fluency in oral and written communication. If students successfully complete the two year IB Language B course sequence, they are eligible to earn an IB certificate. Varying IB fees will apply depending on if the student is enrolled in the IB diploma program or the IB certificate program. .

**Instruction, discussion, and student activities will be conducted almost exclusively in the target language. All students have the option of testing in the Advanced Placement or International Baccalaureate Programme. Both IB2 and AP students may be placed in the same class block.**

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

### **AP SPANISH LANGUAGE**

**Course # 06112H05012 & 06112H05022**

**Prerequisites: Completion of Level IV or IB1, (grade of “B” or better) or with teacher recommendation. Native speakers are encouraged to enroll**

**Fee: \$45 for textbook and approx. \$100 AP exam**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

Designed by the College Board to parallel third-year college-level courses in Spanish Composition and Conversation, AP Spanish Language courses build upon prior knowledge and develop students' ability to understand others and express themselves (in Spanish) accurately, coherently, and fluently in both formal and informal situations. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on. Students who successfully pass the AP exam will earn college credit. The number of credit hours earned is dependent on the student's test results of the College Board AP exam. Students are **required** to take the AP exam given by the college board in May. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language.**

### **IB LANGUAGE B – French I:**

**Course # 06131H05014 & 06131H05024**

**Prerequisite: : Completion of Honors Language III or standard III with teacher recommendation**

**Fee: \$20 for reading materials**

**Full Year Course**

**Grade Level: 10 – 11**

**NCAA Approved**

This advanced, weighted, honors level course prepares students to take the International Baccalaureate Language B exam at the Standard Level (SL). This course focuses on improving students' accuracy and fluency in oral and written communication. **Non-IB students who want to enroll in French 4 should enroll in this course.** If students successfully complete the two year IB Language B course sequence, they are eligible to earn an IB certificate. Additional IB fees will apply if enrolled in the IB diploma or certificate program. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language.**

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

### **IB LANGUAGE B – French II:**

**Course # 06131H05034 & 06131H05044**

**Prerequisite: IB Language B – French I**

**Fee: \$25 for reading materials**

**Full Year Course**

**Grade Level: 11 – 12**

**NCAA Approved**

This advanced, weighted, honors level course prepares students to take the International Baccalaureate Language B exam at the Standard Level (SL). This course focuses on improving students' accuracy and fluency in oral and written communication. If students successfully complete the two year IB Language B course sequence, they are eligible to earn an IB certificate. Varying IB fees will apply depending on if the student is enrolled in the IB diploma program or the IB certificate program. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language. All students have the option of testing in the International Baccalaureate Programme.**

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

**Please note the courses listed on the next two pages cannot be registered for online. They involve an application process. Please see your counselor for the proper paperwork.**

#### **TEACHER AIDE**

**Prerequisite: Teacher approval**

**(Credit: .25)**

Teacher Aides are class leaders who assist the teacher by doing various managerial duties such as lab assistance, filing, clerical duties, and so forth. This class is taken on a pass/fail basis. A strict attendance policy and code of ethics is enforced.

**Semester Course**

**Grade Level: 10 – 12**

#### **GUIDANCE AIDE**

**Prerequisite: Approval of Counseling Registrar**

**(Credit: .5)**

Students will assist the secretary and counselors in an office setting. Duties may include delivering passes, filing, helping new students, greeting visitors, and other various office tasks. Class is taken on a pass/fail basis. A strict attendance policy and code of ethics is enforced.

**Semester Course**

**Grade Level: 10 – 12**

#### **LIBRARY/AVC AIDE**

**Prerequisite: Approval of Librarian**

**(Credit: .5)**

Students will be receptionists for the library. Duties include checking materials in and out, public relations, answering phones, fielding questions, word processing, keeping the library in order and other library tasks as assigned. This class is taken on a pass/fail basis. A strict attendance policy and code of ethics is enforced.

**Semester Course**

**Grade Level: 9 – 12**

#### **OFFICE AIDE**

**Prerequisite: Approval of Attendance Secretary**

**(Credit: .5)**

Students will assist the secretary and the administrators in an office setting. Duties include delivering passes, filing, helping new students, greeting parents, and other various office tasks. Class is taken on a pass/fail basis. A strict attendance policy and code of ethics is enforced.

**Semester Course**

**Grade Level: 9 – 12**

#### **TUTORING PRACTICUM**

**Prerequisite: Must have 3.0 or better GPA**

**(Credit: .5)**

Tutors will be given the opportunity to assist other students who have varied learning styles in regular or resource room classes. The responsibilities include: note taking, scribing for written assignments, and assisting with instruction.

**Semester Course**

**Grade Level: 11 – 12**

#### **MISCELLANEOUS AIDE**

**Prerequisite: Assistant Principal approval**

**(Credit: .5)**

Students will assist in the cafeteria or the snack bar. They must fill out a form and speak with the assistant principal/activity director for approval. Must be willing to stand for an entire block and be willing to wear closed toe shoes and a hat or hair net while working with food.

**Semester Course**

**Grade Level: 10-12**

#### **OUTDOOR LAB HIGH SCHOOL LEADER**

**Prerequisite: Application and teacher recommendation;  
one week at Outdoor Lab School**

Sophomores, Juniors and Seniors are selected via an application process to assist elementary schools as high school leaders of the Outdoor Education Laboratory Schools. They will work with elementary classroom teachers during planning and preparation for the week at Outdoor Lab. They will assist with teaching small groups of sixth graders, supervising dormitory and cafeteria activities, and carrying out other duties during the week on site. Students are responsible for making up class work missed in their regular classes, or arranging to complete work before their OELS experience. The teachers and principal at Outdoor Lab will evaluate the high school leader's performance. **Class is taken on pass/fail basis, and students can earn .5 credit or 110 hours of community service.**

**Grade Level: 10 – 12**

#### **PEER MENTORING**

**Prerequisite: Application and teacher recommendation**

**(Credit: .5)**

Peer mentors are given opportunities to go into elementary schools and work with a specific teacher throughout the semester to gain more insight and knowledge on a pathway to education.

**Semester Course**

**Grade Level: 11 – 12**

# Dakota Ridge High School

## International Baccalaureate Scope and Sequence

Subjects	Freshman	Sophomore	Junior	Senior	Testing Options
<b>Language A English (Group 1)</b>	Honors English 9	Honors English 10	IB English	IB English	HL
<b>Language B (Group 2) Spanish French</b>	Honors/Accelerated Spanish 1 or French 1	Honors/Accelerated Spanish 2 or French 2	IB Spanish 1 IB French 1	IB Spanish 2 IB French 2	ab initio or SL
<b>Individual and Society (Group 3)</b>	Honors World Geography (Semester)  Honors US Government Comprehensive(Semester )	AP U.S. History	IB History of the Americas Route 2 (2 Year Course)		SL or HL
<b>Experimental Sciences (Group 4) Choice of 2 tracks</b>	Honors Biology  Biology (with approval)	Honors Chemistry  Chemistry (with approval)	IB Sports Exercise & Health Science  IB Biology or IB Physics		SL  SL or HL SL
<b>Mathematics (Group 5)</b>	Accelerated Algebra	Honors Geometry	Hon. Alg. 2 sem. 1 & Stats sem. 2	Math Studies	SL
<b>Track based on skill level</b>	Honors Geometry	Honors Algebra 2	IB/Honors Precalc/Trig	Math SL	SL
	Honors Algebra 2	IB/Honors Precalc/Trig	Math SL	AP Option	SL
<b>The Arts (Group 6) Electives</b>	<b>Choice Electives</b> Considerations: 1. A student must complete one semester of PE to Graduate.  2. For future planning, what IB elective will a student choose? What prerequisites exist for those programs?	<b>Choice Electives</b> Considerations: 1. A student must complete one semester of PE to Graduate.  2. For future planning, what IB elective will a student choose? What prerequisites exist for those programs?	IB Visual Art IB Theatre IB Business & Manag. IB Physics IB World Religions IB Computer Science  IB Sports Exercise & Health Science  IB Music  IB Psychology		SL or HL HL SL or HL SL SL SL  SL  SL  SL
<b>Further Requirements</b>	IB Seminar	IB Seminar	Theory of Knowledge (ToK) Extended Essay (EE) Creative Action Service (CAS)		

Honors= DRHS IB Prep HL= Higher Level SL= Standard Level (3 exams must be taken at HL)



# INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM

The INTERNATIONAL BACCALAUREATE Diploma Program is a rigorous pre-university course of study, leading to examinations, that meets the needs of the highly motivated students. Designed as a comprehensive curriculum that allows its graduates to fulfill requirements of the various national systems of education, the IB is based on the pattern of no single country. It provides students of different linguistic, cultural, and educational backgrounds with the intellectual, social and critical perspectives necessary for the adult world. The comprehensive IB program provides students with a balanced education in all the main disciplines: languages, social sciences, experimental sciences, mathematics, and elective subjects. The intent is that students should learn how to learn, how to analyze, how to reach considered conclusions about people, their languages and literature, their ways in society, and the scientific forces of the environment. Dakota Ridge High School offers a four-year curriculum: two years in DRHS IB Prep and two years in a college level curriculum which challenges Jefferson County's best scholars and promotes international understanding. Successful completion earns the student an IB Diploma.

## The IB Examination

### General Scheme

The IB Diploma is awarded for satisfactory performance in six subjects, one chosen from each of the following six groups:

1. **Language A:** English, Language and Literature. This includes the study of World Literature in translation.
2. **Language B:** Spanish, French, or German
3. **Study of Individuals in Society:** History of the Americas
4. **Experimental Sciences:** Biology, Physics, or Sports, Exercise, and Health Science
5. **Mathematics:** Math SL or Math Studies
6. **An IB elective course:** Visual Art, Theatre, Business and Management, Physics, Sports Exercise & Health, World Religions, Music, or Psychology

Three of these six subjects must be taken for examination at higher level (HL) and three at the standard level (SL).

### IB Exam Fees:

The IB charges a one-time IB Exam Registration Fee, and then a fee for each exam a student chooses to sit for. Full diploma candidates will pay the one-time registration fee and six (6) exam fees. Course students will pay the one-time registration fee and then the exam fee for each exam they choose to take. IB adjusts the cost for fees by a few dollars each year. The cost listed below is the cost for the 2016-17 exam session. The price may increase by a few dollars for the 2018-19 school year.

One-time IB Exam Registration Fee: \$175

Exam fee (per exam): \$125

### All Diploma Candidates must also:

- Follow an interdisciplinary course in the Theory of Knowledge; submit an Extended Essay in an IB subject; and undertake Creativity, Activity, and service activities (CAS) for 18 months.
- Fulfill the Jefferson County Graduation Requirements.

**For information, contact Holly Davis, IB coordinator, at 303.982.8956.**

## Dakota Ridge High School IB Scope and Sequence

See the Dakota Ridge High School IB Scope and Sequence for the recommended pathway for IB success.

### Group 1: Language A1

#### English/Language Arts Honors 9

**Prerequisite:** Acceptance into the DRHS Pre-IB Program

**Course #** 01001H05012

01001H05022

**Full Year  
Grade 9**

**Fee:** \$38 for course novels & vocabulary workbook

English/Language Arts 9 incorporates the five aspects of language arts: reading, writing, speaking, listening, and viewing. Study of genres leads to written compositions that build upon students' prior knowledge of grammar, vocabulary, word usage, and mechanics. Students apply comprehension and critical reading skills to both literature and nonfiction. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. The course expectations align with the District's CAP documents and also prepare pre IB students for the types of assessments they will experience in more advanced IB coursework.

## **English/Language Arts Honors 10**

**Prerequisite: English Honors 9**

**Course # 01002H05012  
01002H05022**

**Full Year  
Grade 10**

**Fee: \$58 for multiple novels, fiction & nonfiction & vocabulary workbook**

English/Language Arts 10 Honors offers a balanced focus on composition and literature. Students read widely to improve their reading rate, vocabulary, and comprehension and develop skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message utilizing both print and digital tools. Students engage with technology tools in order to read a diversity of texts and write for authentic audiences. Students apply knowledge of purposes and audiences by studying and producing various genres. Oral communication is practiced in group settings as well through presentations. The honors course prepares students for advanced coursework and engages students in and challenges their higher-order thinking. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. The course expectations align with the District's Bridge to Curriculum and also prepare pre-IB & pre-AP students for the types of assessments they will experience in more advanced IB/AP coursework.

## **IB English**

**Prerequisite: Acceptance into IB Program**

**Course # 01007H05014  
01007H05024**

**Full Year  
Grade 11**

**Fee: \$75 for *Slaughterhouse Five*, *Hamlet*, *Thing Around Your Neck*, *Understanding Comics*, IB English 11 booklet, 3 choice novels**

IB Language A (English 11) prepares students to take the International Baccalaureate Language A exams the higher level (HL). Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors and written analyses of this literature, in addition to other oral and written assignments. All course content is designed to improve students' accuracy and fluency in the English language. Course content includes an in-depth study of literature chosen from the appropriate IB list of texts and authors and written analyses of this literature in addition to other oral and written assignments. All students will be prepared to complete two of the five required IB assessments.

## **IB English**

**Prerequisite: Acceptance into IB Program**

**Course # 01007H05034  
01007H05044**

**Full Year  
Grade 12**

**Fee: \$60 for IB English 12 packet, *The Handmaid's Tale*, *Cassandra*, *A Doll's House***

IB Language A (English 12) extends learning from English 11 and prepares students to take the International Baccalaureate Language A exams the higher level (HL). Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors and written analyses of this literature, in addition to other oral and written assignments. All course content is designed to improve students' accuracy and fluency in the English language. Course content includes an in-depth study of literature-fiction and nonfiction- chosen from the appropriate IB list of texts and authors and written analyses of this literature in addition to other oral and written assignments. All students will be prepared to complete the four of the five English assessments required by IB

## **Group 2: Language B**

As part of the IB program, students are required to follow a course of study in a language other than their own. The purpose of this requirement is to encourage and facilitate further language study at the postsecondary level, to promote tolerance and cultural awareness, as well as to prepare students to enter the international community of professionals. The IB standards expect students to reach an advanced level of proficiency in the second language. Diploma candidates are required to be able to communicate freely in speech and writing, as well as evaluate and respond to written texts, on a wide variety of subject matter. In grades 9-10, students will take Honors 1 and 2. In grades 11-12, students will take IB 1 and 2 (the 3rd through 5th year). Students may choose between French and Spanish, based on their 8th grade preparation, career goals, and personal preference.

## Spanish I – Honors

**Prerequisite:** Acceptance into the DRHS Pre-IB Program

**Course #** 06101H05012

06101H05022

**Full Year**

**Grade 9**

**Fee:** \$22 for workbook & supplementary materials

Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people. The honors course sequence prepares students for advanced IB or AP course work and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. **In this fast-paced course, students will cover one-and-a-half years of language studies. Upon successful completion of this course, students will enroll in Level II Honors. The completion of the level I and II Honors sequence is the equivalent of completing levels I, II, and III of language study.**

## Spanish II – Honors

**Prerequisite:** Spanish I – Honors proficiency skills

**Course #** 06102H05012

06102H05022

**Full Year**

**Grade(s): 9, 10**

**Fee:** \$25 for workbook & supplementary materials

Spanish II courses build upon skills developed in Spanish I Honors, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of native-speaking people to deepen their understanding of the culture(s). The honors course sequence prepares students for advanced IB or AP course work and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. **In this fast-paced course, students will cover one and a half years of language studies. The completion of Level I and II Honors courses is equivalent to three years of language study. Students will enroll in Spanish IB1 after successful completion of this course.**

## IB Language B – Spanish I

**Prerequisite:** Acceptance into the IB Program; Spanish I and II Honors sequence

**Course #** 06111H05014

06111H05024

**Full Year**

**Grade(s): 10, 11**

**Fee:** \$75 for textbook fee

The International Baccalaureate (IB) Language B -Spanish I course prepares students to take the IB Language B exam at the standard level (SL). This course utilizes university level materials with a focus on improving students' accuracy and fluency in oral and written communication. The entire range of Spanish grammar will be reviewed within contextual scenarios. Students will actively discuss and research cultural themes related to the Spanish speaking world. If students successfully complete the 2 year IB Language B course sequence, they are eligible to earn an IB certificate. There will be a fee for a textbook. Additional IB fees will apply if enrolled in the IB diploma or certificate program. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language. Both IB1 and Spanish 4 students may be placed in the same class block.**

## **IB Language B – Spanish II**

**Prerequisite:** IB Language B – Spanish I

**Course #** 06111H05034

06111H05044

**Full Year**  
**Grade(s)** 11, 12

**Fee:** \$45 for textbook

IB Language B—Spanish courses prepare students to take the International Baccalaureate Language B exam at the standard level (SL). This course focuses on improving students' accuracy and fluency in oral and written communication. If students successfully complete the two year IB Language B course sequence, they are eligible to earn an IB certificate. Varying IB fees will apply depending on if the student is enrolled in the IB diploma program or earning an IB certificate. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language.**

## **French I – Honors**

**Prerequisite:** Acceptance into the DRHS Pre-IB Program

**Course #** 06121H05012

06121H05022

**Full Year**  
**Grade** 9

**Fee:** \$15 for workbook & supplementary materials

Designed to introduce students to French language and culture, French I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. French culture is introduced through the art, literature, customs, and history of the French-speaking people. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. **Students will cover one-and-a-half years of language studies. Upon successful completion of this course, students will enroll in Level II Honors. The completion of the Level I and II Honors sequence is the equivalent to three years of language study (Levels I, II, and III).**

## **French II – Honors**

**Prerequisite:** French I – Honors proficiency skills

**Course #** 06122H05012

06122H05022

**Full Year**  
**Grade(s)** 9, 10

**Fee:** \$15 for workbook & supplementary materials

French II courses build upon skills developed in French I, extending students' ability to understand and express themselves in French and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s). The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. **This course will cover one and a half years of language studies. The completion of Level I and II Honors courses is equivalent to three years of language study. Students will enroll in Spanish IB1 after successful completion of this course.**

## **IB Language B – French I**

**Prerequisite:** Acceptance into the IB Program; French I and II Honors sequence

**Course #** 06131H05014

06131H05024

**Full Year**  
**Grade(s)** 10, 11

**Fee:** \$55 for annual online textbook

IB Language B—French course prepares students to take the International Baccalaureate Language B exam at the standard level (SL). This course focuses on improving students' accuracy and fluency in oral and written communication. . Non-IB students who want to enroll in French 4 should enroll in this course. If students successfully complete the two year IB Language B course sequence, they are eligible to earn an IB certificate. There will be a fee for a textbook. Varying IB fees will apply depending on if the student is enrolled in the IB diploma programme or earning an IB certificate. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language.**

## **IB Language B – French II**

**Prerequisite:** IB Language B – French I

**Course #** 06131H05034

06131H05044

**Full Year**  
**Grade(s)** 11, 12

**Fee:** \$25 for textbook

IB Language B—French course prepares students to take the International Baccalaureate Language B exams at the standard level (SL). This course focuses on improving students' accuracy and fluency in oral and written communication. If students successfully complete the two year IB Language B course sequence, they are eligible to earn an IB certificate. Varying IB fees will apply depending on if the student is enrolled in the IB diploma program or earning an IB certificate. **Instruction, discussion, and student activities will be conducted almost exclusively in the target language.**

## **Group 3: Individuals & Societies**

### **World Geography – Honors**

**Prerequisite:** Acceptance into DRHS Pre-IB Program (recommended)

**Semester Course**

**Course #** 04001H05011

**Grade 9**

World Geography provides students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the environment; economic development, the interdependence of regions; and the movement of people, goods, and ideas. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

Entrance into the 9<sup>th</sup> Grade Honors World Geography will be determined by a composite score ranking system based on 7<sup>th</sup> and 8<sup>th</sup> Grade Social Studies Grades, overall middle school GPA, and Honors Social Studies Entrance Exam scores. Students applying must complete an Application Packet and entrance exam. All items contained in the Application Packet – Application Form, hard copy of middle school transcript must be submitted in full before evaluation of the file will be made by the Dakota Ridge Social Studies Department. Submission deadlines, exam dates and procedures, and downloads to the Application Forms are available on the Dakota Ridge website. Application forms may also be obtained by visiting the main office at Dakota Ridge. The goal is to prepare students for AP or IB course work.

### **U.S. Government – Comprehensive – Honors**

**Prerequisite:** Acceptance into DRHS Pre-IB Program (recommended)

**Semester Course**

**Course #** 04151H05011

**Grade 9**

U.S. Government—Comprehensive provides an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. This course may examine the structure and function of state and local governments and may cover certain economic and legal topics. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

Entrance into the 9<sup>th</sup> Grade Honors U.S. Government-Comprehensive will be determined by a composite score ranking system based on 7<sup>th</sup> and 8<sup>th</sup> Grade Social Studies Grades, overall middle school GPA, and Honors Social Studies Entrance Exam scores. Students applying must complete an Application Packet and entrance exam. All items contained in the Application Packet – Application Form, hard copy of middle school transcript, must be submitted in full before evaluation of the file will be made by the Dakota Ridge Social Studies Department. Submission deadlines, exam dates and procedures, and downloads to the Application Forms are available on the Dakota Ridge website. Application forms may also be obtained by visiting the main office at Dakota Ridge.

The goal is to prepare students for either AP (Advanced Placement) or IB (International Baccalaureate) course work.

## **AP US History**

**Prerequisite:** Students are required to fill out AP application packet which includes: teacher recommendation and GPA evaluation

**Course #** 04104H05012 and 04104H05022

**Full Year  
Grade 10**

**Fee:** Purchase textbook on your own (Information provided at APUSH class meeting in April)

**Purchase of textbook** Out of Many, 4<sup>th</sup> edition required, plus \$100 AP Exam

Following the College Board's suggested curriculum designed to parallel college-level U.S. History courses, AP U.S. History provides students with the analytical skills and factual knowledge necessary to address critical problems and materials in U.S. history. Students learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The course examines the discovery and settlement of the New World through the recent past. A.P U.S. History prepares the student for the national Advanced Placement exam. The class provides a detailed survey of American History from 1750 through 1980. Strong reading and writing skills are critical. Class time frequently involves small or large group discussions. The primary focus of the class will be on content; however, writing skills will be an integral part of the student's grade. This is a college level course, and students will be expected to perform college level work in order to succeed in this class. Students with a C or less at the semester may be required to drop the class. Students who pass the economics assessment by December may waive the economics requirement for graduation. Students are required to take the A.P U.S. History exam, and may earn college credit and/or advanced placement. Students must complete the full year course and exam in order to receive AP credit and transcript designation.

## **IB History of the Americas**

**Prerequisite:** Acceptance into IB Program

**Course #** 04054H05014

04054H05024

**Full Year  
Grade 11**

**Students will need to purchase books on their own for this class. Teachers will get that information to students once registration in the class has been confirmed.**

IB History prepares students to take the International Baccalaureate History exam at either the standard level (SL) or the higher level (HL). In this course, students study political, military, economic, social, and cultural trends and explore the nature of historical documentation and the methods used by historians. The IB History course surveys 20th-century topics in an international context; provides a detailed regional study of a major area (Africa, Europe, the Americas, West and South Asia, East and Southeast Asia, or Australia); and enables students to undertake individual study on a subject of interest in greater detail and depth.

The process of assessing students will focus on the idea of effective communication. A varied approach to assessment will include written and oral demonstrations of knowledge, collaboration among IB Learners, and the use of creativity in independent learning and expressions of knowledge. Using this varied approach, there will be a heavy emphasis on taking risks, reflecting on one's own knowledge and varied perspectives. Learners will then be able to communicate those ideas through short responses and extended writing. The structure of the course will reflect the IB model of marking for students to understand both the internal and external assessments. Overall the approach to the course will be to create successful IB learners, while guiding them in the development of historical inquiry and the understanding of individuals and societies.

## **IB History of the Americas**

**Prerequisite:** IB History of the Americas

**Course #** 04054H05034

04054H05044

**Full Year  
Grade 12**

**Students will need to purchase books on their own for this class. Teachers will get that information to students once registration in the class has been confirmed.**

IB History prepares students to take the International Baccalaureate History exam at either the standard level (SL) or the higher level (HL). In this course, students study political, military, economic, social, and cultural trends and explore the nature of historical documentation and the methods used by historians. The IB History course surveys 20th-century topics in an international context; provides a detailed regional study of a major area (Africa, Europe, the Americas, West and South Asia, East and Southeast Asia, or Australia); and enables students to undertake individual study on a subject of interest in greater detail and depth.

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## **Group 4: Experimental Sciences**

### **IB Science Pathways**

<b>Freshman</b>	<b>Sophomore</b>	<b>Junior</b>	<b>Senior</b>	<b>Testing Options</b>
Honors Biology	Honors Chemistry	IB Sports Exercise & Health Science or		SL
Biology (with approval)	Chemistry (with approval)	IB Biology or IB Physics		SL or HL SL

#### **Biology or Biology Honors**

**Prerequisite:** Acceptance into the DRHS Pre-IB Program

**Course #** 03051G05012 or 03051H05032

03051G05022 or 03051H05042

**Full Year  
Grade(s) 9, 10**

**Fee:** \$10 for lab materials

Biology is designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. Strong reading ability and research skills are expected. This class includes lab work, individual and group research and project work. More advanced labs including fruit fly genetics and a cat dissection are undertaken by the honors students. A summer reading assignment is required.

#### **Chemistry – Honors**

**Prerequisite:** Biology or Biology Honors

**Course #** 03101H05032

03101H05042

**Full Year  
Grade 10**

**Fee:** \$15 for lab materials

Chemistry involves studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course. This third level of chemistry is intended for students who desire a greater challenge than provided in Chemistry and who plan to attend college.

#### **IB Biology I**

**Prerequisite:** Acceptance into IB Program

**Course #** 03057H05014

03057H05024

**Full Year  
Grade 11**

**Fees:** \$62 for IB Biology Course Book & \$4.00 for quadrille lined composition notebook

IB Biology courses prepare students to take the International Baccalaureate Biology exams at either the standard level (SL) or the higher level (HL). In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of living organisms from the cellular level through functioning entities within the biosphere. Laboratory experimentation is an essential component of these courses. Students are required to purchase their textbook at the approximate cost of \$100 - the text will be used for both years of the course. **\*This course offers Colorado Christian University concurrent enrollment credit.**

## **IB Biology II**

**Prerequisite: IB Biology II**

**Course # 03057H05034**

**03057H05044**

**Full Year**

**Grade 12**

IB Biology courses prepare students to take the International Baccalaureate Biology exams at either the standard level (SL) or the higher level (HL). In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of living organisms from the cellular level through functioning entities within the biosphere. Laboratory experimentation is an essential component of these courses. . Students are required to purchase their textbook at the approximate cost of \$100 - the text will be used for both years of the course. **\*This course offers Colorado Christian University concurrent enrollment credit.**

## **IB Physics**

**1<sup>st</sup> year course # 03157H05014**

**03157H05024**

**2<sup>nd</sup> year course #03157H05034**

**03157H05044**

**Full Year**

**Grade(s) 11, 12**

**IB Physics Course Book 2014 Edition Oxford IB Diploma Program \$60**

**IB Physics Study Guide 2014 Oxford IB Diploma Program \$35**

IB Physics prepares students to take the International Baccalaureate Physics exams at either the standard level (SL) or higher level (HL). In keeping with the general aim of IB Experimental Sciences courses, IB Physics promotes understanding of the facts, patterns, and principles underlying the field of physics; critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of scientific advances in physics upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the fundamental laws of nature and the interaction between concepts of matter, fields, waves, and energy. Laboratory experimentation is essential; calculus may be used in some courses. **\*This course offers Colorado Christian University concurrent enrollment credit.** fundamental features of religions: theoretical, practical, and sociological. There will be a fee of \$20 for a supplemental textbook. This course can be taken by IB students as part of their IB program and general education students to earn an IB certificate.

## **IB Sports Exercise & Health Science**

**1<sup>st</sup> year course # 03053H05014**

**03053H05024**

**2<sup>nd</sup> year course # 03053H05034**

**03053H05044**

**Full Year**

**Grade Level: 11-12**

**Prerequisites: Physics, Biology or Chemistry**

**Fee: \$55 for IB textbook**

IB Sports Exercise and Health Science standard level (SL) involves the study of the science that underpins physical performance. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition. Students cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyse human performance. Where relevant, the course will address issues of international dimensions and ethics by considering sports, exercise and health relative to the individual in a global context.



## **Group 5: Mathematics**

### **IB Math Pathways**

<b>Freshman</b>	<b>Sophomore</b>	<b>Junior</b>	<b>Senior</b>	<b>Testing Options</b>
Accelerated Algebra	Honors Geometry	Hon. Alg. 2 sem. 1 and Stats sem. 2	Math Studies	SL
Honors Geometry	Honors Algebra 2	IB/Honors Precalc/Trig	Math SL	SL
Honors Algebra 2	IB/Honors Precalc/Trig	Math SL	AP Option	SL

#### **Geometry – Honors**

**Prerequisite:** Acceptance into the DRHS Pre-IB Program and Algebra I

**Course #** 02072H05012

02072H05022

**Full Year**

**Grade 9**

**Fee:** \$10 for Skill Builder workbook

This course meets 10th grade Colorado standards by following the district approved Geometry curriculum and counts as second year of graduation requirements. This course develops the structure of Euclidean geometry and applies the resulting theorems and formulas to address meaningful problems. It includes properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems and proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; rules of angle measurement in triangles and concepts of coordinate geometry and trigonometry. Dynamic geometry software, compass and straightedge, and other tools are used to investigate and explore mathematical ideas and relationships and to develop multiple strategies for analyzing complex situations. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

A TI-83 plus or TI-84 calculator is mandatory for daily use and will be used for four years.

#### **Algebra II – Honors**

**Prerequisite:** Acceptance into the DRHS Pre-IB Program, Algebra, & Geometry

**Course #** 02056H05012

02056H05022

**Full Year**

**Grade(s) 9, 10**

**Fee:** \$2.51 for student consumable workbook

**TI-83 or 84 graphing calculator required**

This course follows the Algebra 2 district approved curriculum and counts as a third year of graduation requirements. Algebra 2 topics include operations with rational and irrational expressions, in-depth study of linear equations and inequalities, analyzing and solving quadratic functions including complex numbers, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. Students investigate and solve linear piece wise, absolute value, cubic, radical, exponential, logarithmic, and rational functions algebraically, numerically, and graphically, with and without a graphing calculator. Students analyze data and develop mathematical models to address real world problem situations. The honors course prepares students for advanced coursework and engages students in enrichment opportunities. Rigor is demonstrated through sophistication and acceleration in terms of thought-provoking learning activities, challenging assessments, and more complex text/materials. Diverse interests, cultures, perspectives, learning styles, and intelligences are cultivated and higher level critical and creative thinking skills such as interpretation, problem-solving, investigation, and logic are emphasized throughout the honors course.

## **IB Mathematical Studies**

**Prerequisite:** Algebra II Honors (sem. 1) & Stats (sem. 2)

**Course #** 02131H05034

02131H05044

**Full Year**

**Grade(s)** 11, 12

This course is a continuation of Math Studies I. Topics include advanced statistics, probability, trigonometry, financial mathematics, logic, set theory, sequences and series, and a thorough introduction to differential calculus. In addition, students will prepare an internal assessment on a mathematical topic of their own choosing.

## **Trig/Pre-Calculus - Honors**

**Prerequisite:** Successful completion of Algebra II – Honors or Algebra II (grade of A) & Teacher Recommendation

**Course #** 02110H05012

02110H05022

**Full Year**

**Grade(s)** 10, 11, 12

**Fee:** \$1.47 for student consumable workbook & must supply own TI-83 or 84 & a calculus textbook for 2<sup>nd</sup> semester

This course is intended for IB students who do wish to pursue a field of study in college that requires a strong calculus background. Topics include operations and properties of number sets; trigonometric functions, equations, and graph; algebra and coordinate geometry; simultaneous linear equations; polynomial and quadratic functions and equations; calculus, including bilinear, exponential and logarithmic functions; two dimensional vectors and matrices; and probability. In addition, students will begin their portfolio for their internal assessment.

## **IB Mathematics SL**

**Prerequisite:** Honors Pre-Calc/Trig; Teacher approval

**Course #** 02132H05018

02132H05028

**Full Year**

**Grade(s)** 11, 12

IB Mathematics SL prepares students to take the International Baccalaureate mathematics SL exam at the standard level (SL).

This course is intended for IB students who do wish to pursue a field of study in college that requires a strong calculus background. Topics include operations and properties of number sets; trigonometric functions, equations, and graph; algebra and coordinate geometry; simultaneous linear equations; polynomial and quadratic functions and equations; calculus, including bilinear, exponential and logarithmic functions, two dimensional vectors, and probability. In addition, students will complete their portfolio for their internal assessment.

## **AP Calculus BC**

**Prerequisite:** Honors Pre-Calc/Trig and AP teacher approval

**Course #** 02125H05012

02125H05022

**Full Year**

**Grade** 12

**Fee:** \$16.29 for student consumable workbook and “Acing AP Calculus” workbook

**\$100 for AP exam & student must supply TI-83 or 84, and calculus textbook**

Following the College Board’s suggested curriculum designed to parallel college-level calculus courses, AP Calculus BC courses provide students with an intuitive understanding of the concepts of calculus and experience with its methods and applications, and also require additional knowledge of the theoretical tools of calculus. The courses assume a thorough knowledge of elementary functions, and cover all of the calculus topics in AP Calculus AB, elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of change problems); and integral calculus (including anti-derivatives and the definite integral). BC topics include: vector functions, parametric equations, and polar coordinates, parametrically defined functions, advanced techniques of integration and advanced applications of the definite integral; and sequences and series.

## **AP Statistics**

**Prerequisite:** Successful completion of Algebra II and teacher approval

**Course #** 02203H05012

02203H05022

**Full Year**

**Grade** 12

**Fee:** \$100 for AP exam, student must have TI-83 or 84, and a statistics study guide

Follows the College Board’s suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. **Students must complete the full year course and exam in order to receive AP credit and transcript designation.**

## **Group 6: Sixth Subjects**

### **IB Visual Arts**

**Prerequisite:** Any beginning level art course

**1<sup>st</sup> year course # 05173H05014**

**05173H05024**

**2<sup>nd</sup> year course # 05173H05034**

**05173H05044**

**Full Year  
Grade(s) 11, 12**

**Fee: \$80 for painting, drawing, & mixed media supplies**

IB Visual Arts prepares students to take the International Baccalaureate Visual Arts exam at either the standard level (SL) or the higher level (HL). The IB Visual Arts course helps develop students' aesthetic and creative faculties, offers training in awareness and criticism of art, and enables students to create quality works of art of their own. Students perform both studio and research work; the research component is designed to investigate particular topics or concepts of interest in further detail. A textbook is required and students may have to purchase additional materials.

### **IB Theater Arts**

**Prerequisite:** Teacher approval

**1st year course # 05062H05014**

**05062H05024**

**2nd year course #05062H05034**

**05062H05044**

**Full Year  
Grade(s) 11, 12**

Students will understand the nature of the theater through study and performance. Students will learn of the major developments and techniques in the history of more than one culture, interpret and illuminate play scripts, understand the art of the stage, perform before an audience, produce work in at least one of the theatrical arts or crafts, understand the processes of theatrical production, and do a theatrical research project. IB Theater Arts prepares students to take the International Baccalaureate Theater Arts exam at either the standard level (SL) or the higher level (HL).

### **IB Business and Management**

**1st year course # 12059H05014**

**12059H05024**

**2nd year course #12059H05034**

**12059H05044**

**Full Year  
Grade(s) 11, 12**

**Fee: \$60 textbook and \$20 to cover both state and national DECA dues**

IB Business and Management courses prepare students to take the International Baccalaureate Business and Management exam at either the standard level (SL) or the higher level (HL). In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts and principles.

### **IB COMPUTING STUDIES**

**1<sup>st</sup> year course # 10159H05014**

**10159H05024**

**2<sup>nd</sup> year course # 10159H05034**

**10159H05044**

**Full Year  
Grade Level: 11 – 12  
NCAA Approved**

**Prerequisite:** Computer Programming – Adv and teacher approval

**Fee: \$50 for licensing fee for internet based curriculum (text, compiler, and testing)**

IB Computer Studies courses prepare students to take the International Baccalaureate Computing Studies exam at either the Standard Level or the Higher Level. The courses emphasize problem analysis, efficient use of data structures and manipulation procedures, and logical decision-making. IB Computing Studies courses also cover the applications and effects of the computer on modern society as well as the limitations of computer technology.

**This course can be taken by IB students as part of their IB programme and general education students to earn an IB certificate.**

## **IB Physics**

**1<sup>st</sup> year course # 03157H05014**

**03157H05024**

**2<sup>nd</sup> year course #03157H05034**

**03157H05044**

**Full Year  
Grade(s) 11, 12**

**IB Physics Course Book 2014 Edition Oxford IB Diploma Program \$60**

**IB Physics Study Guide 2014 Oxford IB Diploma Program \$35**

IB Physics prepares students to take the International Baccalaureate Physics exams at either the standard level (SL) or higher level (HL). In keeping with the general aim of IB Experimental Sciences courses, IB Physics promotes understanding of the facts, patterns, and principles underlying the field of physics; critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of scientific advances in physics upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the fundamental laws of nature and the interaction between concepts of matter, fields, waves, and energy. Laboratory experimentation is essential; calculus may be used in some courses. \*This course offers Colorado Christian University concurrent enrollment credit. fundamental features of religions: theoretical, practical, and sociological. There will be a fee of \$20 for a supplemental textbook. This course can be taken by IB students as part of their IB program and general education students to earn an IB certificate.

## **IB World Religions**

**Course # 07017H05014**

**07017H05024**

**Full Year  
Grades(s) 11, 12**

**Fee: Purchase class textbook on your own and \$15 for supplemental textbook**

IB World Religions prepares students to take the International Baccalaureate World Religions exam at the standard level (SL). Students will be taught world religions in a manner that communicates abstract concepts in historical context with an understanding of diversity and sensitivity to individual beliefs. The study of religions benefits from an approach that considers the three

## **IB Psychology**

**Course # 04257H5014**

**04257H5024**

**Full Year  
Grades(s) 11, 12**

**Fee: \$85 course textbook**

IB Psychology courses prepare students to take the International Baccalaureate Psychology exam at the Standard Level (SL). Course content includes developmental and social psychology, cognition and learning, and personality subject areas, which are approached from biological/physiological, behavioral, and humanistic points of view. These courses may include a study of research design and statistics and involve practical work in psychological research.

## **Theory of Knowledge**

**IB Theory of Knowledge (TOK)**

**Prerequisite: Acceptance into the IB program**

**Course # 04304H05024**

**04304H05034**

**Second Semester, grade 11  
First Semester, grade 12**

Obligatory for every International Baccalaureate degree candidate, IB Theory of Knowledge aims to stimulate critical self-reflection of students' knowledge and experiences. Course content generates questions regarding the bases of knowledge and their verification in the disciplines of mathematics, natural sciences, human sciences, and history, with an awareness of moral, political, and aesthetic judgments and biases. Students learn to appreciate the strengths and limitations of various kinds of knowledge; to relate studied subjects to one another, general knowledge, and living experiences; to formulate rational arguments; and to evaluate the role of language in knowledge and as a way to convey knowledge.



# Warren Tech 2018 - 2019

CAREER AND TECHNICAL HIGH SCHOOL FOR JEFFERSON COUNTY PUBLIC SCHOOLS

Warren Tech, the career and technical high school for Jeffco Public Schools, is the springboard to a competitive edge in college readiness and career opportunities. Programs offer dynamic, career-focused learning that integrates both high school and college credit, including core academic math, science, and English credit to keep students on track for graduation. Through collaborative industry partnerships, Warren Tech programs open doors to internships, apprenticeships, on-the-job experiences, and industry certifications.

**Grade level:** 16 years or older - and going into their junior or senior year of high school.  
**Prerequisite:** Online application - see your counselor or visit [warrentech.org](http://warrentech.org)  
**Fee:** Varies  
**Credit:** 1.5 credits per semester - see Warren Tech website for details at [warrentech.org](http://warrentech.org)

## WARREN TECH CENTRAL CAMPUS

13300 W. 2nd Place • Lakewood, CO 80228 • 303-982-8600

### Auto Collision Repair

(2-4 semesters)

Body and structural repair, refinishing, painting, estimating, welding, shop management

### Auto Customization

(2-4 semesters)

Custom metal fabrication, welding, refinishing, custom paint, airbrushing

### Automotive Technology

(2-4 semesters)

Engine performance, suspension and steering, brakes, heating/air conditioning, transmission repair, auto parts specialist

### Computer Science

(2-4 semesters)

Programming, Oracle Academy, CompTIA Certifications, machine learning, Linux, artificial intelligence

### Cosmetology: Esthetics

(2 semesters)

Skin care, massage, waxing, makeup, industry-related certifications; additional hours required in June

### Cosmetology: Hairstyling

(2-4 semesters)

Hairstyling/cut/color/texture, professional salon and client experience, internships

Additional hours required in June

### Cosmetology: Nail Technology

(2 semesters)

Spa techniques in manicure/pedicure, artificial nail enhancements; additional hours required in June

### Culinary Arts

(2-3 semesters)

Classical and modern cuisine, full-service restaurant and kitchen, baking and pastry preparation, exposure to farm to table practices

### Cybersecurity

(2-4 semesters)

Prerequisite: Completion of Geometry with a "C" or better; Technical detailed reading required; Cisco, Oracle, TCP/IP, KALI Linux, hacking electronics

### Dental Assisting

(2 semesters)

Dental anatomy, x-ray/laboratory techniques, patient care, first aid/CPR

### Fire Science/ First Responder

(2 semesters)

Prerequisite: Doctor's release, liability waiver  
 Fire chemistry, fire prevention, tactics and strategy, first responder/CPR, drill ground

### Game Development

(2-4 semesters)

Prerequisite: Completion of Geometry with a "C" or better; 2-D & 3-D computer game programming, trigonometry/physics-based programming

### Graphic Design & Digital Photography

(2-4 semesters)

Basic drawing and illustration skills, communication design theory, typography, layout, photography, AP Studio Art and advertising design

### Outdoor Leadership

(2-4 semesters)

Prerequisite: Doctor's release  
 Leadership styles and strategies, environmental education, challenge course facilitation, orienteering, wilderness survival, first aid/CPR

### Power Equipment Motorcycle Technology

(2-4 semesters)

Engine repair/performance, hydraulics, motorcycle brakes/suspension, transmission/transaxle, parts

### Precision Machining Technology

(2-4 semesters)

Prerequisite: Completion of Geometry  
 Blueprint reading, computer-aided machining and design, 2-D and 3-D precision parts

### S\*TEM: X-TREME Engineering

(2-4 semesters)

Prerequisite: Completion of Geometry with a "C" or better; architectural/engineering drafting, sustainable farming, design & build a wide variety of projects using sustainable methods and practices

### TV/Video Production

(2-4 semesters)

Professional demo reel, green screen TV studio, script writing in a variety of genres

### Welding

(2-4 semesters)

Automated welding equipment, MIG and TIG welding, blueprint reading, American Welding Society National Certifications

## WARREN TECH NORTH CAMPUS

11325 Allendale Drive • Arvada, CO 80004 • 303-982-9360

### Audio Production

(2 semesters)

Record, edit, master recordings, operation of microphones/speakers/mixers/effect development

### Criminal Justice

(2 semesters)

Constitutional/criminal law, criminal investigations, law enforcement, judicial process, Introduction to Sociology

### Emergency Medical Services

(2 semesters)

Prerequisite: Seniors only, with supplemental application  
 Intro. to Pathophysiology, EMT Basic Curriculum, trauma care, Medical Terminology, clinical rotations. Students are able to take National Registry EMT-Basic Certification Examination upon successful completion of the program

### Forensic Science

(2 semesters)

Prerequisite: Completion of biology  
 Crime scene analysis, forensic pathology, fingerprinting, DNA

### Introduction to Medical Assisting

(2 semesters)

Patient medical history, vital signs, direct patient care, Medical Terminology, Anatomy & Physiology

### Nurse Aide & Introduction to Healthcare

(1st semester)

Medical Terminology, healthcare systems, direct patient care, Clinical Rotations. Five week intensive shadowing experience at St. Anthony Hospital and Lutheran Medical Center. Students are able to take nurse aide certification examination upon successful completion of the program.

### Sports Medicine

(2 semesters)

Prevention/treatment/rehabilitation of sports injuries, patient care, Medical Terminology, BLS CPR/AED Certification, Anatomical Kinesiology

## WARREN TECH SATELLITE PROGRAMS

### Automotive Technology at Standley Lake H. S.

(2 semesters)

Engine performance, suspension and steering, brakes, heating/air conditioning, transmission repair  
 Students from all schools may apply.

### Building Trades Pre-Apprenticeship at Arvada H.S.

(2-4 semesters)

Internships, introduction to underground utilities locating, introduction to heavy equipment operation, plumbing basics, safety/OSHA Certification, surveying  
 Students from all schools may apply.

### Executive High School Internship

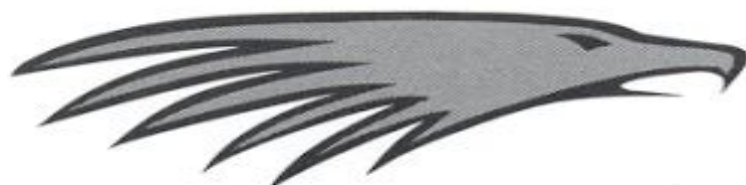
(1 semester)

Must be selected through application and interview process; 3.5+ GPA  
 100 hours in career field (10-12 hrs./wk.)  
 Apply spring of junior year.



APPLY ONLINE TODAY @ [warrentech.org](http://warrentech.org)

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## **FOUR-YEAR ACADEMIC PLAN**

You may find it helpful to record your selections each semester on this page, then list possibilities for following semesters and update them during course registration each semester. Students should also consult their course plan on Naviance for their course selections. Please consult the front section (p. 2-5) for specific graduation and in-state college entrance requirements to guide your course selections.

### **Freshman Year**

Must enroll in six (6) courses per semester, plus Seminar and Study Hall

#### First Semester

1. English/Lang Arts 9  
or Honors
2. World Geography/US  
Gov. or Honors
3. Math
4. Biology or Honors Bio
5. Seminar
6. Study Hall
7. \_\_\_\_\_
8. \_\_\_\_\_

#### Second Semester

1. English/Lang Arts 9  
or Honors
2. World Geography/US Gov.  
or Honors
3. Math
4. Biology or Honors Biology
5. Seminar
6. Study Hall
7. \_\_\_\_\_
8. \_\_\_\_\_

### **Sophomore Year**

Must enroll in six (6) courses per semester, plus Seminar and Study Hall

#### First Semester

1. English/Lang Arts 10  
or Honors
2. Modern US History  
or AP Level
3. Math
4. Science
5. Seminar
6. Study Hall
7. \_\_\_\_\_
8. \_\_\_\_\_

#### Second Semester

1. English/Lang Arts 10  
or Honors
2. Modern US History  
or AP Level
3. Math
4. Science
5. Seminar
6. Study Hall
7. \_\_\_\_\_
8. \_\_\_\_\_

### **Junior Year**

Must enroll in six (6) courses per semester,  
plus Seminar

#### First Semester

1. English
2. World History  
or AP Level
3. Math
4. Science
5. Seminar
6. Free Block
7. \_\_\_\_\_
8. \_\_\_\_\_

#### Second Semester

1. English
2. World History  
or AP Level
3. Math
4. Science
5. Seminar
6. Free Block
7. \_\_\_\_\_
8. \_\_\_\_\_

### **Senior Year**

Must enroll in at least five (5) courses per semester,  
plus Seminar

#### First Semester

1. English
2. Economics (either semester)
3. Math (encouraged)
4. Science (encouraged)
5. Seminar
6. Free Block
7. \_\_\_\_\_
8. \_\_\_\_\_

#### Second Semester

1. English
2. \_\_\_\_\_
3. Math (encouraged)
4. Science (encouraged)
5. Seminar
6. Free Block
7. \_\_\_\_\_
8. \_\_\_\_\_