

# Derby Public Schools



## Advanced Coursework Guide 2018-2019



Every student, every day, preparing for the future.

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# Introduction

The Derby Public Schools Advanced Coursework guide was created by a team of educators to help students and parents understand how to select advanced coursework. The contents of this guide are designed to help answer questions and provide resources when selecting coursework. This guide is also available on the middle and high school websites.

The Advanced Coursework Guide includes the different types of coursework offered at Derby Public Schools in middle school and high school. Additional parent resources are included in the guide to assist students and parents as they select courses, career pathways and transfer eligible courses for college credit.

There are individual limitations on enrollment based upon each individual student's schedule and course interests, which may include:

- Scheduling conflicts between advanced courses and electives
- Advanced coursework may not be offered at a preferred time of the day or semester if enrollment for the course is low

Derby Public Schools is excited to offer students the opportunity to earn college credit while attending high school. If you have additional questions, please contact a member of the school counseling department.



## Overview of Advanced Coursework for Middle

The advanced coursework offered to middle school students for the 2018-2019 school year includes math and Spanish courses. Additional courses are in the process of being explored for the 2019-2020 school year.

The advanced coursework offered in math will allow students to take high school courses during their 8<sup>th</sup> grade, and potentially their 7<sup>th</sup> grade, school year. Taking advanced math courses allow students to experience more challenging math and enroll in advanced math coursework during high school.

In the following pages, and Appendix B, parents will can find additional information, math course charts and graphic information that will show the options for sequencing math courses.

Please Note: Parents are forewarned that Algebra, Geometry or any other math course taken during students' 6<sup>th</sup>, 7<sup>th</sup> or 8<sup>th</sup> grade year **will not** count towards NCAA requirements. Additional information about NCAA requirements can be located at <http://www.ncaa.org>.



# High School Advanced Coursework Overview

Derby Public Schools offers students a variety of options to earn college credit while attending high school. These include courses that are offered both on and off campus. Each type of coursework has different criteria for students to qualify to take the class at Derby High School and separate rules for earning college credit.

The chart below provides a brief overview of each type of coursework and a more detailed description of each type of classes, the criteria for enrolling in each class and the list of classes offered are included later in this guide.

Students, and parents, should work closely with counselors and college to ensure the courses chosen will meet each student’s career goals.

## Types of Courses Available for College Credit

Articulated	Concurrent	Advanced Placement	Dual Enrollment
<ul style="list-style-type: none"> <li>Students can earn credit for courses completed at DHS, provided that they go to the college that offered the credit.</li> <li>There is a different process at each college to obtain this credit.</li> </ul>	<ul style="list-style-type: none"> <li>Classes are taken in the building and taught by DHS teachers. These college credits are awarded from the college.</li> <li>Representatives from the college will come in and tell students how to apply to the college and pay class tuition.</li> </ul>	<ul style="list-style-type: none"> <li>High school courses that allow students to test for post-secondary credit. Credit earned may depend upon college selected.</li> <li>Course weighting for HS credit 0.025 added to course credit earned per semester.</li> </ul>	<ul style="list-style-type: none"> <li>Courses are taken at the college while the student is enrolled at DHS.</li> <li>Students must have approval from DHS and be fully accepted as students at the university.</li> <li>Students receive high school credit for completed courses by turning in an official transcript to the high school.</li> </ul>



# Middle School Advanced Coursework Offerings

The courses in the chart below represent the math courses offered at the middle school level. The pre-requisites for each course are listed as well as the recommended grade-level(s), required grades from previous classes and the test scores needed for each class.

Course	6th	7th	8th	Prerequisite
6th grade math	✓			Regular pathway - completion of 5th grade
6th grade advanced math (compacted 6 & 1st half of 7th grade) ***	✓			Advanced pathway - 3 of the 4 prerequisites below: Easy CBM 80+% 5th grade Aspire 424-446 (Exceeding) 90+% Math fundamentals End of year 70+% KS Math Assessment Performance Level of 3 or 4
7th grade math		✓		Regular pathway - completion of either 6th grade math course
7th grade advanced math (compacted 2nd half of 7th and 8th grade math) ***	✓	✓		Advanced pathway prerequisite: Earn a C or higher in 6th grade advanced math OR at least an 80% on the 6th grade advanced 1st and 2nd semester finals Recommended scores: Easy CBM 80+% 5th grade Aspire 424-446 (Exceeding) 90+% 6th grade Aspire 426-451 (Exceeding) 90+% Math fundamentals End of year 80+% KS Math Assessment Performance Level of 3 or 4
8th grade math (pre-Algebra)			✓	Regular pathway 8th grade: completion of either 7th grade course
MS - Algebra I*		✓	✓	Advanced pathway prerequisite: Earn a C or higher in 7th grade advanced math OR at least an 80% on the 7th grade advanced 1st and 2nd semester finals Recommended scores: Easy CBM 80+% 6th grade Aspire 426-451 (Exceeding) 90+% 7th grade Aspire 428-453 (Exceeding) 90+% KS Math Assessment Performance Level of 3 or 4
MS - Pre-AP Geometry*		✓	✓	Advanced pathway prerequisite: Earn a score of 80% on the Algebra I - 2nd semester final to earn HS credit Recommended scores: Easy CBM 80+% 6th grade Aspire 426-451 (Exceeding) 90+% 7th grade Aspire 428-453 (Exceeding) 90+% KS Math Assessment Performance Level of 3 or 4
Pre-AP Algebra 2 (taken at DHS)			✓	Prerequisite for advanced placement: Earn a score of 80% on 2nd semester Pre-AP Geometry final Recommended scores: 7th grade Aspire 428-453 (Exceeding) 90+% KS Math Assessment Performance Level of 3 or 4

\* These classes are equivalent to those taken at DHS; teachers follow the same curriculum maps and use the same tests. Students will receive DHS credit if they score an 80% or above on the 2nd semester final of the course. The credit will be reflected on their high school transcript with a P (for passing) which will NOT negatively impact the grade point average (GPA) calculation. This credit will count towards high school graduation but does NOT count as credit towards the Board of Regents Qualified Admission for Kansas State Schools.

\*\*\*Requirements for remaining in an advanced pathway classes: As stated in the course syllabi the expectation is that students will earn a C or better to remain in an advanced pathway course. A student who is unable to maintain a C in an advanced pathway course may be moved to the closest regular pathway course if there is concern that the student has not acquired skills necessary for success in future math classes.

# High School Advanced Coursework Offerings

## Articulated Coursework

Articulated coursework allows students to earn credit for courses completed at DHS, provided that they go to the college that offered the credit. There is a different process at each college to obtain this credit. The chart below shows the coursework Derby High School currently offers as articulated courses for college credits.

**Current Pathways and Articulation Agreements**

Marketing	Butler Community College
Family, Community and Consumer Services	Pittsburg State
A/V Visual	Cloud County Community College, PSU
Business/Finance	Butler Community College
Biomedical	Cloud County Community College, Washburn University
Cartography/GeoSpatial	Flint Hills Technical College
Engineering/Applied Mathematics	Wichita State University, KCKCC, Butler
Manufacturing	Manhattan Area Technical College
Programming/Software Development	North Central Kansas Technical College
Health Science	Cloud County Community College, Washburn University, Butler Community College
Restaurant and Event Management	Barton Community College
Web/Digital Communications	Butler Community College
Construction/Design	Washburn Institute of Technology, Butler Community College
Correction/Security/Law Enforcement	WATC
A/V Communications	Barton County Community College, North Central Kansas Technical College, Butler Community College



# Concurrent Coursework

## Description of Concurrent Courses

**Concurrent credit** classes are taken in the building and taught by Derby High School teachers. These college credits are awarded from the college. Representatives from the college will come in and tell students how to apply to the college and pay the class tuition. We currently work with Newman University and the Wichita Area Technical College (WATC). Students must meet minimum GPA requirements to qualify for taking concurrent credit. Students may also need to meet prerequisites to enroll in courses for concurrent credit.

\*Transferability information may be better added to the chart that currently exists. Also, for individual courses within our course guide, more information about the exact agreement, credit, transferability, and fees should be described.

### College Algebra

Length: 1 Year      Grade: 11-12

Credit: 1

Prerequisite: Algebra 2; Recommended Aspire math score of 432 or ACT math score of 21 and 3.0 GPA

Course Emphasis: Sets of numbers, equations, inequalities, fundamentals of algebra, linear functions, quadratic functions, exponential and logarithmic functions, linear systems, matrices, determinants, sequences and series. College Algebra will include material normally presented in a semester college course. ***This year-long course is offered concurrently with College Algebra at W.A.T.C. Students who wish to earn credit at WATC must pay course fees for three credit hours and successfully complete both semesters of the course at DHS. ACT and GPA recommendations as stated above must be met to enroll in this course. Enrollment through WATC occurs in January; students must have earned at least a B for semester 1 prior to enrolling at WATC.***

### AP Calculus AB

Length: 1 Year      Grade: 10-11-12      Prerequisite: Pre-AP Calc  
Recommended Aspire math score of 438 or ACT math score of 24

Credit: 1

Course Emphasis: Review of functions and their limits, application of the derivative-- Rolle's Theorem, integration-area under a curve, applications of definite integral, derivatives of trigonometric functions and their inverses, derivatives of exponential and logarithmic functions, methods of integration, and plane analytic geometry. Students will learn how to use the computer and graphing calculator to solve various problems. ***This year-long course is offered concurrently with Calculus 1 at Newman University. Students who wish to earn credit at Newman University must pay course fees for five credit hours. ACT and GPA recommendations as stated above must be met to enroll in this course. Enrollment through Newman occurs in August.***





## AP Calculus BC

Length: 1 Year      Grade: 11-12      Prerequisite: AP Calculus AB      Credit: 1  
Recommended Aspire math score of 438 or ACT math score of 24

Course Emphasis: This course will 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. This course assumes a thorough knowledge of elementary functions, and will cover all of the calculus topics in Advanced Placement Calculus as well as the following topics: vector functions, parametric equations, and polar coordinates; rigorous definitions of finite and nonexistent limits; derivatives of vector functions and parametrically defined functions; advanced techniques of integration and advanced applications of the definite integral; and sequences and series. ***This year-long course is offered concurrently with Calculus 2 at Newman University. Students who wish to earn credit at Newman University must pay course fees for five credit hours. ACT and GPA recommendations as stated above must be met to enroll in this course. Enrollment through Newman occurs in August.***

## AP Statistics

Length: 1 Year      Grade: 10-11-12      Prerequisite: Algebra 2      Credit: 1  
Recommended Aspire math score of 438 or ACT math score of 24

Course Emphasis: The purpose of this course is to introduce students to major concepts related to exploring data, sampling and experimentation, anticipating patterns using probability and simulation, and statistical inference. Technology will be an integral part of the course as students will use Texas Instruments Ti-84 graphing calculators. AP Statistics is a two semester course that provides college-level work in statistics. ***This year-long course is offered concurrently with Probability & Statistics 1 at Newman University; upon completion of this course, students earn one semester of credit at Newman. Students who wish to earn credit at Newman University must pay course fees for three credit hours. ACT and GPA recommendations as stated above must be met to enroll in this course. Enrollment through Newman occurs in August.***



## Pre-AP Calculus

Length: 1 Year      Grade: 9-10-11-12      Prerequisite: Algebra 2      Credit: 1  
Recommended Aspire math score of 438 or ACT math score of 24

Course Emphasis: Ordered fields and deductive proofs, mathematical induction, convergence of sequences and series, vectors, complex numbers, plane analytic geometry of points and lines, polynomial functions and their graphs, limits of functions, application of the derivative, circular and trigonometric functions, exponential and logarithmic functions, polar coordinates and solution of triangles. Students will learn how to use the computer and graphing calculator to solve various problems. (Should be taken by college bound students who have an interest in math and science or related fields such as business, medicine, computer science or engineering.) ***This year-long course is offered concurrently with Trigonometry at Newman University; upon completion of this course, students earn one semester of credit at Newman. Students who wish to earn credit at Newman University must pay course fees for three credit hours and successfully complete both semesters of the course at DHS. ACT and GPA recommendations as stated above must be met to enroll in this course. Enrollment through Newman occurs in January.***

## \*H-Spanish 4

Length: 1 year      Grade: 9-10-11-12      Prerequisite: Spanish 1, 2, and H-Spanish 3 or placement by diagnostic exam      Credit: 1

Spanish 4 is culmination of four years of language study. Grammatical concepts from the previous three years will be reviewed, focusing on verbal and written communication at an advancing level of proficiency. Students will view authentic films from Spanish-speaking countries. Students will be expected to read, speak, write, and present in Spanish on a regular basis. Outside work will be required. ***This course is offered concurrently with Elementary Spanish at Newman University. Students who wish to earn credit at Newman University must pay course fees of \$75 per credit hour. Semester One of this course equates to Elementary Spanish 1 (4 credit hours) at Newman University. Semester Two of this course equates to Elementary Spanish 2 (4 credit hours) at Newman University.***



## AP US History

Length: 1 Year      Grade: 11      Prerequisite: None      Credit: 1  
Recommended RI score: 1200: suggested Aspire scores: English/Reading/Writing scores of 428+ or Language Arts/Social Studies Teacher recommendation

Course Emphasis: Advanced Placement U.S. History is a college level introductory course which examines the nation's political, diplomatic, intellectual, cultural, social and economic history from colonization to the present. A variety of instructional approaches are employed and a college level textbook is supplemented by primary and secondary sources. The content of the course is designed to meet the needs of students who wish to study U.S. history in depth. Students enrolling in this course should have demonstrated high level reading and writing skills, strong analytical skills and an ability to work with a minimum of teacher supervision. Requirements may include a major research assignment, additional readings on special topics, and essay assignments. The content of the course and examinations will follow the guidelines of the College Entrance Examination Board and the AP U.S. History program. The desired goal is that students who take this course will either enroll for concurrent credit through Newman University or take the AP exam (NOTE: The score earned on an AP exam will have no bearing on the grade earned in an AP class.) ***This course is offered concurrently with American History at Newman University. Students who wish to earn credit at Newman University must pay course fees of \$75 per credit hour. Semester One of this course equates to American History 1 (3 credit hours) at Newman University. Semester Two of this course equates to American History 2 (3 credit hours) at Newman University.***

## AP US Government

Length: 1 Semester      Grade: 12      Prerequisite: Meets Honors Criteria      Credit: ½

Course Emphasis: This course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with problems and materials in United States Government. It will prepare students for intermediate and advanced level college courses by making demands upon them equivalent to those of an introductory college course. Admission to the course will be open to those who qualify for Honors courses. ***This course is offered concurrently with American Government at Newman University. Students who wish to earn credit at Newman University must pay course fees of \$75 per credit hour for three credit hours. Enrollment through Newman occurs in August.***



## **Psychology**

Length: 1 Semester Grade: 11, 12 Prerequisite: 2.7 GPA for college credit; Credit: 1/2  
Recommended RI score of 1200 and Aspire English/Reading, Writing scores of 428: or  
LA/Social Studies teacher recommendation

Course Emphasis: In this course, students will study the mind, consciousness, and behavior. Students will learn and apply basic theories of psychology, study the nervous system, psychobiology, perception, and personality. Emphasis will be placed on the importance of the experimental method in relation to the study of psychology. Students will write and perform approved experiments in social perception. The expectation is that students who take this course will enroll for concurrent credit through WATC.

***This one semester course is offered concurrently with General Psychology at WATC. Students who wish to earn credit at WATC must pay course fees for three credit hours. RI and Aspire recommendations as stated above must be met to enroll in this course.***

## **AP English Literature and Composition**

Length: 1 Year Grade: 12 Prerequisite: English 9, 10, 11 Credit: 1

Possible Indicators of success in this course might include--

H-English 11 or English 11 with grade of A **AND** RI Score of 1000

Course Emphasis: AP English Literature and Composition is a college-level course, and students can, depending on their performance on the AP Exam in May obtain credit for one college literature course and/or advanced placement in college English. The course requires of its students careful and deliberate reading of novels and plays, and an intensive study of poetry. Some of these texts, which are recommended by the College Board, address mature topics. Writing is an integral part of the course, and, in addition to the senior project, students will write at least three compositions per nine-week grading period. These assignments will reinforce the critical reading skills taught across the spectrum of literary genres. Students will also be asked to write "timed essays" throughout the course of the year. The workload for this course is college level and will include practice AP examinations throughout the year. ***This course is offered concurrently with Intro to Literature & Criticism at Newman University. Students who wish to earn credit at Newman University must pay course fees of \$75 per credit hour for three credit hours. Enrollment through Newman occurs in August.***



## Composition 1

Length: 1 Semester      Grade: 12      Prerequisite: English 9, 10, 11      Credit: 1/2  
Also required for enrollment: 3.0 GPA and an ACT English Score of 20+ and ACT Reading Score of 18+.

Course Emphasis: A one-semester course designed to improve the reading and writing skills of students. The emphasis is on fundamental principles of written English in structuring, correct sentences, paragraphs, and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis, and style. Students are introduced to the basic components of research by writing a documented essay in Modern Language Association (MLA) style. ***This one semester course is offered concurrently with Composition I at WATC. Students who wish to earn credit at WATC must pay course fees for three credit hours. ACT and GPA recommendations as stated above must be met to enroll in this course.***

## Composition 2

Length: 1 Semester      Grade: 11      Prerequisite: Composition 1      Credit: 1/2

Course Emphasis: Through a study of poetry, short story, drama and essays as literary forms, this course further develops students' writing skills. This course also improves research techniques through writing an in-depth research essay in Modern Language Association (MLA) style. It emphasizes accuracy and fluency in expressing sound ideas in class discussions, assignments and essays. College credit is available through WATC. ***This one semester course is offered concurrently with Composition II at WATC. Students who wish to earn credit at WATC must pay course fees for three credit hours. ACT and GPA recommendations as stated above must be met to enroll in this course.*** Note: If Comp 1 was taken at an institution other than WATC, a transcript showing Comp I completion must be received by WATC prior to enrollment in Comp 2.

## Speech

Length: 1 Semester      Grade: 10, 11, 12      Credit: 1/2  
Prerequisite: None or 2.7 GPA for college credit

Course Emphasis: Development of oral communication skills in a non-competitive setting to prepare for college or the business world. Communication theory, listening improvement, and evaluation skills will be emphasized. Students will prepare various types of speeches to develop and practice necessary skills. Additional activities include group discussion and parliamentary procedure. Recommended for college-bound students, but also appropriate for non-college bound students. College credit available through WATC. ***This one semester course is offered concurrently with Public Speaking at WATC. Students who wish to earn credit at WATC must pay course fees for three credit hours. GPA recommendations as stated above must be met to enroll in this course.***



### **Honors Finance Accounting 3 (offered as independent study)**

Length: 1 Year      Grade: 11, 12      Prerequisite: H-Advanced Accounting 2      Credit: 1

Course Emphasis: To give additional application in the technology of accounting, using the computer. Solving and analyzing accounting problems and communicating financial information. ***This course is offered concurrently with Managerial Accounting at Newman University. Students who wish to earn credit at Newman University must pay course fees of \$75 per credit hour for three credit hours. Enrollment through Newman occurs in August.***

### **Certified Nurse Aide / Home Health Aide**

*These courses are offered as dual credit with WATC and DHS. Students enroll in Certified Nurse Aide for 15 weeks through WATC with the possibility of an additional 3 weeks for Home Health Aide certification. Enrollment requirements exist separately for Certified Nurse Aide and Home Health Aide. Students who wish to earn credit at WATC must pay course fees of \$69 per credit hour for up to seven credit hours.*

### **AP Chemistry**

Length: 1 Year      Grade: 11, 12      Prerequisite: Chemistry, 3.0 GPA      Credit: 1

Course Emphasis: This course uses a first-year College Chemistry textbook, expands the topics covered in Chemistry I, and introduces Biochemistry, Chemical Equation dynamics, and Qualitative Analysis. Students will do an increased amount of work for activities and for laboratories. Students will continue to use the mathematics done in Chemistry 1, and include natural logarithms and the quadratic equation. Students may elect to take the Advanced Placement Chemistry examination or opt to earn five college credits. ***This year-long course is offered concurrently with Chemistry 1 at WATC. Students who wish to earn credit at WATC must pay course fees of \$69 per credit hour for five credit hours.***



## AP Biology

Length: 1 Year      Grade: 11, 12  
Prerequisites: Biology, Chemistry, 3.0 GPA

Credit: 1

Course Emphasis: This advanced lab-based course focuses on an in-depth study of microbiology, biochemistry, energy transformations in cells, and genetics. Students will increase their skills in designing experiments, microscopy, plant growth, and scientific writing while working with micro-organisms, plants, fruit flies, and biotechnology.

- Solid understanding of the concepts and lab skills taught in Biology and Chemistry
- Basic experience in using a microscope.
- Ability to analyze qualitative and quantitative data.
- Ability to communicate, both orally and as a written report, the significance of a lab investigation.

Students may elect to take the Advanced Placement Biology examination or opt to earn five college credits. ***This year-long course is offered concurrently with Principles of Biology at WATC. Students who wish to earn credit at WATC must pay course fees of \$69 per credit hour for five credit hours.***

## Pre-AP Physics

Length: 1 Year      Grade: 10, 11, 12  
Prerequisites: Algebra 2  
Recommended Aspire math score of 432 or ACT math score of 21

Credit: 1

Course Emphasis: This course is offered for concurrent credit through Wichita Area Technical College. Students can receive five credit hours for taking this course. This class aligns with a college physics class. It is at an accelerated pace and is math-intensive. Students will apply mathematics, such as graphing skills, Algebra, Geometry, and Trigonometry to understand and describe the relationships between variables. The class performs laboratory and technology activities almost daily and regular attendance is important. The class covers topics such as dynamics, kinematics, momentum, energy, work, waves and sound. ***This year-long course is offered concurrently with General Physics 1 at WATC. Students who wish to earn credit at WATC must pay course fees of \$69 per credit hour for five credit hours.***

## AP Physics

Length: 1 Year      Grade: 11,12

Credit: 1

Prerequisites: Physics or Pre-AP Physics 1, 3.0 GPA

Recommended Aspire math score of 432 or ACT math score of 21

Course Emphasis: This course is a continuation of Pre-AP Physics I. This course is offered for concurrent credit through Wichita Area Technical College. Students can receive five credit hours for taking this course. This class aligns with a second semester college physics class. Students will apply mathematics, such as graphing skills, Algebra, Geometry and Trigonometry, to understand and describe the relationships between variables. The class performs laboratory and technology activities almost daily, and regular attendance is important. The class covers topics such as light, mirrors, lens, electricity, magnetism, electromagnetism and quantum theory and introduction to modern physics. Students may elect to take the Advanced Placement Physics examination or opt to earn five college credits. ***This year-long course is offered concurrently with General Physics 2 at WATC. Students who wish to earn credit at WATC must pay course fees of \$69 per credit hour for five credit hours.***





# AP Coursework

## Advanced Placement Courses

**AP classes are college-level** courses offered in English, Math, Science, Social Studies, World Languages, Art, and Music. AP is not just a test; it's an experience. The work you do in AP will help you develop skills and study habits that will be vital in college. Colleges recognize that applicants with AP experiences are better prepared for the demands of college courses. Admissions officers are aware of the difficulty of AP courses and exams and sending them your AP Exam scores can only be a positive step toward potential admission into competitive colleges. Based on the results of the AP exam, college credit may be awarded by participating colleges and universities.

### Rigor of AP Courses

Compared with other high school classes, AP courses are more demanding. You will read, write, analyze material, synthesize ideas, solve problems, and evaluate at a rigorous level. AP classes are comparable to college courses. The skills you develop in AP courses, critical reading, analyzing data sets, synthesizing evidence to develop new insights, will equip you for lifelong learning.

### Should I take an AP course and risk a lower grade?

You will receive a weighted grade. DHS policy will give you an additional .025 credit for every .5 credit earned. Secondly, colleges know that all high school courses are not equal. Their evaluation of student grades focuses as much on the quality of the courses as the grades received. Finally, an AP course gives you an opportunity to learn a subject in greater depth and helps you develop skills that will be critically important to successfully study in college.

### What do I need to succeed in AP?

You need to be willing and able. "Willing" means motivated to study and learn on the college level. If you are committed to participating actively in an AP class and doing the out-of-class assignments, you have met a major prerequisite for success.



## Derby High School Advanced Placement Courses 2018-2019

AP Course Name	Pre-requisites
AP English Language/Composition	RI score 1185; C or better in Pre-AP English 10; A or B in Regular English 10; instructor approval
AP English Literature/Composition	RI score 1185; C or better in AP English Lang or A or B in English 10 or 11; instructor approval
AP Statistics	A or B in Alg II; ACT score of 21 in math; instructor approval
AP Calculus AB	B or better in Pre-AP Calculus; ACT score of 24 in math &/or Aspire score of 438; instructor approval
AP Calculus BC	AP Calc AB; instructor approval
AP Biology	Pre-AP Bio or Bio & Pre-AP Chem or Chem; 3.0 GPA
AP Chemistry	Pre-AP Chem or Chem; 3.0 GPA
AP Physics	Pre-AP Physics or Physics; 3.0 GPA
AP Environmental Science	Pre-AP Bio or Biology; 3.0 GPA
AP European History	Suggested minimum RI score: 1185, suggested Aspire scores English/Reading/Writing 425+ or Language Arts/Social Studies teacher recommendation
AP US History	None, Suggested minimum RI score: 1185, suggested Aspire scores English/Reading/Writing 428+ or Language Arts/Social Studies teacher recommendation
AP American Government	ACT score of 21 on reading; RI score of 1185+
AP Studio Art 2D/3D	Instructor approval
AP Music Theory	Instructor approval

# High School Graduation Requirements

<b>Derby High School Graduation Requirements</b>	<b>Kansas Regents Graduation Requirements</b>	<b>Kansas Scholars Curriculum Requirements</b>
<b>Language Arts (4.0 credits)</b> 1 credit of English 9 1 credit of English 10 1 credit of English 11 1 credit of English 12	<b>Language Arts (4.0 credits)</b> 1 credit of English 9 1 credit of English 10 1 credit of English 11 1 credit of English 12	<b>Language Arts (4.0 credits)</b> 1 credit of English 9 1 credit of English 10 1 credit of English 11 1 credit of English 12
<b>Math (3.0 credits)</b> 1 credit must be Algebra 1 equivalent or higher	<b>Math (3.0 credits)</b> 1 credit must be Algebra II equivalent or higher ACT college readiness math sub-score of 22+ -----OR----- <b>Math (4.0 credits)</b> 1 credit must be Algebra II equivalent or higher	<b>Math (4.0 credits)</b> 1 credit must be Algebra II 1 additional math class above Algebra II (Middle school algebra can count)
<b>Science (3.0 credits)</b> 1 credit Biology 2 credits any other science course(s)	<b>Science (3.0 credits)</b> 1 credit Biology OR Honors Biology 1 credit Chemistry OR Physics 1 credit any other science course	<b>Natural Science (3.0 credits)</b> 1 credit Biology OR Honors Biology 1 credit Chemistry 1 credit Physics
<b>Social Studies (3.0 credits)</b> 1 credit US History OR Pre-AP US History ½ credit US Government 1 credit World History OR AP European History ½ credit social studies elective	<b>Social Studies (3.0 credits)</b> Derby High School requirements fulfill the minimum requirement in this subject area.	<b>Social Studies (3.0 credits)</b> Derby High School requirements fulfill the minimum requirement in this subject area.
<b>Physical Education (1.5 credits)</b> ½ credit P.E. activity 1 credit Health Science 1	<b>Physical Education (no credits)</b> No credits required	<b>Physical Education (no credits)</b> No credits required
<b>Fine Arts (1.0 credit)</b> See course guide for list of courses	<b>Fine Arts (no credits)</b> No credits required	<b>Fine Arts (no credits)</b> No credits required
<b>Additional Electives (9.5 credits)</b> Elective credits are defined as any class selected in addition to the above required courses	<b>Additional Academic Courses (3.0 credits)</b> See KSDE.com for additional information on Kansas Regents Qualified Admissions Curriculum	<b>World Language (2.0 credits)</b> Students are required to complete 2 years of the same world language



# Preparing for College - Standardized Assessments

Standardized testing - nationwide tests used to determine college readiness

- Score guides – definition (example maybe..)
- ACT Aspire - 5th - 10th grade
  - <https://www.discoveractaspire.org/performance-level-descriptors/>
- ACT - May be taken multiple times
  - Register to take the ACT
  - FREE administration at Derby High School in 11th grade
  - <http://pages.act.org/Parent-Toolkit.html>
- SAT - Register to take the SAT -  
<https://collegereadiness.collegeboard.org/sat/scores/understanding-scores/structure>
- PSAT for 10th & 11th National Merit qualification
- Register for the PSAT - <https://collegereadiness.collegeboard.org/psat-nmsqt-psat-10/scores/student-score-reports>
- Armed Services Vocational Aptitude Battery (ASVAB) - The ASVAB is FREE, multiple-aptitude battery that measures developed abilities and helps predict future academic and occupational success in the military. It is administered annually to more than one million military applicants, high school, and post-secondary students.
  - Free to take, sign up in DHS counseling office (January each year)
  - Recommended to take in 10th grade
  - Retakes in the same year or other scheduled times are available through military recruiter.

# Appendices

# Glossary of Terminology

Secondary & Postsecondary - Since secondary school is considered 6-12 grade, postsecondary school is ANY education or skill learned beyond high school.

Undergraduate - Any postsecondary education you obtain before you earn a master's degree. Includes associate's and bachelor's degrees. Terms are defined under section L: "types of degrees" below.

CTE - Career and Technical Education

Vocational-Pathways of education that lead to a specialized career requiring skilled certifications or associate's degree. (some examples are cosmetology, welding, CNA (certified nursing assistant), auto mechanic)

Grade Point Average (GPA) - The average calculated by taking the value of the grade (A = 4, B = 3, etc.) earned divided by the number of classes.

Class rank: your position in relation to the total number of students in your graduating class. (#10 out of 500)

Percentile: Top 10% of class - 10% of number of students (10% of 500 = 50). To be in the top 10%, your class rank would need to be between 1 and 50.

Top 1/3 of class - 1/3 of the number of students (\*example 1/3 of 500 = 167). To be in the 1/3 of your class, your class rank would need to be between 1 and 167)

Transcript - A listing of all of your classes with the grades and credits earned. Your GPA and class rank are usually listed on transcripts.

Standardized testing - nationwide tests used to determine college readiness

- Score guides – definition (example maybe..)
- ACT Aspire - 5th - 10th grade
  - <https://www.discoveractaspire.org/performance-level-descriptors/>
- ACT - May be taken multiple times
  - Register to take the ACT
  - FREE administration at Derby High School in 11th grade
  - <http://pages.act.org/Parent-Toolkit.html>
- SAT - Register to take the SAT -  
<https://collegereadiness.collegeboard.org/sat/scores/understanding-scores/structure>
  - PSAT for 10th & 11th National Merit qualification
  - Register for the PSAT - <https://collegereadiness.collegeboard.org/psat-nmsgt-psat-10/scores/student-score-reports>
  - WorkKeys (via ACT)



- Assessment required for work-related job entry (factories, Spirit Aerosystems, etc.). This is a reliable and nationally validated system evaluating and analyzing workplace skills.
- Leveled Certification
  - Bronze - 30% of jobs in KS
  - Silver - 70% of jobs in KS
  - Gold - 90% of jobs in KS
  - Platinum - 99% of jobs in KS
  - Assessments include Applied Math, Graphic Literacy, Workplace Documents, Applied Technology, Business Writing, Workplace Observation, FIT, & Talent.
  - [Registration & information](#)
  - [Kansas Workforce Areas](#)
- Armed Services Vocational Aptitude Battery (ASVAB) - The ASVAB is FREE, multiple-aptitude battery that measures developed abilities and helps predict future academic and occupational success in the military. It is administered annually to more than one million military applicants, high school, and post-secondary students.
  - Free to take, sign up in DHS counseling office (January each year)
  - Recommended to take in 10th grade
  - Retakes in the same year or other scheduled times are available through military recruiter

Kansas Board of Regents schools - The Kansas Board of Regents is the group in charge of the state's 6 universities and 32 public higher education institutions. They are also in charge of the state's student financial aid, high school equivalency, and career & technical programs.

- List of Regents schools-  
[https://www.kansasregents.org/resources/PDF/Academic\\_Affairs/Qualified\\_Admissions/2865-QA2015](https://www.kansasregents.org/resources/PDF/Academic_Affairs/Qualified_Admissions/2865-QA2015)  
[2016 KansasBoardofRegents QualifiedAdmissionsQuickFacts April2014-1-13-2015 1.pdf](#)

Admission Requirements: requirements to be accepted at a college program or university. These will vary by school.

- ACT score requirement - 21 or higher
- SAT score of 980 or higher
- Top 1/3 of class
- 2.0 or higher in college coursework taken in high school



## Statewide (articulated) transferable courses

- AP Courses - High school courses that allow students to test for post-secondary credit. Credit earned may depend upon college selected.
  - Course weighting for HS credit - 0.025 added to course credit earned
- Concurrent - Classes are taken in the building and taught by DHS teachers. These college credits are awarded from the college. Representatives from the college will come in and tell students how to apply to the college and pay the class tuition. We currently work with Newman University and the Wichita Area Technical College (WATC). Students must meet minimum GPA requirements to qualify for taking concurrent credit (varies by class). Students may also need to meet course and standardized testing score prerequisites to enroll in courses for concurrent credit.
  - Standardized testing score requirements for course credit
  - Link to Concurrent courses offered
- Articulated (for Pathways) - Students will make a seamless transition from secondary to postsecondary education within a specific career pathway of study. Students can earn credit for courses completed at DHS, provided that they go to the college that offered the credit. There is a process at each school to obtain this credit. This could either lead to a time-shortened program which would save on student tuition expenses or a skill-enhanced program where the student leaves with greater skill to offer the employer.

## Current DHS Pathways: (not updated) -

<https://drive.google.com/drive/folders/0B3MdqBJqMAdNYmV1aTV3R2txLVk>

## Definition of Career Clusters & Pathways

- Link to KSDE list of articulated pathways: <http://www.ksde.org/Agency/Division-of-Learning-Services/Career-Standards-and-Assessment-Services/CSAS-Home/Career-Technical-Education-CTE/Postsecondary-Partnerships/Statewide-Articulation-Agreements>

Dual Enrollment - Students attend DHS in the mornings and leave to attend a college in the afternoons.

- Wichita State University (WSU): <http://www.wichita.edu/thisis/admissions/index.asp?role=freshmen>
- Butler Community College: <https://www.butlercc.edu/highschool>
- Cowley County Community College: <https://www.cowley.edu/admissions/hsstudents.html>
- Friends University: <https://www.friends.edu/admissions/apply-to-friends/>
- Newman University: <http://newmanu.edu/admissions/undergraduate>

Credit Hour - The number of hours assigned to a particular class. Some classes are worth more credit hours than others:





- 3-hour course vs. 5-hour course
  - Most general courses are designated as 3-hour courses, but some courses that require lab (such as the sciences) are designated as 5-hour courses.
- Course fees are assessed based on how many credit hours a course is worth:
  - If a university charges \$150 per credit hour, a 3-hour class would cost \$450 to take.
- Degree requirements specify how many credit hours you need to reach that degree level.
- Full-time vs. Part-time Student
  - A student must meet a minimum number of enrolled credit hours per semester to qualify as “full-time” or “part-time”.
  - Most post-secondary institutions designate 12 hours as “full-time” for undergraduate work, and 6 hours as “full-time” for graduate work.

General Education Courses - These are the required, prerequisite courses that give students a basic knowledge of a variety of topics. Generally, a student is required to take a specific set of general education courses before they can begin working on the courses for their chosen field of study.

Major and Minor Coursework - Your college major is your primary field of study, which leads to the type of degree and job you would like to have. Your minor is a secondary area of study or interest, which may or may not support your major. Most colleges and universities do not require you to have a minor. Many students’ minors are a specialization within their major field of study.

Resident vs. Non-resident Tuition - Resident tuition is the amount of money you pay to attend a college or university in the state in which you live. Non-resident tuition is the amount of money you pay to attend a college or university outside of the state in which you live. You typically pay more for non-resident tuition than for resident tuition.

Public vs. Private University - A public university or college is a university that is funded by the government, and usually costs less to attend than a private school. You pay less to attend a public university in your home state than you would to attend an out-of-state public school. A private university or college is a university that is privately funded, and tuition for a private university is the same for all students who attend.

Application/Acceptance/Admission - Application to a college might include one or more of the following:

- Previous academic performance (high school transcript)
- Standardized testing scores
- Interview
- Recommendations from former teachers or others
- Essay



\*A student must be accepted to a college or university in order to attend. Admission is granted to students who have met the prescribed entrance requirements. These requirements vary by college or university.

- Dormitories (dorms)
- On-campus housing for students.
- Many colleges require first-year students who live a certain distance from campus to live on campus rather than traveling to school.

### Types of degrees

- Certification - A credential that you earn to show that you have specific skills or knowledge. They are usually tied to an occupation, technology, or industry. Certifications are usually offered by a professional organization or a company that specializes in a particular field or technology.
- Associate's Degree- A two-year post-secondary degree. Students who pursue this kind of degree full-time may complete a program in as little as two years—though many choose to go at their own pace. The credits earned from an associate's degree can transfer towards a bachelor's degree.
- Bachelor's degree - an undergraduate academic degree awarded by colleges and universities upon completion of a course of study lasting three to seven years, depending on institution and academic discipline. (Generally designated with the letters B.A. or B.S.)
- Master's degree - the first level of graduate study after a bachelor's degree. A master's degree typically requires a year and one-half to two years of additional full-time study. (Generally designated with the letters M.S. or M.A.)
- Doctorate degree- the highest level of academic degree. Everyone is familiar with the medical doctor, who holds an M.D. (Medical Doctorate). But you can earn a doctorate in almost any subject area, this typically requires four or more years of additional full-time study. (Generally designated with the letter Ph.D.)

### Financial Aid

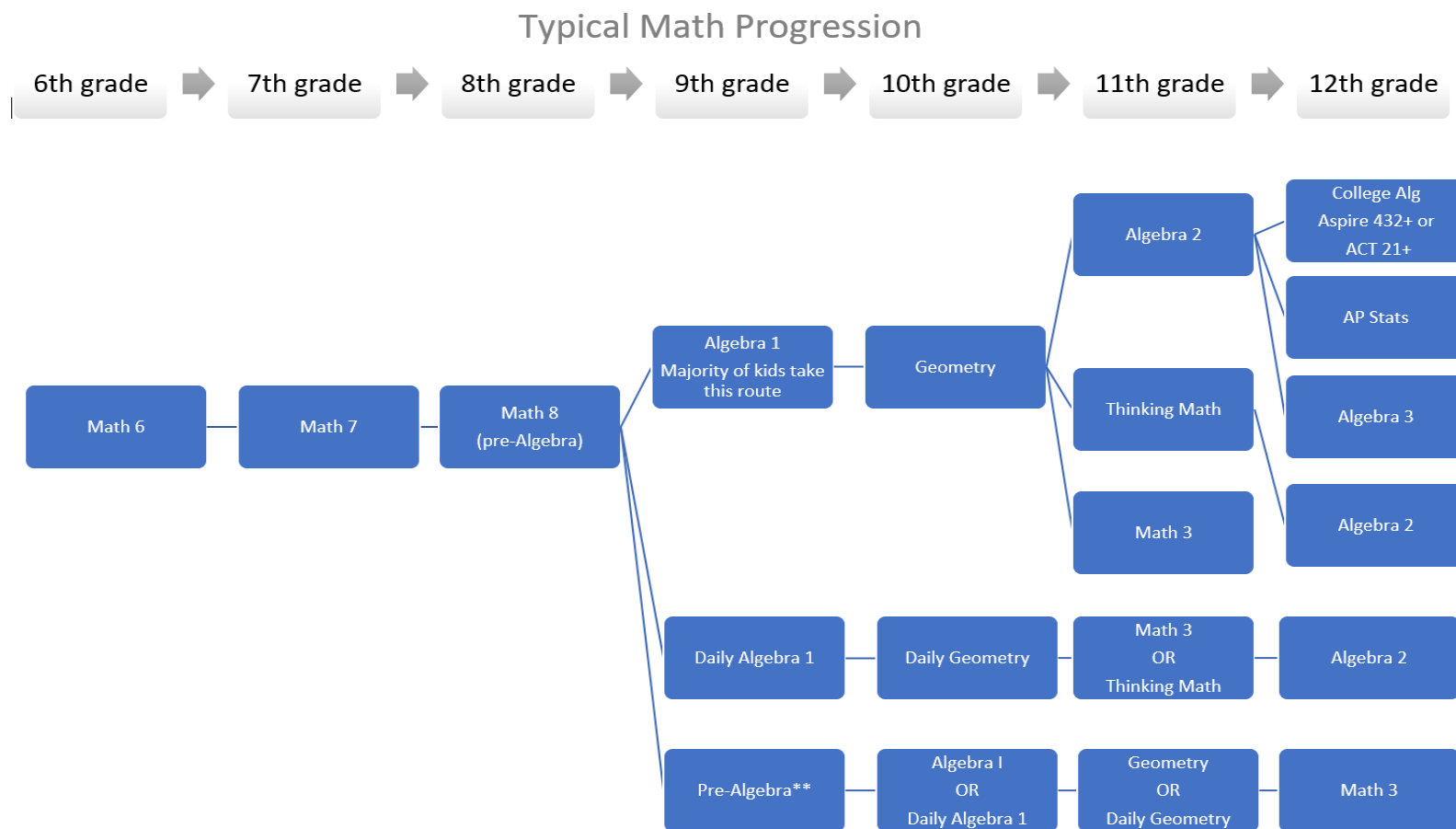
- DHS College Student Services
- FAFSA (Free Application for Federal Student Aid):
  - <https://fafsa.ed.gov/>
- Pell Grant
  - <https://studentaid.ed.gov/sa/types/grants-scholarships/pell>
- Perkins Loan
  - <https://studentaid.ed.gov/sa/types/loans/perkins>
- Scholarship Hunting Sites:
  - - <https://www.unigo.com/>
  - - <http://www.tuitionfundingsources.com/>
  - - <https://www.collegegreenlight.com/>



- - <https://www.cappex.com/>
- - <https://www.fastweb.com/>
- - <https://www.unigo.com/scholarships#/fromscholarshipexperts>
- - <http://www.scholarshiphunter.com/>
- - <https://www.scholarships.com/>

# Working Towards Advanced Math Classes

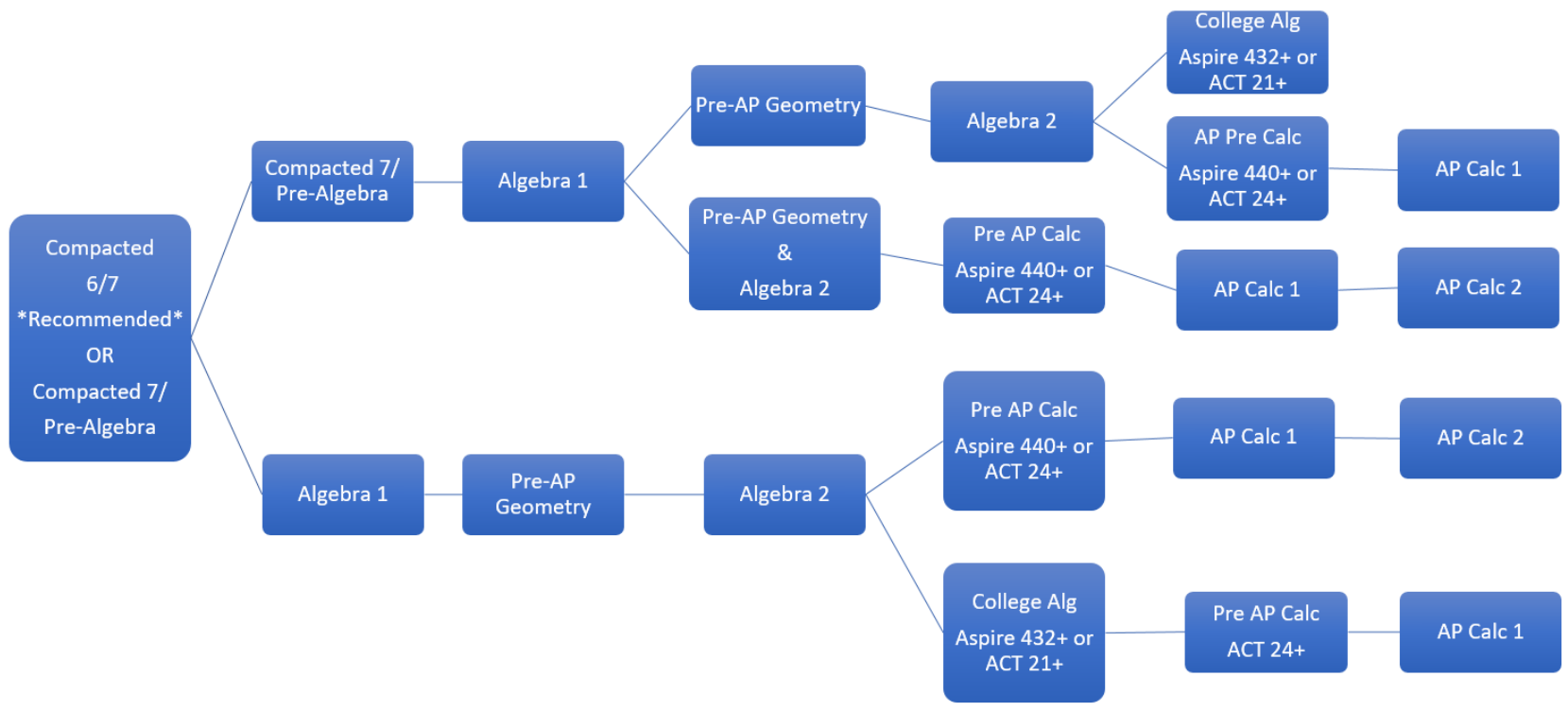
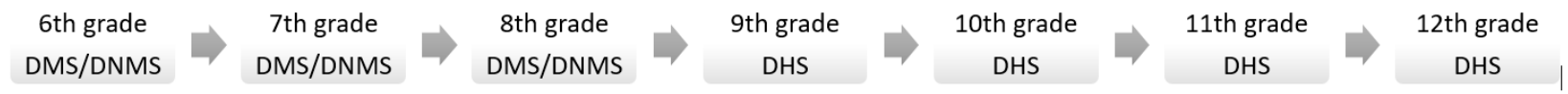
The chart below illustrates the typical math course progression students will take from middle school through high school graduation. The advanced math progression chart shows how advanced courses can be used to help students experience more rigorous math classes and meet pre-requisites for certain career pathways. See each pathway for requirements.



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## Advanced Math Progression



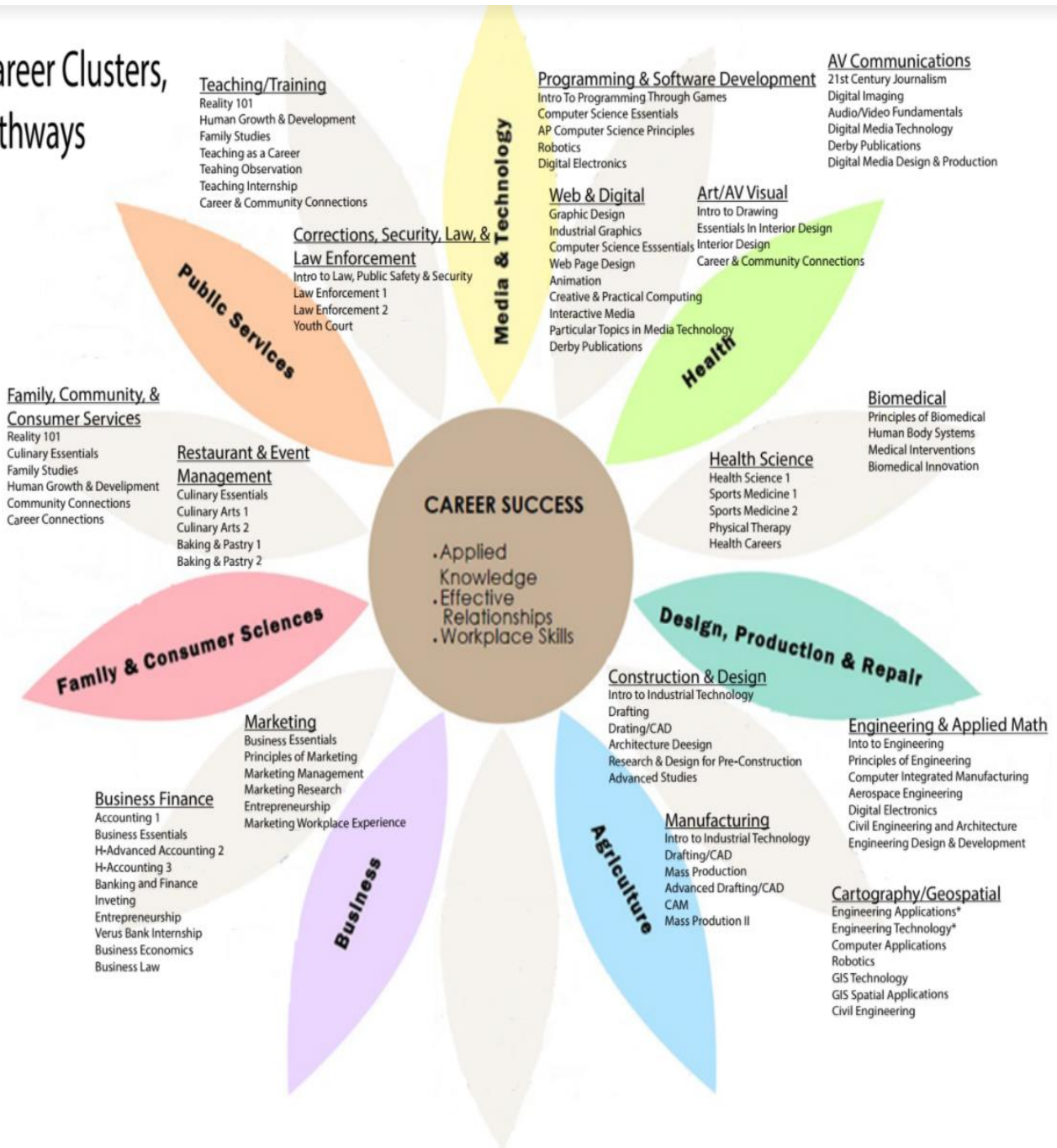
\*\*Classes taken during Middle School do NOT count towards Regents Qualified Admission or NCAA requirements



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# Career Pathway 4-Year Course Listing

## DHS Career Clusters, and Pathways



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Below is the alphabetical listing of the career pathways to be offered at Derby High School during the 2018-2019 school year.

AV Communications
Biomedical
Business Finance
Cartography Geospatial/Spatial Mathematics
Construction and Design (Design Strand)
Corrections, Security, Law and Law Enforcement
Engineering and Applied Mathematics
Family, Community, and Consumer Services
Health Science
Manufacturing
Marketing
Programming and Software Development
Restaurant & Event Management (Culinary Arts Strand)
Teaching and Training
Visual Arts (Fashion, Apparel and Interior Design Strand)
Web & Digital Communications



## AV Communications Pathway

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Business Essentials	0.5	✓	✓	✓	✓	None
21st Century Journalism	0.5	✓	✓	✓	✓	None
Industrial Graphics	1.0	✓	✓	✓	✓	None
Audio/Video Production Fundamentals	0.5	✓	✓	✓	✓	None
Digital Photography and Photo Imaging - Artistic	0.5	✓	✓	✓	✓	None
Digital Photography and Photo Imaging - Journalism	0.5	✓	✓	✓	✓	None
Digital Media Technology	0.5	✓	✓	✓	✓	None
Principles of Marketing	1.0		✓	✓	✓	None
Graphic Design	1.0		✓	✓	✓	None
Digital Media Design & Production	1.0		✓	✓	✓	None
Video Production	1.0		✓	✓	✓	Digital Media Technology OR Audio/Video Production Fund.
Derby Publications	1.0		✓	✓	✓	Instructor Approval



Name: \_\_\_\_\_

School: Derby High School



Derby High School- Arts, A/V Technology & Communications: Arts, A/V Communications

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>21st Century Journalism</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Audio-visual Systems Technician, Video Technician, Field Technician, Camera Operator, News Analyst, Reporter, Broadcast and Sound Technician, Telecommunications Specialists, Illustrator,</b>
10	<u>Digital Media &amp; Design &amp;/or Derby Publications &amp;/or Audio/Video Production Fundamentals</u>	English 10	Geometry	Biology	World History	Photojournalism	<b>Business Essentials, Industrial Graphics, Marketing Comprehensive, Video Production, Spanish, French,</b>	
11	<u>Digital Media &amp; Design &amp;/or Derby Publications &amp;/or Video Production</u>	English 11	Math Elective	Chemistry	US History	Principles of Marketing		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Digital Media &amp; Design &amp;/or Derby Publications &amp;/or Video Production</u>	English 12	Algebra 2	Physics	US Government Social Studies Elective	Drawing and Painting	<b>German</b>	<b>Animator, Commercial Photographer</b>
13		English Comp. 1 & 2	College Algebra	None	Speech/Psychology			
14		Technical Writing	Trigonometry	Physical Science	Sociology			

<b>KEY</b>	<b>Career and College Readiness Courses</b>
	<b>Courses Required For Graduation</b>
	<b>Suggested Courses To Complement Pathway</b>
	<b>Open Electives or Regents</b>
	<b>College Articulated Courses</b>



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## Visual Arts Pathway

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Reality 101	1.0	✓				None
Introduction to Drawing	0.5	✓	✓	✓	✓	None
Essentials of Fashion and Interior Design	0.5	✓	✓	✓	✓	None
Interior Design	0.5		✓	✓	✓	None
Apparel and Textile Production 1	0.5		✓	✓	✓	None
Apparel and Textile Production 2	0.5		✓	✓	✓	Apparel Production 1
Career Connections	0.5				✓	2 credits in FACS pathway
Community Connections	0.5				✓	2 credits in FACS pathway

Name: \_\_\_\_\_

School: Derby High School



Derby High School- Visual Arts: Fashion, Apparel and Interior Design Strand

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Reality 101 Intro to Drawing Design</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	Art Directors, Commercial and Industrial Designers, Craft Artists, Fashion Designers, Graphic Designers, Interior Designers, Painting, Coating and Decorating Workers, Set and Exhibit Designers,
10	<u>Intro to Drawing Essentials in Interior Textile Design</u>	English 10	Geometry	Biology	World History	Graphic Design	Drawing and Painting Fundamentals, Drawing or Painting Advanced, Studio Art AP 2-Dimensional, German,	
11	<u>Interior Design</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Web Design		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Career Connections</u> <u>Community Connections</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	Accounting, CAD	French, Spanish	
13		English Comp. 1 & 2	College Algebra	None	Speech/Psychology			
14		Technical Writing	Trigonometry	Physical Science	Sociology			

<b>KEY</b>	<b>Career and College Readiness Courses</b>
	<b>Courses Required For Graduation</b>
	<b>Suggested Courses To Complement Pathway</b>
	<b>Open Electives or Regents</b>
	<b>College Articulated Courses</b>



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## Biomedical Sciences

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Principles of Biomedical Science	1.0	✓	✓	✓	✓	None
Human Body Systems	1.0		✓	✓	✓	Principles of Biomedical Science
Medical Interventions	1.0			✓	✓	Principles of Biomedical Science
Biomedical Innovation	1.0			✓	✓	Principles of Biomedical Science

Name: \_\_\_\_\_

School: Derby High School

STEM: Derby High School- Engineering & Technology: Bio-Medical

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty



	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Principles of Biomedical Sciences</u>	English 9	Algebra 1	Physical Science, Biology	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	Technologists, Dye Chemist, Physician, Veterinarian, Geneticist, Human Factors Engineer, Lab Technician, Materials Lab & Supply Technician, Mycologist, Nanobiologist, Nutritionist, Organic Chemist, Protein Scientist
10	<u>Human Body Systems</u>	English 10	Geometry	Chemistry, Physics	World History	Sports Medicine	Biotechnical Engineering, Natural Resources Management, Physical Science, Meteorology, French, German,	
11	<u>Medical Interventions</u>	English 11	3rd Math Course Rec: Algebra II	AP Biology, AP Chemistry, AP Environmental Science	US History	Robotics		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>BioMedical Innovation</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	AP Biology, AP Chemistry, AP Environmental Science	US Government Social Studies Elective	CNA, Sports Medicine II, Physical Therapy	Spanish	
		English Comp. 1 & 2	College Algebra		Speech/Psychology		Public Speaking or Interpersonal Communication	
		Technical Writing	Trigonometry	Physical Science	Sociology		Humanities	

<b>KEY</b>	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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## Business Finance

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Business Essentials	0.5	✓	✓	✓	✓	None
Accounting 1	1.0	✓	✓	✓	✓	None
Business Economics	1.0		✓	✓	✓	None
Business Law	0.5		✓	✓	✓	None
Entrepreneurship	0.5		✓	✓	✓	None
Banking and Finance	0.5		✓	✓	✓	None
H-Advanced Accounting 2	1.0		✓	✓	✓	Accounting 1
H-Accounting 3	1.0			✓	✓	Advanced Accounting 2
Investing	0.5			✓	✓	Banking & Finance
Verus Bank Internship	1.0			✓	✓	Instructor Approval



Name: \_\_\_\_\_

School: Derby High School



Derby High School- Finance: Finance and Accounting Strands

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts Determined By Student Need	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Accounting 1 Business Essentials</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	Accountant, Financial Advisor, Banker, CFO, Marketing, Business Administration, Broker, Actuary, Tax Advisor
10	<u>H-Advanced Accounting 2 Banking &amp; Finance</u>	English 10	Geometry	Biology	World History	Principals of Marketing	Independent Study- Accounting 3 (Computerized Accounting), Business Law, German	
11	<u>H-Accounting 3 Investing Entrepreneurship</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Marketing Management		

College Placement Assessments-Academic/Career Advisement Provided

12	<u>Verus Bank Internship Business Economics Business Law</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	Business Economics	Spts & Ent. Marketing, Spanish	
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	Accounting 1 & 2	English Comp. 1	College Algebra	None	Speech/Psychology	Public Speaking or Interpersonal Communication	Principles of Management and Processing Keyboarding	
	Personal Finance and Marketing	Technical Report Writing	Trigonometry	Physical Science	Sociology	Humanities	Business Communications and Managerial Accounting	

KEY	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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## Cartography Geospatial/Spatial Mathematics

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Astronomy/Meteorology	0.5		✓	✓	✓	Physical Science Energy/Matter
Robotics	1.0		✓	✓	✓	Algebra 1
Animation	1.0		✓	✓	✓	None
GIS Technology	1.0			✓	✓	Intro. to Engineering and Principles of Engineering
Civil Engineering and Architecture	1.0			✓	✓	Intro. to Engineering and Principles of Engineering
Aerospace Engineering	1.0			✓	✓	Intro. to Engineering and Principles of Engineering or Instructor Approval





Name: \_\_\_\_\_

School: Derby High School

STEM: Derby High School- Engineering & Technology: Cartography/Geospatial

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts Determined By Student Need	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Physical Geography or Environmental Science</u>	English 9	Algebra 1	Soil Science	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:  Animation, World Geography, Spanish, German	<b>Atmospheric Scientist, Astrophysicist, Cartographer, Civil Engineer, Construction Engineer, Cryptographer, Ecologist, Geophysicist, Geothermal Engineer, Hydrologist, Meteorologist</b>
10	<u>Robotics and GIS Technology</u>	English 10	Geometry	Biology	World History	Meteorology		
11	<u>GIS Spatial Applications</u>	English 11	3rd Math course Rec: Algebra II	Chemistry	US History	Aerospace Engineering		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Civil Engineering &amp; Architecture</u>	English 12	4th Math Course Rec: AP Statistics	Physics	US Government Social Studies Elective	Animation		Oceanographer

	English Comp. 1 & 2	College Algebra		Speech/Psychology		Public Speaking or Interpersonal Communication
	Technical Report Writing	Trigonometry	Physical Science	Sociology		Humanities

KEY	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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## Construction and Design

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Introduction to Industrial Technology	0.5	✓	✓	✓	✓	None
Drafting	0.5	✓	✓	✓	✓	None
Drafting/CAD	1.0		✓	✓	✓	Intro. to Industrial Technology
Architecture Design	1.0		✓	✓	✓	Drafting/CAD or Intro. to Industrial Technology
Research and Design for Pre-Construction	1.0			✓	✓	Drafting/CAD

Name: \_\_\_\_\_



Derby High School- Architecture & Construction: Construction and Design  
 Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Introduction to Industrial Technology Drafting</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Architect, Building Designer, Civil Engineer, Drafter, Electrical Engineer, Landscape Architect, Materials Engineer, regional and Urban Planner/Designer, Safety Designer, Specification Writer, Structural Engineer</b>
10	<u>Drafting/CAD Architecture Design</u>	English 10	Geometry	Biology	World History	Intro to Engineering Design	<b>Computer Programming, Web Page Design, Intro to Engineering Design, Digital Life, Principals of Engineering</b>	
11	<u>Research &amp; Design for Pre-Construction</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Civil engineering and Architecture		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Research &amp; Design for Pre-Construction</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	Consider taking Dual Credit College Courses at Cowley, WATC, etc.	French, Spanish, German	Surveying and Mapping Technician
13	Drawing Comp 1 or Two Dimensional Design/Residential Design and CAD 1	English Comp. 1	College Algebra	None	Speech/Psychology	Public Speaking or Interpersonal Communication	Graphics 1 and 2	
14	Structural, Civil, and Pipe Design & CAD	Technical Report Writing	Trigonometry	Physical Science	Sociology	Renewable Energy Sources & Int Air Transport Act	3 D Modeling and CAD	

<b>KEY</b>	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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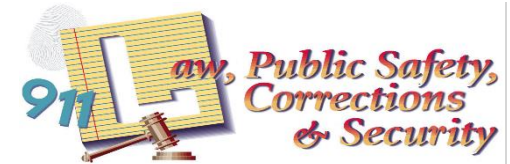
## Corrections, Security and Law Enforcement

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Introduction to Law, Public Safety and Security	0.5	✓	✓	✓	✓	None
Accounting 1	1.0	✓	✓	✓	✓	None
Business Economics	1.0		✓	✓	✓	None
Business Law	0.5		✓	✓	✓	None
Law and Order (Youth Court)	1.0		✓	✓	✓	Instructor Approval
Law Enforcement 1	1.0		✓	✓	✓	Intro. to LPSS
Law Enforcement 2	1.0			✓	✓	Law Enforcement 1
Law, Public Safety and Security Internship	0.5				✓	Instructor Approval

Name: \_\_\_\_\_

School: Derby High School

Derby High School- LPSS: Corrections, Security, Law, & Law Enforcement Services



Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts Determined by Student Need	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Reality 101 Intro to LPSS</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Attorney, Correctional Officer, Jailer, Probation Officer, Parole Officer, Private Security, Sheriff Deputy, Police Officer, State Trooper</b>
10	<u>Law Enforcement I</u>	English 10	Geometry	Biology	World History	Business Essentials		
11	<u>Law Enforcement I</u>	English 11	3rd Math Course rec: Algebra II	Chemistry	US History	OPEN ELECTIVE		

College Placement Assessments-Academic/Career Advisement Provided

12	<u>Youth Court</u>	English 12	4th Math Course rec: College Algebra	Physics	US Government Social Studies Elective	OPEN ELECTIVE		
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13		English Comp. 1	College Algebra	None	Speech/Psychology	Public Speaking or Interpersonal Communication		
14		Technical Report Writing	Trigonometry		Sociology	Humanities		

KEY	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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## Engineering and Applied Mathematics

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Introduction to Engineering Design	1.0	✓	✓	✓	✓	None
Production Blueprint Reading	0.5	✓	✓	✓	✓	None
Principles of Engineering	1.0		✓	✓	✓	Intro. to Engineering
Advanced Blueprint Reading	0.5		✓	✓	✓	Production Blueprint Reading
Robotics	1.0		✓	✓	✓	Algebra I
Digital Electronics	1.0		✓	✓	✓	Intro. to Engineering and Principles of Engineering
Computer Integrated Manufacturing	1.0		✓	✓	✓	Intro. to Engineering and Principles of Engineering
Aerospace Engineering	1.0			✓	✓	Intro. to Engineering and Principles of Engineering or Instructor Approval
Civil Engineering and Architecture	1.0			✓	✓	Intro. to Engineering and Principles of Engineering
Engineering Design and Development	1.0			✓	✓	Any three PLTW Engineering Courses

Name: \_\_\_\_\_

School: Derby High School

STEM: Derby High School- Engineering & Technology: Pre-Engineering

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Introduction to Engineering Design</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Aeronautical Engineer, Aerospace Engineer, Application Engineer, Technical Support Engineer, Biotechnology Engineer, Civil Engineer, Construction Engineer, Electrical Engineer, Mechanical Engineer, Game Programmer,</b>
10	<u>Principles of Engineering Computer Integrated Manufacturing</u>	English 10	Geometry	Biology	World History	Into to Industrial Technology	Aerospace Engineering, <b>Civil Engineering &amp; Architecture</b> , Computer Integrated Manufacturing	
11	<u>Aerospace Engineering Digital Electronics Civil Engineering &amp; Architecture</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Robotics	<b>French</b> , Spanish,	
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Engineering Design &amp; Development</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	Drafting/CAD	<b>German</b>	<b>Packaging Engineer, Structural Engineer</b>
13		English Comp. 1 & 2	College Algebra		Speech/Psychology		Public Speaking or Interpersonal Communication	
14		Technical Report Writing	Trigonometry	Physical Science	Sociology		Humanities	

<b>KEY</b>	<b>Career and College Readiness Courses</b>
	<b>Courses Required For Graduation</b>
	<b>Suggested Courses To Complement Pathway</b>
	<b>Open Electives or Regents</b>
	<b>College Articulated Courses</b>



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## Family and Consumer Sciences

<b>Course Offerings by Grade Level</b>						
<b>Course</b>	<b>Credit</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>Prerequisite</b>
Reality 101	1.0	✓				None
Culinary Essentials	0.5	✓	✓	✓	✓	None
Family Studies	0.5		✓	✓	✓	None
Human Growth and Development	0.5		✓	✓	✓	None
Community & Career Connections	1.0			✓	✓	2 Credits in FACS pathway



Name: \_\_\_\_\_

School: Derby High School

Derby High School- Human Services: Family and Consumer Services

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts Determined by Student Need	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Career and Life Planning (Reality 101)</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Adult Day Care Worker, Community Service Director, Coordinator of Volunteers, Director of Activities, Emergency and Relief Worker, Grief Counselor, Social And Human Services Assistant, Social Services Worker</b>
10	<u>Culinary Essentials Family Studies</u>	English 10	Geometry	Biology	World History	OPEN ELECTIVE	World Language Elective, <b>Enhanced Word Power</b> , Psychology, <b>Sociology</b> , Business Econ., <b>German</b> , Spanish,	
11	<u>Human Growth &amp; Development</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	OPEN ELECTIVE		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Career Connections Community Connections</u>	English 12	4th Math Course Rec: College Algebra	Physics	US Government Social Studies Elective	OPEN ELECTIVE	<b>French</b>	<b>School Counselor, Clinical and Counseling Psychologist</b>
13		English Comp. 1 & 2	College Algebra	None	Speech/Psychology	Public Speaking <b>or</b> Interpersonal Communication		
14		Technical Writing	Trigonometry	Physical Science	Sociology	Humanities		

<b>KEY</b>	<b>Career and College Readiness Courses</b>
	<b>Courses Required For Graduation</b>
	<b>Suggested Courses To Complement Pathway</b>
	<b>Open Electives or Regents</b>
	<b>College Articulated Courses</b>



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## Health Sciences

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Health Science 1	1.0	✓	✓	✓	✓	None
Human Body Systems	1.0		✓	✓	✓	Principles of Biomedical Science
Sports Medicine 1	1.0		✓	✓	✓	None
Sports Medicine 2	1.0		✓	✓	✓	Sports Medicine 1
Physical Therapy	1.0			✓	✓	Health Science 1 and Sports Med. 1
Health Careers	1.0			✓	✓	Health Science 1 and Sports Med. 1

Name: \_\_\_\_\_

School: Derby High School



IT: Derby High School- Health Science

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Health Science</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Certified Nursing Aide, Dental Assistant/Hygienist, Dental Lab Technician, Licensed Practical Nurse, Surgical Technician, Athletic Trainer, Nurse Practitioner, Exercise Physiologist, Psychologist, Social Worker</b>
10	<u>Sports Medicine 1</u>	English 10	Geometry	Biology	World History	Intro to BioMedical Sciences	Principles of Biomedical Science, <b>Medical Interventions</b> , BioMedical Innovations, <b>Spanish</b> , German,	
11	<u>Sports Medicine 2</u> <u>Physical Therapy</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Human Body Systems		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Health Careers</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	CNA (Dual Credit)	<b>French</b>	<b>Speech Language Pathologist, Physician's Assistant</b>
		English Comp. 1 & 2	College Algebra	None	Speech/Psychology			
		Technical Writing	Trigonometry	Physical Science	Sociology			

<b>KEY</b>	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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# Manufacturing

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Introduction to Industrial Technology	0.5	✓	✓	✓	✓	None
Production Blueprint Reading	0.5	✓	✓	✓	✓	None
Advanced Blueprint Reading	0.5		✓	✓	✓	Production Blueprint Reading
Drafting/CAD	1.0		✓	✓	✓	Intro. to Industrial Technology
Computer Integrated Manufacturing	1.0		✓	✓	✓	None
Mass Production I	1.0		✓	✓	✓	None
Mass Production II	1.0			✓	✓	Mass Production I
Advanced Drafting/CAD	1.0			✓	✓	Drafting/CAD

Name: \_\_\_\_\_

School: Derby High School



Derby High School- Manufacturing: Production

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<b><u>Introduction to Industrial Technology</u></b>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	Design Engineer, Electrical and Electronic Technician and Technologist, Assembler, Electronics Engineer, Industrial Engineer, Milling Machine Setter and Set-Up Operator, Precision Layout Worker,
10	<b><u>Drafting/CAD Mass Production</u></b>	English 10	Geometry	Biology	World History	Intro to Computer programming	Computer Programming, Web Page Design, Intro to Engineering Design, Digital Life, Principals of Engineering	
11	<b><u>Adv. Drafting/CAD CAM</u></b>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Drawing/ Painting		
College Placement Assessments-Academic/Career Advisement Provided								
12	<b><u>Mass Production II</u></b>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	OPEN ELECTIVE	French, Spanish, German	
13	Two Dimensional Design & Commercial Building Design and CAD	English Comp. 1 and Public Speaking	College Algebra	Gen. Physics (PH 143)		Networking Basics and Engineering Graphics 1	AutoCAD Basics (EN 107) and 3 D Modeling and CAD	Engineering Concepts and Residential Design and CAD 1
14	Engineering Graphics II (EN 102) and Internship (EN 193)	Technical Writing	Trigonometry	None	Ethics (PL 291)	Renewable Energy Sources & Int Air Transport Act	Intro To Surveying and Structural, Civil and Pipe Design & CAD	Related Elective

<b>KEY</b>	<b>Career and College Readiness Courses</b>
	<b>Courses Required For Graduation</b>
	<b>Suggested Courses To Complement Pathway</b>
	<b>Open Electives or Regents</b>
	<b>College Articulated Courses</b>



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## Marketing Pathway

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Business Essentials	0.5	✓	✓	✓	✓	None
Accounting 1	1.0	✓	✓	✓	✓	None
Principles of Marketing	1.0		✓	✓	✓	None
Graphic Design	1.0		✓	✓	✓	None
Entrepreneurship	0.5		✓	✓	✓	None
Business Economics	1.0		✓	✓	✓	None
Sports/Entertainment Marketing	0.5		✓	✓	✓	Business Essentials
Web Page Design	1.0		✓	✓	✓	None
Marketing Comprehensive	1.0		✓	✓	✓	Business Essentials
Marketing Management	1.0			✓	✓	Marketing Comprehensive
Marketing Research	1.0				✓	Marketing Management

Name: \_\_\_\_\_

School: Derby High School



Derby High School- Marketing

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<b><u>Business Essentials (.5 cr)</u></b>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Chief Executive Officer, Entrepreneur, Franchisee, Small Business Owner, Account Executive, Broker, Regional Sales Manager, Sales Executive, Director of Development, Strategic Planner</b>
10	<b><u>Principles of Marketing</u></b>	English 10	Geometry	Biology	World History	Accounting, Entrepreneurship, Economics	Marketing Management, <b>Accounting 1 and 2</b> , Business Law, <b>Marketing Research</b> , Business Economics	
11	<b><u>Marketing Management Marketing Research Entrepreneurship (.5 cr)</u></b>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Marketing Management		
College Placement Assessments-Academic/Career Advisement Provided								
12	<b><u>Marketing Workplace Experience</u></b>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	Investing, Banking & Finance, Sports & Entertainment Marketing	French, <b>German</b> , Spanish	
13	Principles of Advertising and Business Law	English Comp. 1 & 2	College Algebra	None	Speech/Psychology	Public Speaking or Interpersonal Communication	Introduction to Marketing and Merchandising	
14	Accounting 1 and 2	Technical Writing	Trigonometry	Physical Science	Sociology	Humanities	Merchandising and Principles of Management	

<b>KEY</b>	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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## Programming and Software Development Pathway

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Introduction to Programming	0.5	✓	✓	✓	✓	None
Computer Science Essentials	1.0	✓	✓	✓	✓	None
Creative and Practical Computing	1.0		✓	✓	✓	Computer Applications or another Web and Digital Communications Course
AP Computer Science Principles	1.0		✓	✓	✓	Computer Science Essentials or Instructor Approval



Name: \_\_\_\_\_

School: Derby High School

Derby High School- Information Technology: Programming & Software Development

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Introduction to Programming</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:  Web Page Design, German, French, Spanish	<b>Database Administrator, Technical Writer, Instructional Designer, Software Applications Architect, Operating Systems Designer/Engineer, Computer Programmer, Game Programmer, 3D Animator, Multimedia Producer</b>
10	<u>Computer Science Essentials</u>	English 10	Geometry	Biology	World History	Robotics		
11	<u>AP Computer Science Principles</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Any PLTW Engineering Courses		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>(TBD) Cybersecurity, IT</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	Any PLTW Engineering Courses		
13		English Comp. 1 & 2	College Algebra	None	Speech/Psychology	Public Speaking or Interpersonal Communication		
14		Technical Writing	Trigonometry	Physical Science	Sociology	Humanities		

<b>KEY</b>	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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## Teaching and Training

<b>Course Offerings by Grade Level</b>						
<b>Course</b>	<b>Credit</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>Prerequisite</b>
Human Growth and Development	0.5		✓	✓	✓	None
Reality 101	1.0	✓				None
Family Studies	0.5		✓	✓	✓	None
Teaching as a Career	1.0		✓	✓	✓	Reality 101
Teaching Observation	1.0			✓	✓	Teaching as a Career
Teaching Internship	1.0				✓	Teaching Observation
Career and Community Connections	1.0			✓	✓	2 Credits of FACS Pathway

Name: \_\_\_\_\_

School: Derby High School



Derby High School- Education: Teaching/Training

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts Determined by Student Need	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Career and Life Planning (Reality 101)</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science 1	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:	<b>Adult Day Care Worker, Community Service Director, Coordinator of Volunteers, Director of Activities, Emergency and Relief Worker, Grief Counselor, Social And Human Services Assistant, Social Services Worker</b>
10	<u>Family Studies, Teaching as a Career</u>	English 10	Geometry	Biology	World History	Accounting, Psychology	World Language Elective, <b>Enhanced Word Power</b> , Psychology, <b>Sociology</b> , Business Econ., <b>German</b> , Spanish,	
11	<u>Human Growth &amp; Development, Teaching Observation</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	OPEN ELECTIVE		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Teaching Internship</u>	English 12	4th Math Course Rec: College Algebra	Physics	US Government Social Studies Elective	OPEN ELECTIVE	<b>French</b>	<b>School Counselor, Clinical and Counseling Psychologist</b>
13		English Comp. 1 & 2	College Algebra	None	Speech/Psychology	Public Speaking or Interpersonal Communication		
14		Technical Writing	Trigonometry	Physical Science	Sociology	Humanities		

<b>KEY</b>	Career and College Readiness Courses
	Courses Required For Graduation
	Suggested Courses To Complement Pathway
	Open Electives or Regents
	College Articulated Courses



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## Web & Digital Communications

Course Offerings by Grade Level						
Course	Credit	9	10	11	12	Prerequisite
Introduction to Programming	0.5	✓	✓	✓	✓	None
Computer Science Essentials	1.0	✓	✓	✓	✓	None
Industrial Graphics	1.0	✓	✓	✓	✓	None
Graphic Design	1.0		✓	✓	✓	None
Web Page Design	1.0		✓	✓	✓	None
Animation	1.0		✓	✓	✓	None
Creative and Practical Computing	1.0		✓	✓	✓	Computer Applications or another Web and Digital Communications Course

Name: \_\_\_\_\_

School: Derby High School

Derby High School- Information Technology: Programming & Software Development

Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

	Career and College Readiness Course	English/Language Arts	Math/Fine Arts	Science	Social Studies/PE	Open Electives or Regents Requirements	Recommended Electives	Sample Occupations Related to Career Pathway
9	<u>Graphic Design, Digital Life</u>	English 9	Algebra 1	Physical Science (1 credit)	Health Science	Fine Arts (1 credit) can be taken at anytime	Choose from the following list to fill these slots:  Web Page Design, German, French, Spanish	<b>Multimedia artist and animator, Web developer, computer support specialist, network technician, PC Support Specialist, Public Relations specialist, Instructional Designer and Technologist</b>
10	<u>Industrial Graphics, Computer Science Essentials</u>	English 10	Geometry	Biology	World History	Robotics		
11	<u>Web Page Design, Creative and Practical Computing</u>	English 11	3rd Math Course Rec: Algebra II	Chemistry	US History	Computer Graphics		
College Placement Assessments-Academic/Career Advisement Provided								
12	<u>Derby Publications</u>	English 12	4th Math Course Rec: AP Stats or College Algebra	Physics	US Government Social Studies Elective	Animation		
13		English Comp. 1 & 2	College Algebra	None	Speech/Psychology	Public Speaking or Interpersonal Communication		
14		Technical Writing	Trigonometry	Physical Science	Sociology	Humanities		
	<b>KEY</b>	<b>Career and College Readiness Courses</b>						
		<b>Courses Required For Graduation</b>						
		<b>Suggested Courses To Complement Pathway</b>						
		<b>Open Electives or Regents</b>						

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