Lodi High School
Course Catalog 2019-2020

Dear Students and Parents,

The foundation for a solid educational plan is a well thought out, challenging, academic program that reflects the students' interests and abilities. This type of foundation helps students prepare for all types of opportunities during and after high school.

This Course Catalog provides a complete overview of the courses that will be offered during the 2019-2020 school year. The catalog should be reviewed carefully so that students select a program of study that will help them reach their goals after high school. With this in mind, no one academic year should be planned in isolation. Each student should develop a four-year plan based on their post-secondary goals, their interests, and the availability of courses (some courses are only offered every other year). Students also need to take time to pick alternative courses, as there may not be room in every course selected and other as courses with low enrollment may be canceled due to scheduling and budget constraints. Students will continue to be placed in their core classes (English, science, social studies, and math) based on their skill level. Placement will happen for all freshmen, sophomores, and juniors in each of the core areas. Please take time to read the Align by Design section in this Course Catalog to get a better feel for this process.

Even with the placement of students in the core academic areas, parents and students need to approach the course selection and scheduling process as vitally important to the future of the student. Only by challenging themselves will students fully benefit from the offerings at Lodi High School and ultimately prepare themselves for life after high school. It is our hope that parents take an active role in ensuring that their child is taking on a challenging course load throughout their four years of high school.

Please contact the school counselor if you have any specific questions regarding this catalog. We will be available to assist you and your child often throughout the scheduling process and have set aside the following evening for parents new to the high school to come in and touch base with the counselors and teachers to learn more about each of the classes and this entire process:

8th Grade Course and Scheduling Information Night
Monday, January 7, 2019 (6:00 PM)
Location: Performing Arts Center

We appreciate you working together with us to create opportunities for success for every student, in every classroom, every day!!

Sincerely,

Vince Breunig
LHS Principal

The mission of the School District of Lodi, a strong partnership of families, community and educators, is to inspire students to become lifelong learners who seek new understanding and skill to assume the role of responsible and contributing members of society by creating a world-class, innovative learning environment that stimulates academic and personal excellence.

It is the policy of the School District of Lodi, pursuant to s.118.13, Wisconsin Statutes, and PI 9, that no person, on the basis of sex, race, religion, national origin, color, ancestry, creed, pregnancy, marital or parental status, sexual orientation or physical, cognitive, emotional, or learning disability, or handicap may be denied admission to any school in this district, or be denied participation in, be denied the benefits of, or be discriminated against in any curricular, extra-curricular, pupil services, recreational or other program.

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College Readiness Standards

ALIGN BY DESIGN

Lodi High School is engaged in a curriculum initiative called Align by Design. To adhere to this framework, the high school has aligned all of its core academic courses (social studies, science, math, and English) to the College Readiness Standards. These standards, also known as the Work Place Readiness Standards, were developed by the College Board to help students and schools define the skills that graduates need to be successful in the world after high school (a copy of the College Readiness Standards are included at the end of this course catalog). These are the same skills that are measured on the ASPIRE test that all 7th, 8th, 9th and 10th graders take, and the ACT. The goal of realigning our curriculum to these standards and our commitment to the Align by Design framework is to increase the level of work skills and college readiness of the students from Lodi.

The following are the principles behind the Align by Design model:

1. All students take a rigorous common core course of studies.
2. The student is at the center of the instructional design.
3. The curriculum is content-based and interdisciplinary.
4. Skill development is given cross-curricular emphasis to ensure students' readiness.
5. A focus is on the development of student's critical thinking skills through an emphasis on teaching conflicting interpretations.
6. The commitment is to the civic purpose of education.
7. The high school is operated by a collaborative staff, focused on student achievement, with decisions informed by data.
8. The high school is a learning community: one in which students learn as a community, and one in which students learn about community.

To achieve our goals and follow the framework of Align by Design, all students are placed in their core academic classes based on their level of skill as assessed through several different data points, including but not limited to their ASPIRE scores, MAP scores, I-Ready scores, their classroom performance, and their performance on the State Assessments. As you explore the course catalog, you will notice that there are two levels of courses that freshmen, sophomores, and juniors can be placed. These classes will cover the same content in each level, but the skills which are focused on will be different. This is an important concept as it allows students to move to a different level of class if need be and ensures that the same content is covered by the end of the school year in these classes. Incoming freshmen will also have interdisciplinary units, especially between their social studies and English classes. One of the items you will see as you review the core academic classes is the title of the classes in science, social studies, and English. This is what the following titles mean:

- Plain course title—this course is designed for students whose skills are at benchmark for college readiness.
- Honors or Advanced Placement—this course is designed for students whose skills are above benchmark for college readiness.

There are also associated tables by each of these classes showing what College Readiness Standards the class will be focusing on throughout the course of the year. These tables show which standards and skills will be considered review for that class (class will spend 25% of their time on these skills), which skills will be the focus of the class (class will spend 50% of their time on these skills), and which skills will be an extension for the class (class will spend 25% of their time on these skills). The idea for each class is to spend 25% of the time reviewing and strengthening skills that students already have, 50% of the time working on skills they are developing, and 25% of the time working on skills that are above their level to push them as students. The concept is to be constantly challenging students to achieve at a higher level as they continue through their high school careers. The vision statement at Lodi High School is Creating Opportunities for Success… Every Student… Every Classroom… Every Day! Our work on aligning our curriculum to the College Readiness Standards and the Align by Design framework embodies that vision for each of our students. It is our hope that students and their families will take advantage of these new opportunities that are being offered at Lodi High School.

With this model, students will have the opportunity to take more rigorous course work which will help them prepare for life after high school regardless if they planning on going straight into the work force, into the military, into the technical school system, or to a four-year college.

REGISTRATION PROCEDURE

1. Students will have access to the 2019-2020 course catalog on the high school counseling website.
2. Students should look through the course catalog with a parent/guardian to get ideas of courses they wish to take, keeping in mind that it is important to consider graduation requirements and course pre-requisites. In addition, students are encouraged to consider the classes they plan to take throughout their high school years when planning next year's schedule.
3. Students will schedule their class requests online through Infinite Campus during English classes. Please consider choices carefully, as they may become your scheduled courses.
4. Teachers will review preliminary class lists to determine the appropriateness of student choices and may recommend placement changes as needed. If students have questions on the appropriateness/difficulty of a class, please consult with your teachers and/or counselor.
5. Students who will be in grades 10-12 will meet individually with a counselor to review their schedules in late spring. Students will receive a copy of their schedule prior to the start of the school year and may request schedule changes before the first day of school. However, there are no guarantees that all requests for schedule changes can be granted.

GRADUATION REQUIREMENTS

Social Studies – 4 credits
- 1.0 cr. Human Geography
- 1.0 cr. World History
- 1.0 cr. U.S. History
- 0.5 cr. Govt. and Social Issues
- 0.5 cr. Social Studies Elective

English – 4 credits
- 1.0 cr. Literature & Composition
- 1.0 cr. World Literature
- 1.0 cr. American Literature or AP English Language & Composition
- 0.5 cr. Oral Communication
- 0.5 cr. Senior English Course

Science – 3 credits
- 1.0 cr. Science 9
- 1.0 cr. Biology
- 1.0 cr. Physical Science (at least 0.5 credit must be a Chemistry class)

Math – 3 credits
- 3.0 credits math

Physical Education – 1.5 credits

Health – 0.5 credit (in high school)

Career & Technical Education – 0.5 credit

Fine Arts – 0.5 credit

Financial Literacy – 0.5 credit (beginning with Class of 2021)

STEAM – 0.5 credit (beginning with class of 2022)

Electives – 6.0 credits

Total Credits: 24

STUDENT ACADEMIC POLICIES AND PROCEDURES

THE POLICY FOR REPEATING CLASSES

Students who receive an F for their first or second semester grade in a required class have to repeat the semester they failed. If, for instance, a 9th grader fails the first semester of English 9 and passes the second semester, he/she will be required to repeat only the first semester of that class. However, if the first half of a class is a prerequisite for the second half (e.g., math classes) a student who fails the first half will need to retake and pass the first half before taking the second half of the class. Students who fail the same class twice will need to make up the credit through the Lodi High School's credit recovery courses.

SCHEDULE CHANGE POLICY

We recognize that circumstances change, and we may allow some revisions in the schedule. Please see a counselor if you are interested in requesting a schedule change. All schedule changes will be subject to availability and class size. A change may not be allowed if it will reduce a class size to less than 10 students. Requests should be completed **one week before the semester begins**.

NOTE: You must go to the class listed on your schedule *until* this process is *completed*.

GRADING SYSTEM & SCALE

A+ = 100	**4.000**	B+ = 88-89	**3.333**	C+ = 78-79	**2.333**	D+ = 68-69	**1.333**	F < 60 **0.000**
A = 93-99	**4.000**	B = 83-87	**3.000**	C = 73-77	**2.000**	D = 63-67	**1.000**	
A- = 90-92	**3.667**	B- = 80-82	**2.667**	C- = 70-72	**1.667**	D- = 60-62	**0.667**	

An "E" would be the same as a "D"; **1.0**
A "P" grade earns credit but does not affect GPA.

ACADEMIC RECOGNITION

Honor Roll

The Honor Roll is based on grade point average covering all courses for each semester. It is published twice a year. Semester grades lower than a C in any subject will disqualify a student from honor roll recognition at any level. A three-tier system will be used as follows:

High Honors	4.000
Honors	3.500-3.999
Academic Honorable Achievement	3.000-3.499

Laude System

The purpose of the Laude System is to recognize students for the rigor of their academic program as well as their success in that program.

Laude Score

A student's Laude Score will be determined by multiplying 1) the student's cumulative GPA after first semester senior year by 2) the number of Laude Points earned in recognized courses completed while in high school.

Award Levels

There are three levels of awards

- Summa Cum Laude
- Magna Cum Laude
- Cum Laude

Laude Score ranges for each Award Level

60 and above	Summa Cum Laude
45-59.999	Magna Cum Laude
30-44.999	Cum Laude
29.999 and below	No laude recognition

Cum Laude Recognized Courses

The courses listed below are used in the calculation for Laude Points. Students only earn Laude Points for courses that they complete with a passing grade. AP courses count as 1.0 point each. Honors courses counts as 0.5 point each. For other courses, semester-long courses count as 0.5 point each and year-long courses count as 1.0 point each. Other courses may be considered for recognition through an approval process.

English

Honors Lit & Comp (0.5)
Honors World Lit & Comp (0.5)
AP English Language (1.0)
AP English Literature (1.0)

Science

Honors Science 9 (0.5)
Honors Biology (0.5)
Honors Chemistry 1 (0.5)
AP Biology (1.0)
AP Environmental Science (1.0)
Chemistry 2 (1.0)
Physics (1.0)

Math

Accelerated in Integrated Math 1, 2, or 3 (0.5)
Integrated Math 4 (1.0)
AP Calculus AB (1.0)

Social Studies

AP Human Geography (1.0)
AP World History (1.0)
AP US History (1.0)
AP Psychology (1.0)

Foreign Language

Spanish 3 (1.0)
Spanish 4 (1.0)
AP Spanish (1.0)

Fine Arts

6 total semesters of Art courses (1.0) ***– a capstone project is also required***
7 total semesters of Music courses (0.5) ***– a capstone project is also required***
8 total semesters of Music courses (1.0) ***– a capstone project is also required***

Career & Technical Education

Accounting 2 (0.5)
Chefs (0.5)
Health, Safety & Nutrition for the Young Child (0.5)
Advanced CAD (0.5)
Manufacturing 2 (0.5)
Biotechnology (0.5) ***– cannot be counted toward total Ag courses***
4 total Ag courses (0.5) ***– a capstone project is also required***
8 total Ag courses (1.0) ***– a capstone project is also required***
Certification in Youth Apprenticeship (0.5)

Capstone Project Examples

Music: Class A Solo at Solo & Ensemble
Art: Participation in Visual Arts Classic or Capitol Conference Art Show
Ag (4 Ag courses): Application for State FFA Degree
Ag (8 Ag courses): Application for National FFA Degree

National Honor Society

Gold cords are worn at graduation by seniors who have been inducted into the Academician Chapter of National Honor Society.

SCHOOL COUNSELING

Lodi's counselors offer individual counseling and classroom guidance to all students. Counselors are trained to help students satisfy students' personal, social, academic and career growth needs. Counselors offer personal and social problem counseling, as well as assistance in educational and career planning. Counselors also hold individual planning meetings for students in the fall of 11th grade.

Postsecondary Options

Start College Now Program

The Start College Now Program permits any 11th or 12th grade student to attend and earn credit at a Wisconsin technical college for the purpose of taking one or more non-sectarian courses for credit and possibly for high school credit. The board of education shall determine whether the course(s) satisfies high school graduation requirements under state law, if the course(s) is comparable to one offered in the district and if any high school credits will be awarded to the student. Students shall notify the counselor and building principal no later than January 25 if the pupil intends to enroll in the fall semester, and no later than August 25 if enrolling in the spring semester in order to comply with board approval timelines. The board will pay for up to 18 postsecondary semester credits per pupil. If the pupil receives a failing grade in a course, or fails to complete a course for which the school board has already made payment, the pupil's parent/guardian or the pupil if he/she is an adult, shall reimburse the school board the amount paid on the pupil's behalf. If the school board is not reimbursed as requested, the pupil is made ineligible to participate any further in the program.

Early College Credit Program

The Early College Credit Program permits any 9-12 grade student to attend and earn credit at a Wisconsin institution of higher education for the purpose of taking one or more non-sectarian courses for credit and possibly for high school credit. For the purposes of this program, an "institution of higher education" includes an institution within the University of Wisconsin System, a tribally controlled college, and a private, nonprofit institution of higher education located in Wisconsin.

The board of education shall determine whether the course(s) satisfies high school graduation requirements under state law, if the course(s) is comparable to one offered in the district and if any high school credits will be awarded to the student. Students shall notify the counselor and building principal no later than January 25 if the pupil intends to enroll in the summer of fall semester, and no later than August 25 if enrolling in the spring semester in order to comply with board approval timelines. The board will pay for up to 18 postsecondary semester credits per pupil. If the pupil receives a failing grade in a course, or fails to complete a course for which the school board has already made payment, the pupil's parent/guardian or the pupil if he/she is an adult, shall reimburse the school board the amount paid on the pupil's behalf. If the school board is not reimbursed as requested, the pupil is made ineligible to participate any further in the program.

LEADERSHIP OPPORTUNITY

Leadership Council

Our Leadership Council is committed to the health and wellness of students. The group participates in a variety of community service activities for students and for the larger community. There is a Student Leadership Workshop during August for students in grades 9-12. All students are eligible to attend this workshop and details concerning this event are advertised during the month of May. Selection is based on a first come first serve basis. Topics include developing leadership skills, exploring volunteer opportunities, creating a positive school environment, making appropriate decisions, and establishing the year’s goals for Lodi High School.

ENGLISH

English Department Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
Elements of Literature & Composition	1 Year	1	X			
World Literature & Composition	1 Year	1		X		
American Literature & Composition	1 Year	1			X	
AP English Language & Composition	1 Year	1			X	
Oral Communication	1 Semester	0.5		X	X	X
Shakespeare	1 Semester	0.5			X	X
Intro. To Reading & Writing Strategies (English 12)	1 Year	1				X
AP English Literature & Composition	1 Year	1				X
Writing for Publication	1 Year	1	X	X	X	X
Creative Writing	1 Semester	0.5		X	X	X
Advanced Creative Writing	1 Semester	0.5		X	X	X

The following English courses are designed to help students develop their communication skills and appreciation of great literature of all types. All courses aim to develop students' writing, reading, speaking, listening, and thinking skills. While courses may differ in focus, all courses will be academically demanding of students at their levels.

GRADE 9

All freshmen will be placed into Elements of Lit & Comp or Honors Elements of Lit & Comp.

Elements of Literature & Composition

This course introduces the fundamentals of effective reading and writing skills including the style, structure, and language appropriate for various purposes and audiences. Students will be actively involved in research methodology, writing, and speaking. As part of the course work, students will review grammar and usage, study vocabulary, read and analyze selected fiction and nonfiction texts, develop critical thinking and writing skills, and utilize technology to develop multimedia projects and presentations.
Credit: 1.0 English

*Honors Elements of Literature & Composition

This course is designed for freshman students whose skills are above benchmark for college readiness. It offers a more in-depth study of the literature and requires students to write and speak at advanced levels.
Note: A summer assignment is required for this course.
Credit: 1.0 English

Principles of Literacy 9

This is a course designed to raise student achievement in reading comprehension skills. Individualized instruction targets reading skills to support your learning in all content areas. Other literacy-building activities include independent silent reading, oral reading fluency, and review of challenging vocabulary from your core area classes. Students will be enrolled concurrently in the Elements of Literature and Composition class.
Prerequisite: Placement Only
Credit: 1.0 Elective

GRADE 10

All sophomores will be placed into World Lit & Comp or Honors World Lit & Comp.

World Literature & Composition

This course introduces students to world literature through the study of its traditions, techniques, and genres. The course emphasizes extensive instruction in the writing process, as students compose narrative, informative, and persuasive pieces dealing with literature and other topics. Grammar is taught within the context of the writing. Vocabulary development builds on the program started at the freshman level.
Credit: 1.0 English

*Honors World Literature & Composition

This course is designed for sophomore students whose skills are above benchmark for college readiness. It offers a more in-depth study of the literature and requires students to write and speak at advanced levels.
Note: A summer assignment is required for this course.
Credit: 1.0 English

Principles of Literacy 10

This is a course designed to raise student achievement in reading comprehension skills. Individualized instruction targets reading skills to support your learning in all content areas. Other literacy-building activities include independent silent reading, oral reading fluency, and review of challenging vocabulary from your core area classes.
Students will be enrolled concurrently in the World Literature and Composition class.
Prerequisite: Placement Only
Credit: 1.0 Elective

GRADE 11

All juniors will be placed into either American English or AP English Language. Juniors may choose additional English courses (see "Senior English Courses") if they wish.

American Literature & Composition

This course offers a historical survey of all genres of American literature. Students will study literary eras, themes, and major authors. They will practice narrative, informative, and persuasive writing as well as research college/career options. Vocabulary development will build on the program started at the freshman level.
Credit: 1.0 English

*AP English Language & Composition

This is a course for advanced English students able and willing to do college-level work in writing and rhetorical analysis. The course focuses on complex nonfiction American texts from a variety of historical periods and disciplines. Students learn to read critically, express themselves clearly, argue effectively, and address deceptive use of language. While taking the AP English Language and Composition exam is not a requirement for students in this course, students will dedicate some time preparing for it. Students who successfully complete the exam may earn college credit.
Note: A summer assignment is required for this course.
Credit: 1.0 English

SENIOR ENGLISH COURSES

All Lodi High School students must take Oral Communication and at least one additional Senior English Course for 0.5 English credit.

Oral Communication

Oral Communication is an introductory course in speech composition. Its purpose is to improve one's skills in writing and presenting effective public speeches. Students will prepare a variety of formal speech presentations through research and writing and present their work in the form of persuasive and informative speeches. Students will take Oral Communication during their junior or senior year and will be expected to use the skills acquired in previously taken English classes.

Prerequisite: Sophomore Standing

Credit: 0.5 English, meets Oral Communication graduation requirement

Shakespeare

This course provides students with the opportunity to study Shakespeare's plays and sonnets. Students will study a variety of Shakespeare's tragedies, comedies, romances, and histories in addition to selected sonnets. Students will present their knowledge and ideas through various formal and informal writings. The class will take field trips to see live productions of Shakespeare's plays. The first play studied in the fall term will be dictated by what American Players Theatre offers that season.

Prerequisite: Junior Standing

Credit: 0.5 English

Introduction to Reading & Writing Strategies (Also known as English 12)

This course is a combination of two Madison College courses. This course teaches students skills needed to approach, navigate, and comprehend textbooks as well as the other college-level readings (essays, articles, arguments, documents). The course also prepares students in writing skills needed in most college level classes. Sections of the coursework are theme-oriented and the coursework builds to a final 5-7 page research-based, thesis-driven essay.

Students who attain a grade of C or higher earn 6 elective credits at Madison College.

Prerequisite: Senior Standing

Credit: 1.0 English

*AP English Literature & Composition

This is a course for students with advanced skills. It is intended to prepare students for the AP English Literature and Composition Exam in May. Students will study British and American literature, including poetry, prose, and drama and literary criticism. It is a reading and writing intensive course with a focus on literary analysis. Sample tests will be administered throughout the course.

Note: A summer assignment is required for this course.

Prerequisite: Senior Standing

Credit: 1.0 English

ELECTIVE COURSES

(Courses below do NOT fulfill the English graduation requirement)

Writing for Publication

This year-long course will introduce students to journalism by producing this year's edition of the Yearbook as well as regular editions of a school newspaper, with the potential for adding digital elements and broadcast announcements. This course teaches all aspects of yearbook production by having the students create the annual. Students learn how to solicit for advertising support as well as page design and layout. In addition, the following journalistic skills will be taught and employed: interviewing; reporting; copy, headline, and caption writing; proofreading; editing; and advertising design. Part of the course will focus on editing and proofreading stories for publication in the school newspaper or yearbook. Students will also learn about the historical perspective of the American press and the legal and social responsibilities that come with the operations of

school publications. Credit earned in this course will not apply toward the number of required in English core curriculum credits. However, the credit does apply toward graduation.
Prerequisite: Sophomore Standing; Freshmen may enroll with teacher recommendation
Credit: 1.0 Elective Credit

Creative Writing
This course will provide opportunities for enhancing students' talents in writing. Students will share their writing in a workshop format, promoting growth in creative writing skills. Students will write from various genres such as short story, narratives, poetry, fiction, reflection, myths, and plays. Students should be receptive to experimenting with a variety of techniques and subjects. The focus will be on the writing process, revision skills, and literary techniques to improve writing.
Prerequisite: Sophomore Standing
Credit: 0.5 Elective Credit

Advanced Creative Writing
Advanced Creative Writing will offer a forum for students to explore writing skills introduced in Creative Writing. Students will create a portfolio of writing that explores science fiction, historical fiction, literary fiction, and humor/satire. Focus will be on the writing process, revision skills, and literary techniques to improve writing. Additionally, this class will produce a literary magazine that contains submissions from the student body. Much of the class is based on workshop-style instruction. Units of Study include: Science Fiction, Historical Fiction, Literary Fiction, Suspense or Fantasy Fiction, Humor/Satire, Literary Magazine, Publication Design.
Prerequisite: Creative Writing
Credit: 0.5 Elective Credit

MATH

Transitional Math A
This course integrates the math topics of algebra, geometry, statistics/probability, and problem solving. Transitional Math A utilizes beginning level ACT College and Workplace Readiness Standards. This course will be run on a double block and run through the entire year. The goal of this course is to prepare students for college level mathematics.
Students are placed into this course.
Credit: 2.0

Review CRS	Focus CRS	Extend CRS
Basic Skills	13-15	16-19

Intermediate Math
This course integrates the math topics of algebra, geometry, statistics/probability, and problem solving. Intermediate Math utilizes beginning and intermediate level ACT College and Workplace Readiness Standards. The goal of this course is to prepare students for college level mathematics.
Students are placed into this course.
Credit: 1.0

Review CRS	Focus CRS	Extend CRS
13-15	16-19	20-23

Integrated Math 1

This course integrates the math topics of algebra, geometry, statistics/probability, and problem solving. Integrated Math 1 utilizes intermediate level ACT College and Workplace Readiness Standards. The goal of this course is to prepare students for college level mathematics.

Students are placed into this course.

Credit: 1.0

Review CRS	Focus CRS	Extend CRS
16-19	20-23	24-27

Integrated Math 2

This course integrates the math topics of algebra, geometry, statistics/probability, and problem solving. Integrated Math 2 utilizes both intermediate and advanced level ACT College and Workplace Readiness Standards. The goal of this course is to prepare students for college level mathematics.

Prerequisite: Integrated Math 1 or teacher recommendation

Credit: 1.0

Review CRS	Focus CRS	Extend CRS
20-23	24-27	28-32

Integrated Math 3

This course integrates the math topics of algebra, geometry, statistics/probability, and problem solving. Integrated Math 3 utilizes advanced level ACT College and Workplace Readiness Standards. The goal of this course is to prepare students for college level mathematics.

Prerequisite: B or better in Integrated Math 2 or teacher recommendation

Credit: 1.0

Review CRS	Focus CRS	Extend CRS
24-27	28-32	33-36

*Integrated Math 4

This course integrates the math topics of algebra, geometry, statistics/probability, and problem solving. Integrated Math 4 utilizes advanced level ACT College and Workplace Readiness Standards along with topics in Pre-Calculus. The goal of this course is to prepare students for college level mathematics.

Prerequisite: B or better in Integrated Math 3 or teacher recommendation

Credit: 1.0

Review CRS	Focus CRS	Extend CRS
28-32	33-36	Pre-Calc

Concepts and Analysis

This course is designed to strengthen the algebraic standards of the ACT College and Workplace Readiness Standards. Topics explored are linear models, systems of equations, inequalities, and quadratics. The goal of this course is to prepare students for college level mathematics.

Students who earn a C or better in this course are eligible to earn 3 credits to MATC.

Prerequisite: Integrated Math 2 or teacher recommendation

Credit: 1.0

Introduction to College Math

This course integrates math topics of algebra, geometry, statistics/probability, and problem solving. Introduction to College Mathematics utilizes advance level ACT College and Workplace Readiness Standards with a focus on algebraic concepts needed for success in a college classroom. The goals of this course is to prepare students for college level mathematics.

Prerequisite: Integrated Math 3

Credit: 1.0

Review CRS	Focus CRS	Extend CRS
24-27	28-32 33-36 for Algebra	33-36

*AP Calculus AB

This course follows the university level calculus AB curriculum. Topics that will be covered: Limits and continuity, the derivative and its application, integrals and its application, and infinite series. Students will have the option of taking the AP Calculus AB exam.

Prerequisite: Integrated Math 4 with a grade of B or better or teacher recommendation

Credit: 1.0

SCIENCE

Science Department Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
Science 9	1 Year	1	X			
Biology	1 Year	1		X		
Consumer Chemistry	1 Semester	0.5			X	X
Chemistry 1	1 Year	1			X	X
*AP Biology	1 Year	1			X	X
*AP Environmental Science	1 Year	1			X	X
Human Physiology	1 Year	1			X	X
*Physics	1 Year	1			X	X
*Chemistry 2	1 Year	1				X

The basic knowledge of the world in which we live is undergoing an explosive change as a direct result of the breakthrough in all scientific fields. Because of this, an understanding of the fundamental principles underlying modern science is essential for all students.

Science 9

This course is designed to introduce students to high school science. Semester 1 includes topics related to physical science including, but not limited to, velocity and acceleration, Newton's Laws of Motion, energy, and electromagnetism. During semester 2, an emphasis is placed on studying forces that shape our planet as well as current topics in earth science. Themes of the nature of science, as well as the practices of science and engineering, are intertwined into each are of study.

Credit: 1.0

Students will be placed into one of the following Science 9 classes:

	Review CRS	Focus CRS	Extend CRS
***Science 9*:** This class will focus on the fundamentals of data interpretation and experimental design. Students will focus on interpreting and analyzing complex data tables, comparing two or more complex experiments,	13-15	16-19	20-23

selecting information from more challenging scientific readings, and understanding and implementing the methods and tools used in a simple to moderately complex science experiment. Students will be introduced to evaluating scientific models and experimental results.			
***Honors Science 9*:** This class is an in-depth study of data analysis and experimental design. Students will focus on interpreting and analyzing complex data tables, selecting information from challenging scientific readings, and implementing the methods and tools used in a complex science experiment. Students will also focus on the fundamentals of evaluating scientific models and experimental results.	16-19	20-23	24-27

Biology

Biology is a science course designed to introduce students to the world of living things. The objective is to increase the student's understanding and appreciation of biological concepts from the molecular level through the ecosystem level. Topics of study include taxonomy and diversity, ecology, zoology, cell biology, genetics and DNA science.

Prerequisite: Science 9

Credit 1.0

Students will be placed into one of the following Biology classes:

	Review CRS	Focus CRS	Extend CRS
Biology: This class will focus on data analysis and experimental design. Students will focus on interpreting and analyzing complex data tables, selecting information from challenging scientific readings, and implementing the methods and tools used in a complex science experiment. Students will also focus on the fundamentals of evaluating scientific models and experimental results.	16-19	20-23	24-27
Honors Biology: This class will focus on data interpretation; such as, comparing complex data presentations and interpolating between data points. In addition, students will learn how to understand complex experiments and predict results. Furthermore, students will be able to determine if given information supports or contradicts a hypothesis or conclusion and identifying strengths and weaknesses within models.	20-23	24-27	28-32

Chemistry

Consumer Chemistry

Consumer Chemistry will provide the basic knowledge of chemistry and give students a chance to apply that knowledge to their daily lives. Students will look at common situations they will face as a consumer and use chemistry knowledge to help them understand the situation more fully. Situations may include the chemistry of cooking, water filtration, counting calories, applying salt to melt ice, reading product ingredient lists, and the dyeing of materials.

The emphasis in Consumer Chemistry will be on the ideas of chemistry with a much smaller emphasis on the mathematics involved. Students will explore the ideas of chemistry primarily using a hands-on approach.

Prerequisites: Science 9 and Biology

Credit: 0.5

Chemistry 1

Chemistry 1 is an introductory course to the fundamentals of chemistry. Topics include the process of science, laboratory procedures, solutions and solubility, chemical bonding, atomic structure, the periodic table, chemical reactions and reaction types, and acid/base chemistry.

This course is designed to help students prepare for any post-high school training in a science-related field, such as agriculture or medicine.

Prerequisites: Science 9, Biology, and Integrated Math 1
Credit: 1.0

	Review CRS	Focus CRS	Extend CRS
General Chemistry 1: This class will focus on data analysis and experimental design. Students will focus on interpreting and analyzing complex data tables, selecting information from challenging scientific readings, and implementing the methods and tools used in a complex science experiment. Students will also focus on the fundamentals of evaluating scientific models and experimental results.	20-23	24-27	28-32
Honors Chemistry 1: This class will focus on data interpretation; such as, comparing complex data presentations and interpolating between data points. In addition, students will learn how to understand complex experiments and predict results. Furthermore, students will be able to determine if given information supports or contradicts a hypothesis or conclusion and identifying strengths and weaknesses within models.	24-27	28-32	33-36

*Chemistry 2

Chemistry 2 is an advanced course in the fundamentals of chemistry. Topics include a continuation of the study and applications of the concepts from Chemistry 1, gas laws, energy and chemical reactions, and organic chemistry. Students will be highly involved in the selection and design of experiments studied in the course. Any student entering a science field after high school should strongly consider taking Chemistry 2.
Prerequisite: Chemistry 1
Credit: 1.0

Human Physiology

This is an advanced biological science course emphasizing the anatomy and physiology of the organ systems in humans. Topics include cells and tissues, bones, muscles, foods and nutrition, digestion, circulation, respiration, excretion, the endocrine gland system, and reproduction. Animal and organ dissections are part of the course. This course may be of special value to those interested in health or medically related fields. It is suggested for college bound students and those with a special interest in the human body.
Prerequisites: Science 9, Biology, and completion or concurrent enrollment in Chemistry 1
Credit: 1.0

*Physics

This is a course primarily designed for 11th and 12th grade students with a basic interest in science and a strong background in mathematics. The following units are taught: force, motion, work, heat energy, ac and dc electricity, physical optics and modern application of physics. Computer simulations and C.B.L.'s (Calculator Based Laboratories) are utilized in the areas of universal gravitation, motion, sound, temperature, and AC/DC electricity. It is designed for students intending to continue their education in college or technical school.
Prerequisites: A "C" or better in Integrated Math 3 or consent of instructor
Credit: 1.0

*AP Biology

The AP Biology course is designed to be the equivalent to a college introductory biology course usually taken by biology majors during their first year. AP Biology is a rigorous course covering advanced biology topics using a college level textbook and lab experiences. Some of the topics include biochemistry, cellular energetics, molecular genetics, biotechnology, evolution, plant/animal systems and ecology. Students have the option of taking the AP Biology exam at the end of the course. They may earn college credit depending upon their exam score and the post high school institution they attend.
Prerequisite: Completion of Chemistry 1
Credit: 1.0

*AP Environmental Science

The AP Environmental Science course is designed to be the equivalent of an introductory college course in environmental science. APES is a rigorous science course that stresses scientific principles and analysis including topics of Earth systems and resources, ecology, population dynamics, land and water use, energy resources, pollution and global change. A strong laboratory and field investigation component allows students to learn about the environment through firsthand observation. Experiences both in the lab and in the field provide students with important opportunities to test concepts and principles that are introduced in the classroom and gain an awareness of the importance of confounding variables that exist in the "real world." Students have the option of taking the APES exam at the end of the course.

Prerequisite: Completion of Biology

Credit: 1.0

Horticulture, Biotechnology and Food Science have been approved by DPI and accepted by the UW post-secondary institutions for science credit. The course will be recorded on the student's transcript with ES following the course title indicating it is equivalent to a half credit of science.

SOCIAL STUDIES

Social Studies Department Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
Human Geography	1 Year	1	X			
World History	1 Year	1		X		
United States History	1 Year	1			X	
Government & Social Issues	1 Semester	0.5				X
Personal & Social Responsibility	1 Semester	0.5			X	X
*The Fundamentals of Economics	1 Semester	0.5			X	X
*AP Psychology	1 Year	1				X
Cultural Geography of Southeast Asia	1 Semester	0.5			X	X
Popular Culture in American History	1 Semester	0.5				X
War & Conflict	1 Semester	0.5			X	X

This department aims to provide the students with the knowledge and intellectual skills and attitudes necessary for effective citizenship. The courses within the department increase the students' understanding of geography, history, economics, our legal system, politics, government, and human behavior. The department also develops and reinforces those skills necessary to gather, organize, evaluate and communicate information and ideas in order to work toward the resolution of human problems.

Human Geography

This course will explore the emotional, political and physical significance that the physical place has on our sense of identity, belonging and individuality as human beings. Students engaged in this course will explore how Geography impacts their everyday lives as well as the lives of people living elsewhere in the world. Some major units to be covered will be Religious Realms, Geography and Popular Culture,
The Geography of Languages, and Political Patterns.

Credit: 1.0

Students will be placed into one of the following Human Geography classes:

	Review CRS	Focus CRS	Extend CRS
Human Geography: This course is designed for students whose skills are at benchmark for college readiness.	16-19	20-23	24-27
****AP Human Geography***: This course is designed for students whose skills are above benchmark for college readiness. It offers a more in-depth study of human geography and will prepare students for the College Board Exam, which will allow students to earn college credit.	20-23	24-27	28-32

World History

The World History course is intended to provide a framework of six chronological periods viewed through the lens of related key concepts and course themes, accompanied by a set of skills that clearly define what it means to think historically. The course is organized around a number of key concepts instead of a perceived list of facts, events, and dates.

Course Themes:

1: Interaction Between Humans and the Environment
2: Development and Interaction of Cultures
3: State-Building, Expansion, and Conflict
4: Creation, Expansion, and Interaction of Economic Systems
5: Development and Transformation of Social Structures

Credit: 1.0

Students will be placed into one of the following World History classes:

	Review CRS	Focus CRS	Extend CRS
World History: This course is designed for students whose skills are at benchmark for college readiness.	20-23	24-27	28-32
****AP World History***: This course is designed for students whose skills are above benchmark for college readiness. It offers a more in-depth study of world history and will prepare students for the College Board Exam, which will allow students to earn college credit.	24-27	28-32	32-36

United States History

United States History is a one-year survey course of the significant political, economic, social, cultural, and diplomatic developments in American history from the initial settlement of American colonies through the modern day. Students will use primary and secondary document analysis to address major themes, including the changing nature of U.S. Democracy, the changing face of American society, and the United States' changing role in the world.

Prerequisites: **Human Geography, World History**

Credit: 1.0

Students will be placed into one of the following United States History classes:

	Review CRS	Focus CRS	Extend CRS
United States History: This course is designed for students whose skills are at benchmark for college readiness.	24-27	28-32	33-36
****AP United States History***: This course is designed for students whose skills are above benchmark for college readiness. It offers a more in-depth study of US history and will prepare students for the College Board Exam, which will allow students to earn college credit.	24-27	28-32	33-36

Government and Social Issues (GSI)

This course will provide students with the knowledge to be effective citizens of the United States. Throughout the course an emphasis will be placed on the functions and responsibilities of local, state, and national

government. Major units include an in-depth look at each branch of government; the role and function of political parties; current events; US foreign policy; and social issues facing our country today.
Credit: 0.5

ELECTIVES: Students are required to take 0.5 elective credit from the following courses

*The Fundamentals of Economics

Fundamentals of Economics is a graduation with distinction class designed for the college bound student, or for the student who has a strong interest in economic concepts. Course assignments and assessments are challenging and geared toward preparation for optional AP Microeconomics Exam. Course topics include a brief introduction to economic basics and globalization, followed by detailed units on Micro and Macroeconomic concepts.
Credit: 0.5

*AP Psychology

AP Psychology is designed to introduce students to the scientific study of the behavior and mental processes of human beings. Students also learn about the ethics and methods psychologists use in their science and practice. To accomplish this, the course provides instruction in each of the following fourteen content areas: History and Approaches, Research Methods, Biological Bases of Behavior, Sensation and Perception, States of Consciousness, Learning, Cognition, Motivation and Emotion, Developmental Psychology, Personality, Testing and Individual Differences, Abnormal Psychology, Treatment of Psychological Disorders, and Social Psychology. Through the course, students will be prepared to take the College Board Advanced Placement Examination, and possibly receive college credit. This course is rigorous, fast-paced, and requires advanced reading and writing skills.
Prerequisites: Human Geography, World History
Credit: 1.0

Cultural Geography of Southeast Asia

Through the use of educational technology students enrolled in this course will enjoy a comprehensive study of Southeast Asian culture and geography. Students will attain global skills needed for the 21st century by exploring the culture of the people that live in Southeast Asia, including their religions, languages, ethnic groups, food, customs and contemporary issues. This will be a distance education course team-taught by teachers from Sa-nguan-Ying school, Lodi High School's sister school in Thailand.
Prerequisite: **Grade 11 or 12**
Credit: 0.5

Personal and Social Responsibility

This is a service-learning course that focuses on researching social issues within our local, national and international community, and implementing student-generated solutions to those problems. The class will focus on combining research and problem-solving skills in a hands-on learning environment. Come to this course ready to develop critical thinking and problem-solving skills as well as a willingness to work as a part of a team.
Credit: 0.5

Popular Culture in American History

This course will explore American history through the lens of popular culture. The course will critically examine and analyze the development, growth, and influence of American popular culture and how that has influenced the modern interconnected world today. The course will encourage students to consider ways in which popular culture embodies ideas about gender, class, race and our nation in the modern era. Finally, the course explores the global dimensions of American popular culture in the 21st century.
Credit: 0.5

War and Conflict

This course will expose students to major conflicts and global issues relevant in today's society. Students will become better acquainted with the necessary background on many of today's hottest topics in our society including: 1) Genocide, how it is defined, where and when has it happened, what has been the international response, and how can we prevent genocide in the future; 2) Modern Day U.S. Conflicts, including our current conflict in Afghanistan, The War on Terror, Syria, and defeating ISIS; 3) Economic Trade Wars and globalization including NAFTA, the TPP, CAFTA, the EU, and Brexit; 4) Interventionism/Multilateralism vs. Isolationism/Unilateralism and what the role of the United States should be in all of the four major topical areas. The skill focus of this class will be examining each topic from various perspectives, analyzing the evidence, and coming to their own conclusions about the best course of action.

Prerequisite: Grade 11 or 12

Credit: 0.5

AGRICULTURE

Agricultural Department Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
Agricultural Careers & Leadership	1 Semester	0.5	X	X		
Horticulture ES	1 Semester	0.5	X	X		
Small Animal Science ES	1 Semester	0.5	X	X		
WI Fish & Aquaculture	1 Semester	0.5		X	X	X
WI Wildlife & Forestry	1 Semester	0.5		X	X	X
Advanced Agribusiness Management	1 Semester	0.5			X	X
Agricultural Processing/ Food Science	1 Semester	0.5			X	X
*Biotechnology ES	1 Semester	0.5			X	X
Greenhouse Management	1 Semester	0.5			X	X
Landscaping	1 Semester	0.5			X	X
Large Animal Science	1 Semester	0.5			X	X
Vet Studies & Small Animal Care ES	1 Semester	0.5			X	X

The Agriculture program of Lodi High School is designed to give students the opportunity to pursue interests in the United States number ONE employer—AGRICULTURE! The agriculture industry employs over 23 million people in the U.S., which accounts for almost 20% of the nation's work force! Within the broad scope of agriculture, there are eight career clusters for Agricultural Education: Agribusiness Systems, Animal Systems, Environmental Service Systems, Food Products and Processing Systems, Natural Resources Systems, Plant Systems, Power, Structural, Technical Systems, and Biotechnology Research and Development.
These career clusters are covered in the agricultural classes offered. The information learned can be used not only for career exploration, but also for life skills and practical knowledge needed.

***ES (Equivalent Science) Courses**:*

These courses have been approved by DPI and accepted by the UW post-secondary institutions for science credit. The course will be recorded on the student's transcript with ES following the course title indicating it is equivalent to a half credit of science.

Agricultural Careers and Leadership

This course develops student leadership skills that the student can apply in everyday life. It will focus on personal skills development and team building activities in preparation for employment. Students will explore several agriculturally-related careers in the Lodi area to directly correlate their personal employability skills with the business community's expectations and needs. To recognize the globalization of agriculture the students conduct a mock International Agricultural Food Symposium.
Credit: 0.5

Horticulture ES (Equivalent Science)

The horticulture industry is one of the fastest growing areas in the agricultural field. The students will be introduced to plant anatomy and plant identification. Horticultural skills such as plant care, plant production, floral design, landscape management and greenhouse management will be developed at the introductory level. Students will raise a plant crop and create marketing plans for it. Students are also introduced to horticultural careers in the areas of landscaping, greenhouse management, and floral design.
Credit: 0.5

Small Animal Science ES (Equivalent Science)

The focus of this class is to introduce students to the physical and behavioral characteristics of common pets and recreational animals. The purpose is to inform students of common practices, uses, and care of these animals. The pet industry and all of its facets has a large economic impact in the United States. As pet ownership increases so does the amount of money expended on pet services and supplies. Students will explore the many career opportunities available in this field and be introduced to the new careers being developed to fill the demands of today's pet owners. Students will learn about animals in society, animal welfare issues, classification and breeds of animals, anatomy, physiology, nutrition, reproduction, and animal behavior.
Credit: 0.5 This course will be offered in 2019-2020 and thereafter every other year

Wisconsin Fish & Aquaculture

Aquaculture is one of the up and coming areas in agriculture. Students will raise fish in an aquaculture system to market size. Other topics covered in this course include Wisconsin fish species, taxidermy, boat safety, waterfowl, decoy painting, fly tying and fishing trips.
Credit: 0.5 This course will be offered in 2020-2021 and thereafter every other year

Wisconsin Wildlife & Forestry

The objective of this course is to introduce students to management practices and ethical issues related to our Natural Resources. Students will explore topics on forestry management, sustainable forestry, wildlife management, hunting safety and issues, and conservation practices developed to protect the environment. Students will visit the school forest and wildlife preserves to learn more about careers in these areas.
Credit: 0.5 This course will be offered in 2019-2020 and thereafter every other year

Advanced Agribusiness Management

This course is highly recommended for students enrolled in the Youth Apprenticeship program, FFA members with strong SAE programs and/or students interested in learning about managing their personal finances. Students will be introduced to business concepts and develop their own class cooperative. Concepts covered in this course include managing finances, acquiring credit, calculating depreciation, defining various types of business organizations, and developing a method of keeping financial records. This course covers the financial literacy standards and provides students with the basic knowledge needed to manage their personal and business finances.
Prerequisite: One other agricultural class
Credit: 0.5 This course will be offered in 2019-2020 and thereafter every other year

Agricultural Processing/Food Science

The main objective of this course is to introduce students to methods of food preservation and the effects of food additives, sugars, fats, colors, and flavors on food quality. Students will look at the science and chemistry

involved in food processing and explore careers in the food industry. Emphasis will be placed on issues relating food safety and genetically modified foods to consumer concerns.
Credit: 0.5 This course will be offered in 2020-2021 and thereafter every other year

*Biotechnology ES (Equivalent Science)

This course is designed to introduce students to the biotechnology revolution and its application to agriculture. Students will gain an understanding of genetic engineering, electrophoresis, biotechnology careers, and emerging technologies such as cloning and gene therapy. Student learning will focus around "hands-on" activities and discussion of social and ethical issues. This course is designed for students who wish to broaden their science background with experience in real life situations.
Prerequisite: Biology
Credit: 0.5

Greenhouse Management

This course introduces students to the various types of careers in the horticultural industry including floral design, greenhouse crops, hydroponics, marketing, and office management. The students will assist in growing a greenhouse crop, maintain and plant school gardens, create floral designs, tour retail and wholesale floral shops, and visit Olbrich Gardens.
Prerequisite: Horticulture ES
Credit: 0.5

Landscaping

Landscaping is one of the fastest growing career areas. Students will learn how to design a landscape, properly install and maintain a landscape and correct lawn maintenance. Much of the class time is spent at actual landscape sites applying the skills learned in class.
Credit: 0.5

Large Animal Science

The purpose of this class is to inform students about management practices involved in producing livestock such as, beef cattle, dairy cattle, swine, and sheep. Units of study include nutrition, genetics, reproduction, breed identification, disease prevention, parasitology, facility maintenance, health care, and quality product production. Students enrolled in this course will have a better understanding of the meat industry and management practices utilized in the livestock industry.
Prerequisite: Small Animal Science
Credit: 0.5 This course will be offered in 2020-2021 and thereafter every other year

Vet Studies & Small Animal Care ES (Equivalent Science)

A basic understanding of small animal breeds and anatomy is required for this course. The course includes units of study on animal handling and restraint, veterinary terminology, anatomical and physiological systems, clinical exams, hospital procedures, parasitology, diseases, posology, laboratory techniques, and office management. Students will be introduced to each of these areas to emphasize the many skills required for employability in a veterinary career. Students interested in veterinarian, Vet. Tech., or research animal technician careers should consider this class.
Prerequisite: Small Animal Science
Credit: 0.5

ART COURSES

Art Course Offerings							
Courses	**Course Length**	**Credit**	**Fee**	**9**	**10**	**11**	**12**
Art 1	1 Semester	0.5	$10.00	X	X	X	X
Ceramics 1	1 Semester	0.5	$13.50	X	X	X	X
Photo 1	1 Semester	0.5	$20.00	X	X	X	X
Ceramics 2	1 Semester	0.5	$13.50		X	X	X
Drawing	1 Semester	0.5	$5.00		X	X	X
Painting	1 Semester	0.5	$10.00		X	X	X
Photo 2	1 Semester	0.5	$20.00		X	X	X
Film Appreciation	1 Semester	0.5	0			X	X
Independent Studio	1 Semester	0.5	0			X	X

Fees listed above are for the 2017-2018 school year. They are subject to change for 2018-2019 school year.

Art 1

This foundation course covers a variety of art making techniques such as drawing, painting, sculpting and printmaking while using and learning about many different materials. Exploration of art movements, artist styles and works of art closely related to the Art Elements will be a mainstay. The Art Elements are the foundation of all works of art and help students understand these works, analyze, problem-solve and practice. The activities taught and knowledge gained will instill these foundations before students move on to advanced level art courses.
Credit: 0.5

Ceramics 1

Students will explore different hand building techniques such as pinching, slab building, coiling, molding and the beginning levels of wheel throwing. We will also explore decorating techniques, and the aesthetics of pottery and ceramics. The history of ceramics, ceramic artists and famous works of art will be researched throughout the course.
Credit: 0.5

Photo 1

Students will learn the basic concepts of digital photography, such as how the camera works, depth of field, shutter speed, lighting, composition, color balancing and building the perfect shot. Students will be introduced to Adobe Photoshop Elements, and learn the basic aesthetics of creating and altering an image by layering and other actions. Students will also learn about the history of photography, various photographers and their work.
Prerequisite: Art 1
Credit: 0.5

Ceramics 2

Students will continue their hand building skills, and start to create an advanced level of work. Students will also further practices in wheel throwing and have the opportunity to create utilitarian objects such as cylinders (cup), bowls, pitchers, plates, and tea pots, if they are willing to work hard.
Prerequisite: Ceramics 1 (Must have earned a B or higher)
Credit: 0.5

Drawing

This course will concentrate on techniques and exercises that aid in drawing realistically what one sees. Learning to use and experiment with a variety of media (pencil, chalk, charcoal, ink, wash, etc.) will constitute an important part of this introductory, fast-paced drawing experience. One hasn't really seen something until he/she attempts to draw it accurately!
Prerequisite: Art 1 (Must have earned a C or better in Art 1)
Credit: 0.5

Painting
Students will explore painting techniques and creative solutions to creating well-crafted, thoughtful works of art. Color theory and relationships will be taught and practiced throughout the semester using acrylic and water color paints.
Prerequisite: Art 1 (Must have earned a C or better in Art 1)
Credit: 0.5

Photo 2
Students will extend their photo practices and knowledge through further exploration and advanced projects. Students will have the opportunity to learn darkroom techniques, as well as digital media and Adobe programming. This is for students who had a successful experience in Photo I to enhance their skills, and develop a higher level of artwork.
Prerequisite: Art 1 & Photo 1 (Must have earned a B or better in Photo 1, and a C or better in Art 1)
Credit: 0.5

Film Appreciation
If you have a strong interest in film, are a creative thinker, have a talent in writing, and like research-based learning….Film Appreciation would be a great class for you! We start by learning about the history and inventions that contributed to the evolution of cinema over the years. We also learn about the technical roles that go into film production, the rating system, film genre, recording equipment, graphics, costume and makeup design, set design, film topics and concepts. We watch films connected to each class unit in the auditorium, discuss the film and have an assignment based on the movie and information we learned about in the unit.
Prerequisite: Grade 11 or 12
Credit: 0.5

Independent Studio
This class is meant to give advanced artists the freedom to expand their learnings and experiences from their prior studio courses.
-Students will be able to develop and establish themselves as artists.
-Students will be more innovative in designing their curriculum.
-Students will be able to work with other students at their level and help one another develop their work.
-Students will be able to use preferred mediums- clay, photography, drawing, painting, printing, sculpting, etc.
-Students will create art journals and blogs.
-Students will study art history and art practices more in depth.
Prerequisite: Art 1, Ceramics 1, Photo 1, Painting and Drawing (Must have earned A- or higher)
Credit: 0.5

BUSINESS & INFORMATION TECHNOLOGY EDUCATION

Keyboarding and Online Tools
Keyboarding and Online Tools is the perfect opportunity for students who would like to increase their keyboarding speed and learn about the many online applications available to modify pictures, create videos, and present online. Students will also learn about available Google Applications for Education and will be introduced to MS Office software like Word, Excel and PowerPoint. An emphasis on keyboarding technique and the proper “touch method” (no looking at fingers, correct finger placement) will be reinforced daily. This course will may be offered every other year.
Credit: 0.5 This course will be offered in 2020-2021 and thereafter every other year

Exploring Computer Science

This introductory course starts by defining computing and learning the basic parts of a computer. Students will also learn how to systematically solve hardware and software problems. Most of the course is spent learning a variety of programming languages and using that knowledge to code video games and animations. This course may be offered every other year and prepares a student for AP Computer Science Principles.
Credit: 0.5 This course will be offered in 2019-2020 and thereafter every other year

AP Computer Science Principles

This year long Advanced Placement Course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. Whether it's 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drive the world. Students will be coding in a variety of languages based on current trends. This course will be offered every other year.
Prerequisite: Exploring Computer Science or consent of instructor and Math 3
Credit: 1.0 This course will be offered in 2020-2021 and thereafter every other year

Computer Applications-MS Office Suite Certification

Students at all levels of computer proficiency will be challenged in Computer Applications. The class will provide students with a workable knowledge of the Microsoft Office Suite of programs. Students completing Computer Applications will have the opportunity to earn the Microsoft Office Suite certification. This course will be offered every other year.
Prerequisite: Keyboarding and Online Tools or consent of instructor
Credit: 1.0 This course will be offered in 2019-2020 and thereafter every other year

Business Concepts

This course is designed to introduce students to a variety of business concepts. Topics will include economics, marketing, international business, banking and finance, and business management.
Credit: 0.5

College and Career Readiness

This course provides a challenging adventure in learning and self-discovery to help learners prepare for college and/or career. The learner will develop self-awareness, build relationships, and be empowered to make effective choices in college & career decisions. A wide variety of skills will be applied to promote success in high school and readiness for college/career. Students will learn how to create resumes, cover letters, and other professional documents. In additions, students develop interviewing skills through a variety of scenarios.
Reserved for Juniors and Seniors
Credit: 0.5

Sports and Entertainment Marketing

This course is designed to develop a thorough understanding of the marketing concepts and theories that apply to sports and entertainment. This course is based on the business and marketing core that includes communication skills, distribution, marketing information management, pricing, products/service management, promotion, selling, operations, strategic management, human resource management, and the economic impact and considerations involved in the sports and entertainment marketing industries.
Prerequisite: Business Concepts or consent of instructor
Credit: 0.5

Accounting 1 AS

This course covers the complete accounting cycle as it relates to keeping records of personal and business transactions for tax purposes. It is recommended for both vocational and college-bound students and is highly recommended for Business Concepts students and students interested in a career in computers or data processing. Computerized accounting is introduced in this class.

Accounting 1 and 2 combined articulates with Madison Area Technical College Applied Accounting (101-114) or Accounting Principles (101-111).
Credit: 1.0

Introduction to QuickBooks
An introductory course of the QuickBooks small business accounting software. Students become familiar with QuickBooks features and learn to use the software to set up a new company; recording transactions with customers, vendors and employees, manage business revenue and expenses, process payroll, reconcile bank accounts, track inventory and create useful reports.
Credit: 1.0

FOREIGN LANGUAGE

Foreign Language Department Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
Spanish 1	1 Year	1	X	X		
Spanish 2	1 Year	1	X	X		
*Spanish 3	1 Year	1		X	X	X
*Spanish 4	1 Year	1		X	X	X
*AP Spanish	1 Year	1			X	X

Spanish is a language arts course with its emphasis on the grammar and the Spanish-speaking civilization in general, through writing/spelling, speaking, listening, and reading. Spanish is the foreign language that has the most practical value in this country because there are millions of Spanish speaking people in the United States. Any student who fails or does not complete the first ½ credit of a one-credit Spanish course, is not allowed to take the second ½ credit until s/he retakes and passes the first. In order to build skills, any Spanish course may be repeated for no credit. If a student has a B or better at any level, s/he may not repeat a course. UW-Madison, as well as some private and out-of-state colleges, require two years of a single foreign language for admission.

Spanish 1
This course covers the fundamental principles of Spanish, through grammar, idiomatic expressions, vocabulary and spelling. It provides a basic knowledge of the Spanish language and Spanish/Latino cultures.
Prerequisite: C or better in English 8 or 9
Credit: 1.0

Spanish 2
This course continues the students' mastery of Spanish grammar and vocabulary, through conversation. It covers the culture of Spanish-speaking countries in more detail.
Prerequisite: Students must have B- or better to go onto next level. Applies to those coming from MS 8th grade Spanish 1, and those who took Spanish 1 in the HS.
Credit: 1.0

***Spanish 3**
This course is designed to improve language usage in a practical manner, by means of group conversations, reading and writing. The emphasis is on Spain's culture, through classical literature.
Prerequisite: Students need to maintain a C average in both semesters of Spanish 2 to move on.
Credit: 1.0

***Spanish 4**

This course is designed to improve language usage by reviewing concepts taught in Spanish 1-3 and to build onto the grammar with more details. These concepts will be the focus in the literature from Spain, Mexico, Central America, and South America.

Prerequisite: Students need to maintain a C average in both semesters of Spanish 3 to move on.

Credit: 1.0

***AP Spanish**

This is a course for advanced Spanish students to help prepare them to take the AP Spanish Language Exam in May (taking the exam is not a requirement of the course). Students will refine their listening comprehension, reading comprehension, and their writing and speaking skills through the exploration of contemporary cultural and literary topics. Students will develop their skills in Spanish, toward a deeper understanding and appreciation of cultural differences.

Prerequisite: B or better Spanish 4

Credit: 1.0

MUSIC

The Music Department offers courses to include the study of music history, theory, technical skills, and the experience of participating in a performing ensemble. The ensembles are sequential in design for the student who is pursuing a post-graduate career in music, with structural emphasis on building a solid musical foundation in theory as well as in practice. In addition, the courses offered provide for the student wishing to experience musical appreciation and provide an element of fun and enjoyment.

Instrumental Music

Symphonic Band Recommended for grades 9-11

A wide variety of music, including pop tunes and the classics are explored and performed. Marching Band, Pep band, solo/ensemble participation, study of theory, and history are subjects explored by the more mature, musically capable, symphonic band/wind ensemble student. These groups maintain a rigorous performance schedule. Attendance at all performances and one weekly group lesson are required. Field trips may be organized for this band.

Prerequisites: Rented or owned instrument.

Fees: Rental of school owned instruments (oboe, bassoon, French horn, saxophones, baritone, tuba, percussion) $50 for percussion, $60 for brass/wind per year.

Credit: 1.0

Wind Ensemble Recommended for grades 10-12

A wide variety of music, including pop tunes and the classics are explored and performed. Marching Band, Pep band, solo/ensemble participation, study of theory, and history are subjects explored by the more mature, musically capable, symphonic band/wind ensemble student. These groups maintain a rigorous performance schedule. Attendance at all performances and one weekly group lesson are required. Field trips may be organized for this band.

Prerequisites: Rented or owned instrument, consent of instructor and placement by assessment.

Fees: Rental of school owned instruments (oboe, bassoon, French horn, saxophones, baritone, tuba, percussion) $50 for percussion, $60 for brass/wind per year.

Credit: 1.0

Jazz Ensemble Recommended for grades 9-12

This course is for serious music students interested in the hard work and good humor necessary to play jazz. Performances include many styles of jazz and show music with some study of improvisation. This group's performances include concerts, and other special engagements. Attendance at all performances and membership in symphonic band/wind ensemble are required. This class will meet 2 days a week from 7:10 a.m. to 8:00 a.m.

Prerequisites: Previous band experience. Audition. Rented or owned instrument.

Credit: 0.5

Special Effect Band Recommended for grades 9-12

There is a $50.00 basic fee from all participants with extra T-shirt and shoe fees for new members.

This is an auditioned show band. Auditions take place in January. In order to be in show band, you must be a member of the high school band. The band meets Wednesdays at 7:10 a.m. Most performances take place from November through January and 80% are on weekends. Interested students should see Mr. Marshall.

Prerequisites: Audition

Credit: 0.5

Vocal Music

Chorale

Chorale is a year-long class, open to all men and women in grades 9-12, without an audition. Music chosen for study will include various genres from music history, and emphasis in class will be placed upon appropriate production of tone, breath support, musical style, and musical knowledge. Students should be motivated to sing, perform, and have a desire to learn more about their voices. Participation in solo and ensemble will be encouraged.

Prerequisite: Consent of instructor

Credit: 1.0

Treble Choir

Treble Choir is a year-long class and will be a balanced ensemble of singers in a soprano, second soprano, and alto voicing (SSA). Music chosen for performance will consist of sacred and secular literature form various time periods, scored for SSA. Time will be spent furthering knowledge in vocal techniques, breath support, musical style, and musical knowledge. Participation in solo and ensemble will be encouraged.

Prerequisite: Consent of instructor

Credit: 1.0

Chamber Choir-Special Effect

Chamber Choir is a year-long class and will be a balanced ensemble of advanced level vocalists comprising soprano, alto, tenor, and bass voices available through the audition process. Music chosen for study will include various genres of music from chant to musical theatre. This group performs a demanding schedule of concerts, requiring more than just class time for rehearsals. Chamber Choir will be required to perform in all school concerts as a traditional choral ensemble and participate in competition and performance as a show choir.

Participation in solo and ensemble will be encouraged.

Prerequisite: Audition and consent of instructor

Credit: 1.0

PHYSICAL EDUCATION AND HEALTH

Physical Education & Health Department Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
PE 9	1 Semester	0.5	X			
^Strength Training & Conditioning	1 Semester	0.5	X	X	X	X
^Outdoor Activity	1 Semester	0.5	X	X	X	X
^Individual PE	1 Semester	0.5	X	X	X	X
^Fitness for Life	1 Semester	0.5	X	X	X	X
^Team Sports	1 Semester	0.5	X	X	X	X
^Lifeguard Training (S2)	1 Semester	0.5		X	X	X
^Water Safety Instructor (S1)	1 Semester	0.5		X	X	X
Health	1 Semester	0.5	X	X		
Life Skills and Parenting (S2)	1 Semester	0.5		X	X	X
^ = must pass PE 9 first						

The Physical Education and Health Department of Lodi High School have developed a curriculum that promotes a variety of lifetime activities to meet the needs of the entire student body.

Students must take physical education in three different years of high school. All freshmen must pass PE 9 before they are allowed to advance to any other course.

To fulfill the remaining one credit required for graduation, students must take two DIFFERENT courses.
All courses will include a cardio section, skills tests, written tests, Fitness Gram tests and heart rate monitors.
Students may repeat courses as electives. Students may take a maximum of two PE classes per year.

Physical Education 9

*****Can include any activity from the courses listed below.
*All freshmen must pass PE 9 before they are allowed to advance to any other course

*****THE COURSES MAY NOT COVER ALL THE ACTIVITIES LISTED*****

Strength Training and Conditioning

Weightlifting
Agility
Cardio fitness
Core training
Plyometric training
Run/Sprint

Individual PE

Table tennis
Frisbee golf
Weights/Cardio/Fitness Activities
Self-defense
Badminton
Swim/Scuba
Golf
Tennis
Bowling
Pickleball
Biking

Fitness for Life

Yoga
Kickboxing
Strength and conditioning workouts
Aerobics
Core training
Swim/Pool workouts
Boot camp activities
Snowshoeing
***Some activities may have off-campus fees**

Snowshoeing
*** Some activities may have off-campus fees**

Team Sports
Basketball
Football
Softball
Lacrosse
Ultimate Frisbee
Volleyball
Swim
Speedball/Soccer
Mat Ball
Floor Hockey

Outdoor Activity
Snowshoe
Curling
Archery
Cross-Country ski
Snowboard/downhill ski
Ice skating
Broomball
Swim
Hike/camp/orienteering
Canoe
Fishing
***Some activities may have off-campus fees**
***Dress for the weather - Must have boots, snow pants, gloves, hat and jacket.**

Adaptive Physical Education

The adaptive PE section offered is for those students who cannot safely or successfully engage in unrestricted participation in the vigorous activities of the general PE program. This program includes a variety of developmental activities, games, sports and rhythms, suited to the capacities and limitations of students with disabilities.
Prerequisite: Referral or consent of PE department
Credit: 0.5

Health

This course is offered to help students acquire a working knowledge and understanding of current health issues that are pertinent in today's society. Some of the areas studied are what is health, consumer health, environmental health, nutrition, family life education, drug and alcohol use and abuse, mental health, and CPR/AED. Small discussion groups, outside resources, projects/activities, and presentations by community members are components of the various units.
Credit: 0.5

Life Skills & Parenting

In this class students will explore child development through in class discussions, activities, and mentoring projects. Students will analyze the aspects of mental and emotional health and apply the principles of health and wellness to their own life.
Credit: 0.5
Prerequisite: Must pass health first.

Lifeguard Training AND/OR Water Safety Instruction Course

Lifeguard (1st semester) WSI (2nd semester) – 0.5 credit each
Cost $80 for American Red Cross certification cards
Max size limit 20

Students will have the opportunity to become certified through the American Red Cross in: Lifeguard Training, Water Safety Instructor, CPR, AED, and First Aid.
Course requirements:
1. Must be 16 years old by the end of the course (Early June).
2. Swim 300 yards continuously.
3. Tread water for 2 minutes using only the legs.
4. Swim front crawl, back crawl, breaststroke, elementary backstroke, and sidestroke 25 yards.

5. Swim butterfly 15 yards.
6. Maintain position on back for 1 minute in deep water (floating or sculling).
7. Complete a timed event within 1 minute 40 seconds.
    - Start in water, swim 20 yards.
    - Surface dive to a depth of 7-10 feet to retrieve a 10 pound object.
    - Return to surface with 10 pound object and swim 20 yard back to starting point with both hands on the object. Face is out of the water or near the surface so they can breathe.
    - Get out of the water without using the steps or ladder.

LIFE SKILLS

Life Skills Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
Financial Literacy	1 Semester	0.5			X	X
Project-Based Learning	1 Semester	0.5			X	X
*Certified Nursing Assistant	1 Year	1			X	X
*Youth Apprenticeship	1 Year	1			X	X

Financial Literacy

This course involves the study of the consumer in the market place. Emphasis is placed on such things as personal finance including managing income, balancing a checking account and establishing a positive credit rating. In addition, the course will focus on consumer law related issues including personal injury lawsuits, contracts and debtor protection.
Credit: 0.5

Project-Based Learning

This course will meet the needs of the motivated, independent learner. Students will choose a topic of their choice and conduct research about that topic for 9 weeks. Students will learn to write a project proposal, literature review and annotated bibliography. Students will be able to differentiate between good and poor research sources as well as gain invaluable research techniques. Interview and note-taking strategies are explained. In addition, students, at the conclusion of their research, are required to demonstrate what they have learned to a panel of teachers, community members and students.
Credit: 0.5

Certified Nursing Assistant (CNA)

Applications for youth options (for juniors & seniors) must be turned in by January 24th of the previous year for the fall semester or by August 25th for the following spring semester. Students who attend will earn a CNA certificate after completing the 120-hour course. The course includes approximately 70 hours of classroom and lab work (time and 50 hours of actual clinical experience.) Students learn the skills to work as a CNA as well as being exposed to many other health professions during the course. Upon successful completion the student is able to obtain a job as a CNA anywhere in the State of Wisconsin. This class is a Madison Area Technical College credit course, as well as high school credit course.
Credit: 0.5

Youth Apprenticeship

Youth Apprenticeship is a program designed to provide juniors and seniors with the opportunity to prepare for a career while still in school. While in the program, students will take high school classes required to meet graduation requirements. They will also have one class each semester in the occupational area of their youth apprenticeship program.

This program requires a signed contract. Categories to include: Agriculture, Food and Natural Resources, Architecture and Construction, Health Services, Hospitality, Lodging, and Tourism, Finance, Information Technology, Manufacturing, Science, Technology, Engineering, and Math, Transportation, Distribution, and Logistics.
Prerequisite: Consent of Instructor
Credit: Students must participate for a full year

STEAM EDUCATION

Students in STEAM Education will use skills from science, technology, engineering, art, and mathematics to design and create projects within our Smart Lab. A Smart Lab is a fully equipped STEAM Education environment designed for creating and inventing. Students will engage in robotics, 3D printing, software engineering, digital animation, circuitry, digital media editing, engineering, and much, much more. The options for inventing and creating within a Smart Lab are limitless. We offer three levels of STEAM Education. STEAM 1 and 2 are designed to provide a broad overview of the Smart Lab and what it has to offer. STEAM Project Development is for students wanting to focus on specific projects for an entire semester.

STEAM 1
In this introductory course, students interested in Science, Technology, Engineering, Art, and Math will explore and apply a wide range of technologies and softwares through project-based learning experiences. Students develop and practice real-world skills such as problem-solving, collaboration, project-planning and communication. Systems of technology explored include (1) Mechanics and Structures, (2) Computer Graphics, (3) Scientific Data and Analysis, (4) Digital Communications, (5) Alternative and Renewable Energy, (6) Robotics and Control Technology, (7) Circuitry, and (8) Software Engineering.
This course is required for graduation
Credit: 0.5

STEAM 2
In this continuation course, students who have successfully completed STEAM 1 will continue to explore and apply a wide range of 21st Century Skills through project-based learning experiences. Students develop and practice real-world skills such as problem-solving, collaboration, project-planning and communication. Systems of technology explored include (1) Mechanics and Structures, (2) Computer Graphics, (3) Scientific Data and Analysis, (4) Digital Communications, (5) Alternative and Renewable Energy, (6) Robotics and Control Technology, (7) Circuitry, and (8) Software Engineering.
Prerequisite: STEAM 1
Credit: 0.5

STEAM Project Development
In this advanced course, students interested in Science, Technology, Engineering, Art, and Math will combine a wide range of technologies; projects will be more substantial and in depth. Students will be expected to maintain an ePortfolio for both daily work and final presentation, and a project plan for each project.
Prerequisite: STEAM 1 and STEAM 2
Credit: 0.5

SPECIAL EDUCATION

The School District of Lodi will provide all students who have special educational needs with experiences that increase proficiency in social, academic and vocational domains. The needs of individual students will be determined as the result of ongoing academic, vocational, communication, physical, behavioral and social assessments. Each student's program, including related and supportive services will be specified in the Individual Education Program (IEP) and will be updated annually. Educational experiences will be offered in the least restrictive environment by supporting students in regular education classes and instructing students in special education classes. Students within the Special Education Program will be provided with sequential and systematic instruction to prepare them with necessary skills to function within the school, home and community. All special education programs will be provided in accordance with federal rules and regulations, Department of Public Instruction standards, Board of Education policies and administrative procedures.
Prerequisite: Referral, Placement and IEP

TECHNOLOGY EDUCATION

Technology Education Department Course Offerings						
Courses	**Course Length**	**Credit**	**9**	**10**	**11**	**12**
Basic Electronics	1 Semester	0.5	X	X		
Home Maintenance	1 Semester	0.5	X	X		
Manufacturing 1	1 Semester	0.5	X	X		
Power & Energy	1 Semester	0.5	X	X		
*Manufacturing 2	1 Semester	0.5		X	X	X
Building Construction	1 Semester	0.5			X	X
CAD	1 Semester	0.5			X	X
*Advanced CAD	1 Semester	0.5			X	X
Small Engines	1 Semester	0.5			X	X

All Technology Education classes are designed to develop safe employability skills in architecture, construction, design, energy, engineering, manufacturing, quality assurance, and transportation systems.

Basic Electronics

This course introduces students to the basic fundamentals, latest technology and practical applications of both electricity and electronics. Through building projects and performing interesting experiments, students will learn to understand the principles of electricity and electronics.
Credit: 0.5

Home Maintenance

This course introduces students to maintenance and repairs that can be performed by the average maintenance person. Some areas covered during the course are: replacement of window glass and screens, removing and replacing electrical outlets and switches, repair of minor plumbing leaks, repair of holes in walls, and painting.
Credit: 0.5

Manufacturing 1

This course introduces students to many of the tools, materials, and processes used in industry. Students are involved in projects and lab activities, which deal with woods, metals, and plastics. Students must pay the cost of materials for any individual projects.
Credit: 0.5

Power & Energy

This course introduces students to the forms of energy and how it is transformed into power. Areas introduced during this course are: solar, mechanical, chemical, nuclear, and electrical energy; power transfer through gears and belts, hydraulics, and pneumatics; and types of engines used for transportation vehicles.

Credit: 0.5

*Manufacturing 2

This course is a further study of the many materials and processes used in industry. Students choose individual projects from a list of pre-selected activities in the areas of woods, metals, plastics, leather, glass, etc. Students must pay the cost of materials for any individual projects.

Credit: 0.5

Building Construction

This course introduces students to the many aspects of light building construction from design to assembly. Architectural design is emphasized along with construction of miniature buildings and small garden sheds.

Credit: 0.5

CAD

This course introduces students to drafting techniques that are manual and computer-aided design (CAD). The main focus is on 2-D multi-view drawings in AutoCAD.

Credit: 0.5

*Advanced CAD

This course explores 3-D design and architecture through Auto CAD, Inventor, and Revit.

Prerequisite: CAD

Credit: 0.5

Small Engines

This course introduces students to single-cylinder small engines. Areas covered are internal combustion engines, proper care and maintenance, and rebuilding procedures for small engines. Students must provide a small engine, gasket set, oil and any necessary parts for lab.

Credit: 0.5

STANDARDIZED TESTING INFORMATION

Aspire

9th and 10th graders take the state-mandated Aspire test each spring, which evaluates students' college readiness and also provides information to help students and their parents focus on career preparation and improving academic achievement.

ACT

The ACT is used as a factor for admission to most colleges. 11th graders take a state-mandated ACT at LHS in late February/early March, and there is no cost to students for this test date. Students may choose to take the ACT multiple times. The test is offered nationally several times during the year (see dates below). Students register for national test dates by going to www.act.org and providing the information requested. 10th graders take a practice ACT at LHS on the same date (late February/early March) that the 11th graders take the state-mandated ACT.

2019 ACT National Test Dates	
2019 ACT Test Dates & Registration Deadlines	
Test Date	**Registration Deadline**
February 9, 2019	January 11, 2019
April 13, 2019	March 8, 2019
June 8, 2019	May 3, 2019
July 13, 2019*	June 14, 2019

PSAT
The PSAT is offered in October to interested juniors. This test is used as the Preliminary National Merit Scholarship Qualifying Test as well as practice for the SAT. Approximately 50,000 students receive recognition out of the approximately 1.6 million students who take the test each year. Generally, a student must score in the top 3% nationally to receive recognition. Approximately 7,500 students receive a scholarship.

SAT
Students should check the admission requirements of the schools to which they are interested in applying to find out whether or not the SAT is required. It is used more frequently by schools on the east and west coasts and is not necessary for many colleges in the Midwest.

POST-SECONDARY INFORMATION

WISCONSIN TECHNICAL COLLEGE SYSTEM
WTCS has 16 colleges and 49 campuses throughout the state.
WTCS has a variety to meet the needs of most interested students. There are more than 400 career programs offered.
No WTCS program requires more than two years of full-time study and many require less than a year.
Courses are offered through a variety of delivery methods.
More information about the Wisconsin Technical College System can be found online at www.wtcsystem.edu

TECHNICAL COLLEGE DEGREES
Associate Degrees
Two-year programs that combine technical skills with math, communications and social sciences.

One and Two-Year Technical Diplomas
Hands-on learning of occupational skills.

Short-Term Programs
Occupational programs of less than one year.

Liberal Arts Transfer Program
The first two years of a four-year baccalaureate college education. These credits readily transfer to four-year institutions. Students are guaranteed to be able to transfer to the UW System by earning a minimum of 64 credits in the Liberal Arts Transfer program and maintaining a 3.0 grade point average.

Advanced Technical Certificate
Students earn nine to 12 credits to receive a certificate that meets the needs of employers seeking highly skilled workers in business, health, and trade and industrial fields. At least six of these credits are in advanced content beyond the associate degree.

Apprentice-Related Instruction
Classroom training is provided for registered apprentices while they receive on-the-job training from their employer.

UNIVERSITY OF WISCONSIN SYSTEM

Applying For Admission
The University of Wisconsin System Application for Undergraduate Admission is a standard application form, which can be used to apply for admission to any UW System campus. The application can be found online at apply.Wisconsin.edu. Applicants for admission to a UW System institution are required to submit official high school transcripts and official college or university transcripts from all institutions previously attended. Most new freshman applicants are required to submit official ACT score reports.

When to Apply
The UW System Application is available August 1st each year. UW System institutions begin processing fall term applications September 1st of the preceding year. Application priority dates and deadlines vary from campus to campus, and sometimes among different programs at one campus. Students are encouraged to apply early in the fall of their senior year.

Holistic Admission Process
The UW System uses a holistic admission process, meaning that they are using a number of factors in their decision making process. Some of the admission factors include, grade point average, class rank, standardized test scores (ACT), rigor of classes (particularly the 12th grade), extracurricular activities, community service, work experience, and a personal statement. UW-Madison also encourages students to submit one or two letters of recommendation from teachers along with their application. Admission requirements vary from one school to another; students should check the specific admission guidelines for the college(s) to which they plan to apply. More information about the UW System can be found at www.uwhelp.wisconsin.edu.

College-level work requires strong reading, writing, and math skills, so taking high school courses that help develop those skills will be beneficial. Taking foreign language courses is also recommended and is required for admission to some colleges and universities.

The following required high school courses are the minimum that you'll need to enter a UW System campus. Some campuses require more.

- 4 years of English, including composition and literature.
- 3 years of mathematics, including Integrated Math I, II, and III
- 3 years of natural science, including one or more units of laboratory science such as biology, chemistry, or physics. We strongly recommend courses with a solid laboratory component, and some campuses even require them.
- 3 years of social science, including history.
- 4 years of electives from the above areas, foreign language, fine arts, computer science, or other areas.

We strongly advised taking two years of a single foreign language, and some UW System universities require them.

FINANCIAL AID AND SCHOLARSHIPS

FAFSA

The Free Application for Federal Student Aid may be started beginning October 1st of senior year. The application deadlines for financial aid vary by school. More information about the FAFSA can be found at www.fafsa.ed.gov

Scholarships

Scholarship applications are often available throughout the senior year. Scholarship information can be found on the High School Counseling website.

	College Readiness Standards — English		
	Topic Development in Terms of Purpose and Focus	**Organization, Unity, and Coherence**	**Word Choice in Terms of Style, Tone, Clarity, and Economy**
13–15		Use conjunctive adverbs or phrases to show time relationships in simple narrative essays (e.g., *then*, *this time*)	Revise sentences to correct awkward and confusing arrangements of sentence elements Revise vague nouns and pronouns that create obvious logic problems
16–19	Identify the basic purpose or role of a specified phrase or sentence Delete a clause or sentence because it is obviously irrelevant to the essay	Select the most logical place to add a sentence in a paragraph	Delete obviously synonymous and wordy material in a sentence Revise expressions that deviate from the style of an essay
20–23	Identify the central idea or main topic of a straightforward piece of writing Determine relevancy when presented with a variety of sentence-level details	Use conjunctive adverbs or phrases to express straightforward logical relationships (e.g., *first*, *afterward*, *in response*) Decide the most logical place to add a sentence in an essay Add a sentence that introduces a simple paragraph	Delete redundant material when information is repeated in different parts of speech (e.g., "alarmingly startled") Use the word or phrase most consistent with the style and tone of a fairly straightforward essay Determine the clearest and most logical conjunction to link clauses
24–27	Identify the focus of a simple essay, applying that knowledge to add a sentence that sharpens that focus or to determine if an essay has met a specified goal Delete material primarily because it disturbs the flow and development of the paragraph Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement	Determine the need for conjunctive adverbs or phrases to create subtle logical connections between sentences (e.g., *therefore*, *however*, *in addition*) Rearrange the sentences in a fairly uncomplicated paragraph for the sake of logic Add a sentence to introduce or conclude the essay or to provide a transition between paragraphs when the essay is fairly straightforward	Revise a phrase that is redundant in terms of the meaning and logic of the entire sentence Identify and correct ambiguous pronoun references Use the word or phrase most appropriate in terms of the content of the sentence and tone of the essay
28–32*	Apply an awareness of the focus and purpose of a fairly involved essay to determine the rhetorical effect and suitability of an existing phrase or sentence, or to determine the need to delete plausible but irrelevant material Add a sentence to accomplish a subtle rhetorical purpose such as to emphasize, to add supporting detail, or to express meaning through connotation	Make sophisticated distinctions concerning the logical use of conjunctive adverbs or phrases, particularly when signaling a shift between paragraphs Rearrange sentences to improve the logic and coherence of a complex paragraph Add a sentence to introduce or conclude a fairly complex paragraph	Correct redundant material that involves sophisticated vocabulary and sounds acceptable as conversational English (e.g., "an aesthetic viewpoint" versus "the outlook of an aesthetic viewpoint") Correct vague and wordy or clumsy and confusing writing containing sophisticated language
33–36†	Determine whether a complex essay has accomplished a specific purpose Add a phrase or sentence to accomplish a complex purpose, often expressed in terms of the main focus of the essay	Consider the need for introductory sentences or transitions, basing decisions on a thorough understanding of both the logic and rhetorical effect of the paragraph and essay	Delete redundant material that involves subtle concepts or that is redundant in terms of the paragraph as a whole

* Statements apply to PLAN & ACT only

† Statements apply to the ACT only

College Readiness Standards — English (continued)			
	Sentence Structure and Formation	**Conventions of Usage**	**Conventions of Punctuation**
13–15	Use conjunctions or punctuation to join simple clauses Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences	Solve such basic grammatical problems as how to form the past and past participle of irregular but commonly used verbs and how to form comparative and superlative adjectives	Delete commas that create basic sense problems (e.g., between verb and direct object)
16–19	Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence	Solve such grammatical problems as whether to use an adverb or adjective form, how to ensure straightforward subject-verb and pronoun-antecedent agreement, and which preposition to use in simple contexts Recognize and use the appropriate word in frequently confused pairs such as *there* and *their*, *past* and *passed*, and *led* and *lead*	Provide appropriate punctuation in straightforward situations (e.g., items in a series) Delete commas that disturb the sentence flow (e.g., between modifier and modified element)
20–23	Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers)	Use idiomatically appropriate prepositions, especially in combination with verbs (e.g., *long for*, *appeal to*) Ensure that a verb agrees with its subject when there is some text between the two	Use commas to set off simple parenthetical phrases Delete unnecessary commas when an incorrect reading of the sentence suggests a pause that should be punctuated (e.g., between verb and direct object clause)
24–27	Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence	Ensure that a pronoun agrees with its antecedent when the two occur in separate clauses or sentences Identify the correct past and past participle forms of irregular and infrequently used verbs and form present-perfect verbs by using *have* rather than *of*	Use punctuation to set off complex parenthetical phrases Recognize and delete unnecessary commas based on a careful reading of a complicated sentence (e.g., between the elements of a compound subject or compound verb joined by *and*) Use apostrophes to indicate simple possessive nouns Recognize inappropriate uses of colons and semicolons
28–32*	Use sentence-combining techniques, effectively avoiding problematic comma splices, run-on sentences, and sentence fragments, especially in sentences containing compound subjects or verbs Maintain a consistent and logical use of verb tense and pronoun person on the basis of information in the paragraph or essay as a whole	Correctly use reflexive pronouns, the possessive pronouns *its* and *your*, and the relative pronouns *who* and *whom* Ensure that a verb agrees with its subject in unusual situations (e.g., when the subject-verb order is inverted or when the subject is an indefinite pronoun)	Use commas to set off a nonessential/nonrestrictive appositive or clause Deal with multiple punctuation problems (e.g., compound sentences containing unnecessary commas and phrases that may or may not be parenthetical) Use an apostrophe to show possession, especially with irregular plural nouns Use a semicolon to indicate a relationship between closely related independent clauses
33–36†	Work comfortably with long sentences and complex clausal relationships within sentences, avoiding weak conjunctions between independent clauses and maintaining parallel structure between clauses	Provide idiomatically and contextually appropriate prepositions following verbs in situations involving sophisticated language or ideas Ensure that a verb agrees with its subject when a phrase or clause between the two suggests a different number for the verb	Use a colon to introduce an example or an elaboration

* Statements apply to PLAN & ACT only

† Statements apply to the ACT only

	College Readiness Standards — Mathematics			
	Basic Operations & Applications	**Probability, Statistics, & Data Analysis**	**Numbers: Concepts & Properties**	**Expressions, Equations, & Inequalities**
13–15	Perform one-operation computation with whole numbers and decimals Solve problems in one or two steps using whole numbers Perform common conversions (e.g., inches to feet or hours to minutes)	Calculate the average of a list of positive whole numbers Perform a single computation using information from a table or chart	Recognize equivalent fractions and fractions in lowest terms	Exhibit knowledge of basic expressions (e.g., identify an expression for a total as $b + g$) Solve equations in the form $x + a = b$, where a and b are whole numbers or decimals
16–19	Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve some routine two-step arithmetic problems	Calculate the average of a list of numbers Calculate the average, given the number of data values and the sum of the data values Read tables and graphs Perform computations on data from tables and graphs Use the relationship between the probability of an event and the probability of its complement	Recognize one-digit factors of a number Identify a digit's place value	Substitute whole numbers for unknown quantities to evaluate expressions Solve one-step equations having integer or decimal answers Combine like terms (e.g., $2x + 5x$)
20–23	Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average	Calculate the missing data value, given the average and all data values but one Translate from one representation of data to another (e.g., a bar graph to a circle graph) Determine the probability of a simple event Exhibit knowledge of simple counting techniques*	Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor	Evaluate algebraic expressions by substituting integers for unknown quantities Add and subtract simple algebraic expressions Solve routine first-degree equations Perform straightforward word-to-symbol translations Multiply two binomials*
24–27	Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour)	Calculate the average, given the frequency counts of all the data values Manipulate data from tables and graphs Compute straightforward probabilities for common situations Use Venn diagrams in counting*	Find and use the least common multiple Order fractions Work with numerical factors Work with scientific notation Work with squares and square roots of numbers Work problems involving positive integer exponents* Work with cubes and cube roots of numbers* Determine when an expression is undefined* Exhibit some knowledge of the complex numbers†	Solve real-world problems using first-degree equations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Identify solutions to simple quadratic equations Add, subtract, and multiply polynomials* Factor simple quadratics (e.g., the difference of squares and perfect square trinomials)* Solve first-degree inequalities that do not require reversing the inequality sign*
28–32 *	Solve word problems containing several rates, proportions, or percentages	Calculate or use a weighted average Interpret and use information from figures, tables, and graphs Apply counting techniques Compute a probability when the event and/or sample space are not given or obvious	Apply number properties involving prime factorization Apply number properties involving even/odd numbers and factors/multiples Apply number properties involving positive/negative numbers Apply rules of exponents Multiply two complex numbers†	Manipulate expressions and equations Write expressions, equations, and inequalities for common algebra settings Solve linear inequalities that require reversing the inequality sign Solve absolute value equations Solve quadratic equations Find solutions to systems of linear equations
33–36 †	Solve complex arithmetic problems involving percent of increase or decrease and problems requiring integration of several concepts from pre-algebra and/or pre-geometry (e.g., comparing percentages or averages, using several ratios, and finding ratios in geometry settings)	Distinguish between mean, median, and mode for a list of numbers Analyze and draw conclusions based on information from figures, tables, and graphs Exhibit knowledge of conditional and joint probability	Draw conclusions based on number concepts, algebraic properties, and/or relationships between expressions and numbers Exhibit knowledge of logarithms and geometric sequences Apply properties of complex numbers	Write expressions that require planning and/or manipulating to accurately model a situation Write equations and inequalities that require planning, manipulating, and/or solving Solve simple absolute value inequalities

* Statements apply to PLAN & ACT only

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College Readiness Standards — Mathematics (continued)				
	Graphical Representations	**Properties of Plane Figures**	**Measurement**	**Functions†**
13–15	Identify the location of a point with a positive coordinate on the number line		Estimate or calculate the length of a line segment based on other lengths given on a geometric figure	
16–19	Locate points on the number line and in the first quadrant	Exhibit some knowledge of the angles associated with parallel lines	Compute the perimeter of polygons when all side lengths are given Compute the area of rectangles when whole number dimensions are given	
20–23	Locate points in the coordinate plane Comprehend the concept of length on the number line* Exhibit knowledge of slope*	Find the measure of an angle using properties of parallel lines Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°)	Compute the area and perimeter of triangles and rectangles in simple problems Use geometric formulas when all necessary information is given	Evaluate quadratic functions, expressed in function notation, at integer values
24–27	Identify the graph of a linear inequality on the number line* Determine the slope of a line from points or equations* Match linear graphs with their equations* Find the midpoint of a line segment*	Use several angle properties to find an unknown angle measure Recognize Pythagorean triples* Use properties of isosceles triangles*	Compute the area of triangles and rectangles when one or more additional simple steps are required Compute the area and circumference of circles after identifying necessary information Compute the perimeter of simple composite geometric figures with unknown side lengths*	Evaluate polynomial functions, expressed in function notation, at integer values Express the sine, cosine, and tangent of an angle in a right triangle as a ratio of given side lengths
28–32 *	Interpret and use information from graphs in the coordinate plane Match number line graphs with solution sets of linear inequalities Use the distance formula Use properties of parallel and perpendicular lines to determine an equation of a line or coordinates of a point Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle)†	Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles Use the Pythagorean theorem	Use relationships involving area, perimeter, and volume of geometric figures to compute another measure	Evaluate composite functions at integer values Apply basic trigonometric ratios to solve right-triangle problems
33–36 †	Match number line graphs with solution sets of simple quadratic inequalities Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$ Solve problems integrating multiple algebraic and/or geometric concepts Analyze and draw conclusions based on information from graphs in the coordinate plane	Draw conclusions based on a set of conditions Solve multistep geometry problems that involve integrating concepts, planning, visualization, and/or making connections with other content areas Use relationships among angles, arcs, and distances in a circle	Use scale factors to determine the magnitude of a size change Compute the area of composite geometric figures when planning or visualization is required	Write an expression for the composite of two simple functions Use trigonometric concepts and basic identities to solve problems Exhibit knowledge of unit circle trigonometry Match graphs of basic trigonometric functions with their equations

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	College Readiness Standards — Reading	
	Main Ideas and Author's Approach	**Supporting Details**
13–15	Recognize a clear intent of an author or narrator in uncomplicated literary narratives	Locate basic facts (e.g., names, dates, events) clearly stated in a passage
16–19	Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives	Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage
20–23	Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages	Locate important details in uncomplicated passages Make simple inferences about how details are used in passages
24–27	Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages	Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
28–32*	Infer the main idea or purpose of more challenging passages or their paragraphs Summarize events and ideas in virtually any passage Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in virtually any passage	Locate and interpret minor or subtly stated details in more challenging passages Use details from different sections of some complex informational passages to support a specific point or argument
33–36†	Identify clear main ideas or purposes of complex passages or their paragraphs	Locate and interpret details in complex passages Understand the function of a part of a passage when the function is subtle or complex

scriptions of the EPAS (EXPLORE, PLAN, and ACT) Reading Passages

complicated Literary Narratives refers to erpts from essays, short stories, and novels t tend to use simple language and structure, e a clear purpose and a familiar style, present ightforward interactions between characters, employ only a limited number of literary ices such as metaphor, simile, or hyperbole.

More Challenging Literary Narratives refers to excerpts from essays, short stories, and novels that tend to make moderate use of figurative language, have a more intricate structure and messages conveyed with some subtlety, and may feature somewhat complex interactions between characters.

Complex Literary Narratives refers to excerpts from essays, short stories, and novels that tend to make generous use of ambiguous language and literary devices, feature complex and subtle interactions between characters, often contain challenging context-dependent vocabulary, and typically contain messages and/or meanings that are not explicit but are embedded in the passage.

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	College Readiness Standards — Reading (continued)		
	Sequential, Comparative, and Cause-Effect Relationships	**Meanings of Words**	**Generalizations and Conclusions**
13–15	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage	Understand the implication of a familiar word or phrase and of simple descriptive language	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
16–19	Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives	Use context to understand basic figurative language	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
20–23	Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages
24–27	Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
28–32*	Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages	Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts	Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
33–36†	Order sequences of events in complex passages Understand the subtleties in relationships between people, ideas, and so on in virtually any passage Understand implied, subtle, or complex cause-effect relationships in virtually any passage	Determine, even when the language is richly figurative and the vocabulary is difficult, the appropriate meaning of context-dependent words, phrases, or statements in virtually any passage	Draw complex or subtle generalizations and conclusions about people, ideas, and so on, often by synthesizing information from different portions of the passage Understand and generalize about portions of a complex literary narrative

Uncomplicated Informational Passages refers to materials that tend to contain a limited amount of data, address basic concepts using familiar language and conventional organizational patterns, have a clear purpose, and are written to be accessible.

More Challenging Informational Passages refers to materials that tend to present concepts that are not always stated explicitly and that are accompanied or illustrated by more—and more detailed—supporting data, include some difficult context-dependent words, and are written in a somewhat more demanding and less accessible style.

Complex Informational Passages refers to materials that tend to include a sizable amount of data, present difficult concepts that are embedded (not explicit) in the text, use demanding words and phrases whose meaning must be determined from context, and are likely to include intricate explanations of processes or events.

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College Readiness Standards — Science			
	Interpretation of Data	**Scientific Investigation**	**Evaluation of Models, Inferences, and Experimental Results**
13–15	Select a single piece of data (numerical or nonnumerical) from a simple data presentation (e.g., a table or graph with two or three variables; a food web diagram) Identify basic features of a table, graph, or diagram (e.g., headings, units of measurement, axis labels)		
16–19	Select two or more pieces of data from a simple data presentation Understand basic scientific terminology Find basic information in a brief body of text Determine how the value of one variable changes as the value of another variable changes in a simple data presentation	Understand the methods and tools used in a simple experiment	
20–23	Select data from a complex data presentation (e.g., a table or graph with more than three variables; a phase diagram) Compare or combine data from a simple data presentation (e.g., order or sum data from a table) Translate information into a table, graph, or diagram	Understand the methods and tools used in a moderately complex experiment Understand a simple experimental design Identify a control in an experiment Identify similarities and differences between experiments	Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model
24–27	Compare or combine data from two or more simple data presentations (e.g., categorize data from a table using a scale from another table) Compare or combine data from a complex data presentation Interpolate between data points in a table or graph Determine how the value of one variable changes as the value of another variable changes in a complex data presentation Identify and/or use a simple (e.g., linear) mathematical relationship between data Analyze given information when presented with new, simple information	Understand the methods and tools used in a complex experiment Understand a complex experimental design Predict the results of an additional trial or measurement in an experiment Determine the experimental conditions that would produce specified results	Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Determine whether given information supports or contradicts a simple hypothesis or conclusion, and why Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information Select a data presentation or a model that supports or contradicts a hypothesis, prediction, or conclusion
28–32*	Compare or combine data from a simple data presentation with data from a complex data presentation Identify and/or use a complex (e.g., nonlinear) mathematical relationship between data Extrapolate from data points in a table or graph	Determine the hypothesis for an experiment Identify an alternate method for testing a hypothesis	Select a complex hypothesis, prediction, or conclusion that is supported by a data presentation or model Determine whether new information supports or weakens a model, and why Use new information to make a prediction based on a model
33–36†	Compare or combine data from two or more complex data presentations Analyze given information when presented with new, complex information	Understand precision and accuracy issues Predict how modifying the design or methods of an experiment will affect results Identify an additional trial or experiment that could be performed to enhance or evaluate experimental results	Select a complex hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Determine whether given information supports or contradicts a complex hypothesis or conclusion, and why

Science College Readiness Standards are measured in the context of science topics students encounter in science courses. These topics may include:

Life Science/Biology	Physical Science/Chemistry, Physics	Earth & Space Science
• Animal behavior • Animal development and growth • Body systems • Cell structure and processes • Ecology • Evolution • Genetics • Homeostasis • Life cycles • Molecular basis of heredity • Origin of life • Photosynthesis • Plant development, growth, structure • Populations • Taxonomy	• Atomic structure • Chemical bonding, equations, nomenclature, reactions • Electrical circuits • Elements, compounds, mixtures • Force and motions • Gravitation • Heat and work • Kinetic and potential energy • Magnetism • Momentum • The Periodic Table • Properties of solutions • Sound and light • States, classes, and properties of matter • Waves	• Earthquakes and volcanoes • Earth's atmosphere • Earth's resources • Fossils and geological time • Geochemical cycles • Groundwater • Lakes, rivers, oceans • Mass movements • Plate tectonics • Rocks, minerals • Solar system • Stars, galaxies, and the universe • Water cycle • Weather and climate • Weathering and erosion

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