

Westwood

2018 - 2019

Course Description Handbook

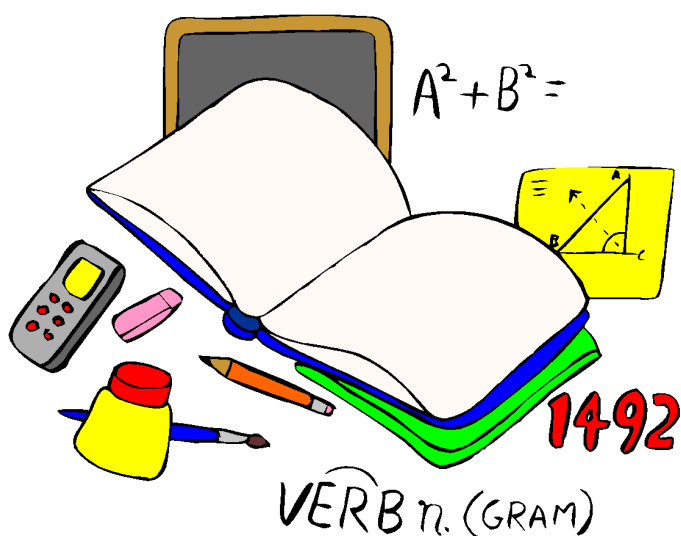


Table of Contents

| | |
|--|--------------|
| Introduction and On-line Registration Directions | 3 |
| Westwood Graduation Requirements | 4 |
| Course Load Requirements | 5-6 |
| Course List & Course Prerequisites | 7-9 |
| School-to-Work | 10 |
| Post Secondary Enrollment Options | 11-12 |
| Multicultural & Nonsexist Equity Policy | 13 |
| Board of Regents, State of IA- Regent School Requirements | 14-20 |
| Agricultural Science, Technology & Marketing | 21-24 |
| Art | 24 |
| Business & Computer | 25-26 |
| Family & Consumer Sciences | 27-29 |
| Foreign Language | 30 |
| Health & Physical Education | 31-32 |
| Industrial Technology | 33-34 |
| Language Arts | 35-37 |
| Mathematics | 38-39 |
| Music | 40 |
| Science | 41-42 |
| Social Studies | 43 |
| Community Service | 44 |

Introduction

The information in this booklet will be a resource for decisions you must make while in high school. The choices made will help you meet the graduation requirements and the educational goals you have for yourself.

Careful consideration is needed by each of you as you plan for next year at Westwood High School. What courses will you take to help meet your educational goals for high school and beyond? What courses do you need to take to help prepare you for your career goals? As you consider what classes to take, think about your academic strengths and your occupational goals. Are your academic strengths and occupational goals in line with your abilities and interests? Discuss your thoughts about this with your parents, teachers, and counselor. They can help you gain an understanding of what preparation is needed to meet your goals beyond high school.

As you familiarize yourself with this Course Handbook you will be better able to make the appropriate decisions for educational planning here at Westwood and in your post secondary endeavors.

A list of classes to choose from can be found on page 6 of the Course Description Handbook. Be sure to sign up for either #115 P.E., #114 Early Bird, or #116 S&C, since these are yearlong courses (indicated with a “Y”), you only have to put them in once. Same goes for most of your English, Math, and Science courses. If a course is listed as F/S it is a semester class and will either be offered in the spring or fall depending on how it fits into our schedule. For example, Ag Metals can only be taken for one semester. However, Cultures of the World can be taken for one semester or all year. If you would like to take Cultures in the fall, sign up for Cultures-F #42. If you would like to take Cultures in the spring, sign up for Cultures-S #282. If you want to take Cultures for the full year enter both #42 and #282. **If not enough students sign up for a course it may not be offered.**

Westwood Graduation Requirements

44 Credits are needed for graduation.

- 1 credit is earned for each semester of an academic course passed
- Band and Vocal are weighted as 1 credit a semester
- PE/SC is weighted as $\frac{1}{4}$ credit a semester
- Elementary Helper is $\frac{1}{2}$ credit a semester
- School-to-work is weighted as $\frac{1}{2}$ credit per semester —*per period* (see pg. 11)

Required credits:

8 English Credits:

**Both semesters of English I, II, & III are required.

**Beginning with the Class of 2020, a full year of either English IV or AP English will be required

1 Citizenship Credit:

**Students must complete 20 hours of community service before graduation.
(see pg. 46)

6 Social Studies Credits:

**Both semesters of American History are required and Government I.

**Three additional social studies credits are required from World History, World Cultures, Government II, Topics I & II in American History.

6 Math Credits:

3 years-- Pre-Algebra in junior high does not count towards your six semesters of high school math.

**Any course from Algebra A up through Calculus count towards six semesters of math

**Algebra A and Algebra B credits will count toward requirements for graduation, but will only count 2 credits towards admission requirements at most 4 year colleges and universities (see page 9).

6 Science Credits:

** Integrated Science, Biology, Biology-Advanced Studies, Advanced Biology 2, Natural History of Iowa, Physiology, Chemistry, Physics, Ag. Natural Resources, Ag. Horticulture, Intro to AFNR and WIT Animal Science may be used to meet Science requirements.

1 Computer Credit:

**One semester of Computer Applications before graduation.

1 Banking & Personal Finance Credit

4 Years PE/SC: Not included in GPA. May be waived only if out for a sport that semester. May only waive one semester a year. Waived for any other reasons must be cleared through the principal's office. Written permission from parents must be on file for each semester that PE/SC is waived. A Physical Activity Contract must be completed if not in PE/SC for any reason including waiver.

****Students will have the option of graduating at mid-year during their senior year if they have completed the required number of credits to graduate.**

Course Load Requirements

Six academic classes are required each semester by Board Policy. P.E. or S&C must be taken in addition to the six classes. Students may not take courses of a lower level than those already taken (example: a student who has taken Alg. I could not then take Alg. A or Alg. B).

Recommended Sequence of Required/Elective Courses:

REQUIRED COURSES

| <u>9th Grade</u> | <u>10th Grade</u> | <u>11th Grade</u> | <u>12th Grade</u> |
|-----------------------------|-------------------------------------|------------------------------------|----------------------------|
| English I | English II | English III | English IV or AP English |
| Int. Science or Adv Biology | Biology, Adv. Biology, or Chemistry | American History | PE/SC |
| Alg A, Alg 1, or Geometry | Alg. B, Alg I, Alg, II, or Geometry | PE/SC | Government |
| Social Studies | Social Studies | Prob/Stats, Adv. Math, or Geometry | Banking & Personal Finance |
| PE/SC | PE/SC | Two Science Credits | |
| Computer App (1 semester) | | | |

ELECTIVE COURSES

| <u>9th Grade</u> | <u>10th Grade</u> | <u>11th Grade</u> | <u>12th Grade</u> |
|-----------------------------|--------------------------------|---------------------------------|---------------------------------|
| Ag Metals | In addition to previous column | In addition to previous columns | In addition to previous columns |
| Ag Small Engines | Art II | Natural History of IA | School-to-work |
| Intro to Ag | Adv. Comp Apps | Physics | Art IV |
| Ag. Natural Resources | Acct I | Accounting II | AP Calculus |
| AFNR | Family Living | Adv. Bio II | Spanish IV |
| WIT Animal Sci | Spanish II | Prob/Stats | CAD Level 3 |
| Career Skills | Foods III | Art III | Government II |
| Communication Skills/Speech | Const Engin | Excel | |
| Art I | Woodworking Tech | Business Law | |
| Child Devel I | World Cultures | Begin Program | |
| Child Devel II | CAD Level 1 | Adv. Woodworking | |

| |
|-----------|
| Foods I |
| Foods II |
| Housing |
| Clothing |
| Spanish I |

| |
|------------------|
| Career Skills |
| Ag Small Engines |
| Ag Shop |
| Ag Metals |
| |

| |
|---------------------------------|
| Spanish III |
| CAD Level II |
| Topics I & II in Am. History |
| Physiology |

Elective Courses Continued

9th Grade

| |
|-------------------------|
| Health |
| Intro to Engineering |
| Creative Writing |
| Writing Essentials |
| Band |
| Vocal |
| World History |
| Ag Natural Resources |

COURSE LIST AND PREREQUISITES

| | F = Fall S = Spring Y = Year | | |
|-----------------|---|-----------------|------------------------------------|
| Course # | Course Name | Semester | Pre-requisite |
| 274 | 20 th Cent. Media | F | |
| 271 | 20 th Cent. Media | S | |
| 8 | A.P. Calculus | Y | Adv Math |
| 35 | A.P. English – F | F | 80% Rd/Lit on IA Assess or Eng III |
| 275 | A.P. English – S | S | 80% Rd/Lit on IA Assess or Eng III |
| 66 | Accounting I | Y | |
| 67 | Accounting II | F | Accounting I |
| 64 | Adv Computer Apps | F | Computer Apps |
| 87 | Adv Woodworking Technology | Y | |
| 19 | Adv. Biology I | Y | |
| 25 | Adv. Biology II | Y | Adv. Biology I |
| 7 | Adv. Math | Y | Algebra II |
| 52 | Ag Horticulture | F | |
| 53 | Ag Metals | F | |
| 127 | Ag Production | S | AFNR |
| 57 | Ag Shop | S | Ag Metals & Small Engines |
| 1 | Algebra A | Y | |
| 3 | Algebra B | Y | Algebra A |
| 4 | Algebra I | Y | |
| 5 | Algebra II | Y | Geometry |
| 43 | Amer. History | Y | |
| 121 | Art I – F | F | |
| 276 | Art I – S | S | |
| 122 | Art II – F | F | Art I |
| 277 | Art II – S | S | Art I |
| 119 | Art III – F | F | Art II |
| 278 | Art III – S | S | Art II |
| 120 | Art IV – F | F | Art III |
| 279 | Art IV – S | S | Art III |
| 92 | Band | Y | Previous Instrumental experience |
| 140 | Banking & Personal Finance | F/S | |
| 70 | Beginning Programming | F/S | Alg I |
| 21 | Biology | Y | Integrated Science |

| | | | |
|-----|--------------|-----|----------------------|
| 68 | Business Law | F/S | |
| 145 | CAD Level I | S | Intro to Engineering |

F = Fall S = Spring Y = Year

| Course # | Course Name | Semester | Pre-requisite |
|-----------------|-----------------------------|-----------------|----------------------------|
| 150 | CAD Level II | Y | CAD- Level I |
| 141 | CAD Level III | F/S | CAD-Level II |
| 59 | Career Skills – F | F | |
| 280 | Career Skills – S | S | |
| 22 | Chemistry | Y | Completed Alg I or Alg B |
| 281 | Child Develop. I | F | |
| 77 | Child Develop. II | S | Child Develop. I |
| 76 | Clothing | F | |
| 36 | Communication Skills/Speech | F | |
| 62 | Comp Applications | F/S | |
| 82 | Const. Engineer | Y | CAD Level I |
| 286 | Creative Writing | S | |
| 114 | Earlybird S&C | Y | |
| 130 | Elementary Helper | F/S | |
| 31 | English I | Y | |
| 32 | English II | Y | English I |
| 33 | English III | Y | English II |
| 34 | English IV – F | F | English III |
| 284 | English IV – S | S | English III |
| 72 | Excel | S | |
| 75 | Foods I | F | Foods I |
| 143 | Foods II | S | Foods II |
| 144 | Foods III | S | |
| 6 | Geometry | Y | Algebra I OR Alg A & Alg B |
| 44 | Government | F | American History |
| 45 | Government II | S | Government |
| 106 | Health – F | F | |
| 105 | Health – S | S | |
| 142 | Housing & Interiors | S | |
| 20 | Integrated Science | Y | |
| 216 | Intro to AFNR | F/S/Y | |
| 80 | Intro to Engineering | F | |
| 17 | Natural History of Iowa | Y | |
| 56 | Natural Resources | S | |
| 115 | Physical Education | Y | |
| 23 | Physics | Y | Completed Geometry |
| 24 | Physiology | Y | Adv Studies Biology |

| | | | |
|-----|---------------|-------|----------------------------|
| 9 | Prob/Stats | F/S/Y | Algebra I OR Alg A & Alg B |
| 58 | Small Engines | F | |
| 101 | Spanish I | Y | |

F = Fall S = Spring Y = Year

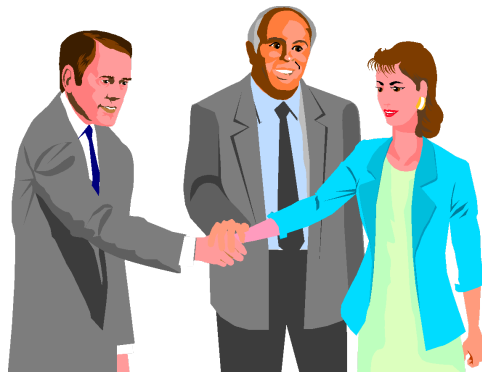
| Course # | Course Name | Semester | Pre-requisite |
|-----------------|-------------------------------|-----------------|------------------------------|
| 102 | Spanish II | Y | Spanish I |
| 103 | Spanish III | Y | Spanish II |
| 104 | Spanish IV | Y | Spanish III |
| 116 | Strength/Cond. | Y | |
| 250 | Topics I in American History | F | American History |
| 51 | Topics II in American History | S | Topics I in American History |
| 91 | Vocal Music | Y | |
| 455 | WIT Agronomy | S | Ag Production |
| 356 | WIT Animal Science | S | Ag Production |
| 454 | WIT Career Seminar | F | Ag Production |
| 514 | WIT CNA Clinical | S | |
| 513 | WIT CNA Theory | S | |
| 457 | WIT Soil Science | F | Ag Production |
| 85 | Woodworking Technology | Y | |
| 42 | World Cultures | F | |
| 282 | World Cultures | S | |
| 41 | World History – F | F | |
| 287 | World History – S | S | |
| 283 | Writing Essentials | F | English III |
| | | | |

School-to-Work Program

The School-to-Work program is designed to allow **senior students or junior students with principal approval** to get $\frac{1}{2}$ credit per semester per period with a maximum of three periods for on-the-job skill development. Students will be allowed to leave school if they are going to work. The principal will determine whether or not a School-to-Work program is warranted for a student. Students will be required to complete a job information form, including business name, supervisor, address, phone numbers, etc. and provide a pay stub.

Students in after-school extra-curricular activities are not allowed to take part in this program during their co-curricular season, but may apply once a season has ended.

Any student who does not follow through with the requirements of the program will be dropped and will be expected to remain in school. Grading will be a P and F (pass/fail).



Post Secondary Enrollment Options

POST-SECONDARY ENROLLMENT OPTIONS ACT

The Post Secondary Enrollment Options Act (Chapter 261C, Iowa Code) allows students the opportunity to enroll part-time in an eligible community college, State University, private college or university. Western Iowa Community College is often an attendance center for WHS students.

Specific criteria must be met to be eligible for this program. In following the Senior Year Plus requirements, students wishing to take college level courses *must be proficient* (Based on NSS--National Standard Score) in Reading Comprehension, Math: Concepts & Problem Solving, and Science. Must have a Cumulative GPA of 2.6 or a 3.000 in specific areas (Math & English).

Qualifying scores on a standardized test (ACT or COMPASS) may be needed to enroll in English courses and math courses. Also, no courses can be remedial courses. Students who may be interested in this option should contact the counseling center during pre-registration for more information.

Students must provide their own transportation. NOTE: Fall registration will begin April and registration must be complete before the end of this school year. Spring registration will be in November and must be completed the week before Winter Break.

Students in grades 11th and 12th are eligible for this program. Students who qualify as Talented and Gifted are allowed to start these classes their 9th grade year.

The Post Secondary Act was enacted to promote rigorous academic pursuits of a wider variety of options to high school students by enabling 11th and 12th to enroll in courses in eligible post secondary institutions of higher learning in Iowa.

The specific purposes of this Act are to:

- Promote rigorous academic pursuits, and
- Provide a wider variety of options for students

The following guidelines are also in place for Post Secondary Enrollment:

- Students may not enroll in a course at post secondary institutions if a comparable course is available at the student's high school.
- Students may enroll only part time at post secondary institutes.
- Evening courses during the school year are eligible to students at no cost.
- Students may attend summer classes, but the student must pay the cost of attendance for any summer credit hours.
- Students may not enroll for "audit" under this Act. They must take the class for credit.
- There is no charge to the student for tuition, materials, textbooks or lab fees as long as the student earns **at least a C** in each course they are enrolled in. Students not receiving at least a C in the course will be asked to pay **\$402 per a 3 credit course** for each class below a C. Damaged property such as books and computers (deemed by the college bookstore) is also the responsibility of the student.

- **Tuition Payment Plan**---Westwood Community School has a tuition payment plan option to accommodate the financial needs of students. Additional information regarding payment plans should contact Jill Sponder, business manager, at jsponder@wcsdrebels.com.
- If a student takes classed on campus transportation is not furnished by school districts under this Act.
- Post secondary courses may or may not be in the student's grade point average depending on whether or not the student wants them to show on their transcript or needs the credits for graduation.
- You must be taking at least three courses at Westwood to be listed on the honor roll.
- After successful completion of the post secondary course the student will have earned postsecondary credit from that institution as long as a C was earned in the class.. Other post secondary education institutions may, consistent with credit transfer policies, award post secondary credit for any courses taken under this act.
- The following courses are eligible under this act:
 - Nonsectarian courses (Courses that are not confined to or affiliated with any specific religion)
 - Courses that are not comparable to courses offered by the local school district
 - Credit bearing courses that lead to an educational degree
 - Courses in the disciplines of mathematics, science, social sciences, humanities, vocational technical education, and courses in career option programs offered by public area colleges
- The pupil's parent/guardian shall sign the student registration form if the pupil is under age 18, indicating that they assume all responsibilities for costs (\$402 per a 3 credit course) directly related to an incomplete or coursework lower than a C. In addition, students will also be charged \$402 per a 3 credit course if they choose to drop their class after the "drop date" set by the college. Courses vary in length. WIT offers 8 week, 12 week and 16 week classes When registering for a class students are responsible for knowing the last date to drop a class to avoid being charged.
- Students may enroll in correspondence courses offered by post secondary schools.
- The school district can and shall request students enrolled under this act provide a copy of grades earned.
- Local school districts are NOT financially responsible under this act if a student does not notify the appropriate school personnel (Superintendent, Principal, or Guidance Counselor) that they are participating in the Post Secondary Enrollment Act.
- For any additional information on the Post Secondary Enrollment Options Act please contact the high school guidance office at 428-3303.

NON-DISCRIMINATION POLICY

It is the policy of the Westwood Community School District not to illegally discriminate on the basis of race, color, national origin, sex, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to the policy please contact the district's Equity Coordinator, Connie Smits, School Counselor, 1000 Rebel Way, Sloan, IA 51055, Phone: [712-428-3200](tel:712-428-3200), E-mail address: csmits@wcsdrebels.com

Board of Regents, State of Iowa

Freshman Admission Requirements to the Regent Universities

Admission of freshmen who wish to enroll at any of the Iowa Regent universities is based on the Regent Admission Index (RAI) formulas described below. In addition, applicants must meet the minimum high school course requirements for the university they wish to enter.

There are two RAI formulas for computing students' RAI scores, the Primary RAI Formula (for students whose high schools provide class rank) and the Alternative RAI Formula (for students whose high schools do not provide class rank). Below is a detailed description of each formula:

| Primary RAI Formula (for students whose high school provides class rank) | Alternative RAI Formula (for students whose high school does NOT provide class rank) |
|--|---|
| $(1 \times \text{Percentile class rank})$ $+ (2 \times \text{ACT composite score})$ $+ (20 \times \text{Cumulative GPA})$ $+ (5 \times \text{Number of years of high school core courses})$ RAI score | $(3 \times \text{ACT composite score})$ $+ (30 \times \text{Cumulative GPA})$ $+ (5 \times \text{Number of years of high school core courses})$ RAI score |

Note: For purposes of calculating the RAI, SAT scores will be converted to ACT composite equivalents, 99% is the top value for high school rank, 4.00 is the top value for GPA, and the number of high school core courses completed is expressed in terms of years or fractions of years (e.g., one semester equals 0.5 year). Applicants whose academic records do not include all of the factors listed above, excluding class rank, will be evaluated on an individual basis by the Regent universities to which they apply.

Freshman applicants from Iowa high schools who achieve at least a 245 RAI score and who meet the minimum number of high school courses required by the Regent universities will qualify for automatic admission to any of the three Regent universities. Freshman applicants who achieve less than a 245 RAI score may also be admitted to a specific Regent university; however, each Regent university will review these applications on an individual basis and the admission decision will be specific to each institution. Freshman applicants from approved high schools in other states may be held to higher academic standards, but must meet at least the same requirements as graduates of Iowa high schools.

The Regent universities recognize that the traditional measures of academic performance do not adequately describe some students' potential for success. Therefore, the Regent universities strongly encourage all interested students to apply for admission. Applicants who feel their academic record is not an accurate reflection of their potential for success are encouraged to provide supplemental information explaining their circumstances in addition to the application, academic transcripts, and test scores.



2017 RAI Core Course List

IOWA STATE
UNIVERSITY



THE UNIVERSITY
OF IOWA



Admission of freshmen to the Iowa Regent universities is based on the Regent Admission Index (RAI) formula described below. In addition, applicants must meet the minimum high school course requirements for the university they wish to enter. Because your school issues class rank, your RAI formula is:

- (2 x ACT composite score)
- + (1 x percentile high school rank)
- + (20 x high school GPA)
- + (5 x number of high school core courses)

Regent Admission Index Score

Note: For purposes of calculating the RAI, SAT scores will be converted to ACT composite equivalents, 99% is the top value for high school rank, 4.00 is the top value for GPA, and the number of high school core courses completed is expressed in terms of years or fractions of years (e.g., one semester equals 0.5 year). Applicants who do not possess all required factors will be evaluated on an individual basis by the Regent universities to which they apply.

Freshman applicants who achieve at least a 245 RAI score and who meet the minimum number of high school courses required by the Regent universities will qualify for automatic admission to any of the three Regent universities. Freshman applicants who achieve less than a 245 RAI score may also be admitted to a specific Regent university; however, each Regent university will review these applications on an individual basis and the admission decision will be specific to each institution.

WESTWOOD HIGH SCHOOL, SLOAN, CORE COURSES APPROVED FOR RAI

Source: 2016-2017 SRI Winter data. (Note: course numbers in parentheses refer to community college course numbers.)

| English | CU* | Math | CU* | Science | CU* | Social Studies | CU* | World Languages | CU* |
|----------------------|-----|--------------------------|-----|-------------------------|-----|-----------------------------|-----|------------------------------|-----|
| 20th Century Media | 1 | Advanced Math | 1 | Advanced Biology | 1 | American History | 1 | Spanish 1 | 1 |
| AP English | 0.5 | Algebra 1 | 1 | Advanced Biology 2 | 1 | Current Affairs | 1 | Spanish 2 | 1 |
| Creative Writing | 0.5 | Algebra 1B | 1 | Biology | 1 | Government | 0.5 | Spanish 3 | 1 |
| English 1 | 1 | Algebra 2 | 1 | Chemistry | 1 | Government 2 | 0.5 | Spanish 4 | 1 |
| English 2 | 1 | AP Calculus AB | 1 | Integrated Science | 1 | Topics in American History | 0.5 | | |
| English 3 | 1 | Geometry | 1 | Natural History of Iowa | 1 | World Cultures | 1 | | |
| Writing Essentials | 0.5 | Probability & Statistics | 1 | Physics | 1 | World History | 1 | | |
| | | | | Physiology | 1 | | | | |
| Total English | | Total Math | | Total Science | | Total Social Studies | | Total World Languages | |

*The numbers in this column represent the Carnegie units awarded for each course. This number should be multiplied by 5 to determine the number of RAI points awarded for the course.

Updated: 8/25/2017

Regent Admission Index

Frequently Asked Questions

- Q:** Why did the freshman admission requirements to the Regent universities change several years ago?
- A:** In Spring 2006, the Iowa legislature passed House File 2395, requiring the Board of Regents to conduct a study of the current upper one-half class rank requirement which had been in place since 1958. The Board of Regents appointed an Admissions Study Team, including representatives from the Board of Regents and each of the three Regent universities, to conduct this study. After reviewing a large volume of data, the Admissions Study Team created the Regent Admission Index (RAI) and recommended that the RAI replace the current upper-half class rank requirement. This recommendation was approved by the Board of Regents and went into effect for freshmen entering the Iowa Regent universities beginning Fall 2009.
- Q:** What exactly is the RAI?
- A:** A student's RAI score is derived from one of two mathematical equations that include those factors that have been shown to be predictors of academic success at the Regent universities: class rank, ACT/SAT scores, grade point average, and core courses completed.

There are two RAI formulas for computing students' RAI scores, the Primary RAI Formula (for students whose high schools provide class rank) and the Alternative RAI Formula (for students whose high schools do not provide class rank). Below is a detailed description of each formula:

| Primary RAI Formula (for students whose high school provides class rank) | Alternative RAI Formula (for students whose high school does NOT provide class rank) |
|--|---|
| $\begin{aligned} & (1 \times \text{Percentile class rank}) \\ & + (2 \times \text{ACT composite score}) \\ & + (20 \times \text{Cumulative GPA}) \\ & + (5 \times \text{Number of years of high school core courses}) \\ & \text{RAI score} \end{aligned}$ | $\begin{aligned} & (3 \times \text{ACT composite score}) \\ & + (30 \times \text{Cumulative GPA}) \\ & + (5 \times \text{Number of years of high school core courses}) \\ & \text{RAI score} \end{aligned}$ |

Note: For purposes of calculating the RAI, SAT scores will be converted to ACT composite equivalents, 99% is the top value for high school rank, 4.00 is the top value for GPA, and the number of high school core courses completed is expressed in terms of years or fractions of years (e.g., one semester equals 0.5 year). Applicants whose academic records do not include all of the factors listed above, excluding class rank, will be evaluated on an individual basis by the Regent universities to which they apply.

- Q:** Does this mean each Regent university no longer has minimum high school course requirements for admission?
- A:** No. Each Regent university still has its own minimum high school course requirements for admission. These requirements really serve as the first screen in the admission decision.

This page contains details about the Regent Admission Index, which is used to determine automatic admission of freshman applicants to the Iowa Regent Universities.

Definitions

Test score: Enter your ACT composite score, or, if you took the SAT after February 2016, enter your evidence based reading and writing score and mathematics score. This RAI calculator works with SAT scores taken after February 2016. **If you took the SAT prior to February 2016, please [convert your score](#) to the new SAT scoring system before calculating your RAI using this tool.** This calculator will convert your SAT score to an ACT equivalent according to the following table:

| SAT Score (Evidence Based Reading and Writing + Math) | ACT Equivalent (Composite) |
|--|-------------------------------|
| 1600 | 36 |
| 1560-1590 | 35 |
| 1520-1550 | 34 |
| 1490-1510 | 33 |
| 1450-1480 | 32 |
| 1420-1440 | 31 |
| 1390-1410 | 30 |
| 1350-1380 | 29 |
| 1310-1340 | 28 |
| 1300-1280 | 27 |
| 1240-1270 | 26 |
| 1200-1230 | 25 |
| 1160-1190 | 24 |
| 1130-1150 | 23 |
| 1100-1120 | 22 |
| 1060-1090 | 21 |
| 1020-1050 | 20 |
| 980-1010 | 19 |
| 940-970 | 18 |
| 900-930 | 17 |
| 860-890 | 16 |
| 810-850 | 15 |
| 760-800 | 14 |
| 720-750 | 13 |
| 630-710 | 12 |
| 560-620 | 11 |

High school rank: Enter your position in your high school class and the number of students in your class.

If your school does not provide a class rank, use the alternative RAI calculator which does not require rank. ([list of Iowa high schools that do not provide class rank](#))

Grade-point average: Enter your high school grade-point average and scale.

If your school provides more than one GPA (e.g. weighted GPA and non-weighted GPA), use the best GPA.

Number of completed core courses: Enter the number of full-year courses that you've taken or plan to take in English, mathematics, natural science, social science, and foreign language. (A one-semester course counts as 0.5.) While additional courses in areas such as the fine arts and

technology will help round out your high school experience and prepare you for future careers, they are not part of the core courses used to calculate your admission index.

Working with your high school guidance counselor, consult the following document to determine what courses count in the Regent Admission Index calculation:

What Does This Index Mean?

The Regent Admission Index combines factors that strongly predict success at regent universities: ACT or SAT test score, high school rank, high school cumulative grade-point average, and the number of completed high school core courses.

There are two RAI formulas for computing students' RAI scores, the Primary RAI formula (for students whose high schools provide class rank) and the Alternative RAI formula (for students whose high schools do not provide class rank).

Iowa high school graduates must achieve a Regent Admission Index (RAI) score of at least 245 and take the minimum number of required [high school courses](#) to qualify for automatic admission as freshmen to Iowa State University, the University of Northern Iowa, and the College of Liberal Arts and Sciences at the University of Iowa. Students who achieve a score less than 245 will be considered for admission on an individual basis.

If You Are Not an Iowa High School Student

If you are interested in applying to an Iowa Regent University, but you are not an Iowa high school student (e.g., you are a nonresident, transfer, or returning student), visit any of the university web sites below to learn about admission requirements.

[University of Iowa \(opens new window\)](#)

[Iowa State University \(opens new window\)](#)

[University of Northern Iowa \(opens new window\)](#)

If Your Index Score is Below 245

Students who don't achieve a Regent Admission Index score of 245, but who otherwise demonstrate potential and commitment to succeed at a Regent University, may be offered admission after an individual review of their application.

High School Course Requirements

In addition to meeting the Regent Admission Index requirement, students must complete the minimum number of high school courses specified below for the institution to which they're applying.

| Subject Area | Iowa State University | University of Iowa | University of Northern Iowa |
|-----------------------|---|---|---|
| English/Language Arts | 4 years of English/Language Arts emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature. | 4 years, with an emphasis on the analysis and interpretation of literature, composition, and speech. | 4 years, including one year of composition; may also include one year of speech, communication, or journalism. |
| Math | 3 years, including one year each of algebra, geometry, and advanced algebra. | 3 years, including two years of algebra and one year of geometry, for admission to the College of Liberal Arts and Sciences. 4 years, including two years of algebra, one year each of geometry higher math (trigonometry, analysis, or calculus), for admission to the College of Engineering. | 3 years, including the equivalent of algebra, geometry, and advanced algebra. |
| Natural Science | 3 years, including one year each from any two of the following: biology, chemistry, and physics. | 3 years, including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences. 3 years, with at least one year each in chemistry and physics, for admission to the College of Engineering. Nursing - 3 years including one year each of biology, chemistry and physics. | 3 years, including courses in general science, biology, chemistry, earth science, or physics; laboratory experience highly recommended. |
| Social Science | 2 years for admission to the Colleges of Agriculture, Business, Design, Human Sciences, and Engineering. Three years for admission to the College of Liberal Arts and Sciences. | 3 years, with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences. 2 years, with U.S. history and world history recommended, | 3 years, including courses in anthropology, economics, geography, government, history, psychology, or sociology. |

| | | | |
|------------------|---|--|---|
| | | for admission to the College of Engineering. | |
| Foreign Language | 2 years of a single foreign language for admission to the College of Liberal Arts and Sciences and the College of Engineering. Foreign language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences. | 2 years of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. Nursing - 3 years in a single language or two years each in two different languages. | Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last term will meet the university graduation requirement. |
| Other Courses | Specific elective courses are not required for admission to Iowa State University. | Specific elective courses are not required for admission. | Two years of additional courses from the required subject areas, foreign languages, or fine arts. |

For More Information

Your high school counselor is an excellent source of information about planning for college. We recommend you speak with your counselor as early as possible about taking courses that will prepare you for success in college.

For more information about the Iowa Regent Universities and admission requirements, visit the web sites below:

AGRICULTURAL SCIENCE, MARKETING (ASTM)



TECHNOLOGY, AND

STUDENT ENROLLMENT:

Students will be able to take any course on a semester basis, as they choose. However, some classes do have a prerequisite before they can be taken. Different types of FFA awards will depend on which classes are most requested in pre-registration.

FEES AND SAFETY GLASSES:

Students will be charged for individual projects if they decide to do them. Shop glasses are required in the shop.

FFA:

All students who are enrolled in one or more semester of Ag are entitled to join FFA. Class time will be spent to carry out the various FFA activities. A student has to be enrolled in Ag. at least one semester each year to be an FFA member. FFA chapter officers will be required to be enrolled in class to hold office. FFA activities can be part of the class grade.

PROJECTS:

All members are required to keep a record book. Projects will be required, depending upon their opportunities and interest. Class time will be spent on records. Project record books will move from class to class and year to year, and can be a part of the class grade.

449 LAW:

The Ag. Department is enrolled in the Ag. Mechanics pathway. The following classes for career development can be used along with a year of Career Skills.

Career Skills – F #59
Career Skills – S #280
Grade(s): 10, 11, 12

Credit: 1 or 2
Semesters: 1 or 2 F/S/Y
Prerequisite: None

Career Skills is a course designed to introduce many of the skills needed to be successful in the world of work. Many of these skills carry over into our personal lives. Topics included are career decision-making, job interviews, entering the world of work, developing your skills and understanding, becoming a wise consumer, and meeting your adult responsibilities.

Ag Metals #53
Grade(s): 9, 10, 11, 12
Class size: 12-14

Credit: 1
Semester: F
Prerequisite: None

This class involves the learning skills needed in arc welding and oxyacetylene welding. Class time is spent on demonstrations and learning these skills. Shop safety, sheet metal work, soldering, and hot and cold metal will be covered. Individual projects may be completed, but not required.

Ag. Small Engines #58

Grade(s): 9, 10, 11, 12

Class size: 16-18

Credit: 1

Semester: F

Prerequisite: None

This class is designed to teach the basics of small engines. Units will be covered on engine design, engine systems, trouble shooting, maintenance, and tune-up. Students will be required to disassemble and reassemble an engine.

Other courses offered by the Ag. Department are as follows:

Ag. Shop #57

Grade(s): 10, 11, 12

Class size: 10-12

Credit: 1

Semester: S

Prerequisite: Ag Metals & Small Engines

This class is designed to allow students to design, fabricate, or repair projects of their own. They will set goals each day which will require them to plan, design, and build a project of their choice. A student's grade will be mostly on projects and use of class time.

Ag. Natural Resources #56

Grade(s): 9, 10, 11, 12

Credit: 1

Semester: F/S

Prerequisite: None

Topics discussed in this class will include, but are not limited to, soil conservation, water conservation, outdoor recreation, global concerns such as global warming, deforestation and ozone depletion, and wildlife management (identifying wildlife species, species of fish, waterfowl, game birds and non-game birds, discovering these species' habitats and how to manage them successfully). We will also explore career opportunities related to this field. May be used to meet science requirements.

Ag. Horticulture #52

Grade(s): 9, 10, 11, 12

Credit: 1

Semester: F

Prerequisite: None

This class is designed for those who may have an interest in plants. Units include career opportunities in plant science, plant propagation, integrated pest control, container grown plants, using plants in the landscape, lawn and turf grass establishment and maintenance, the vegetable garden, the small fruit garden, and holiday crafts and floral designs. Plantings and projects are included in the class. May be used to meet science requirements.

Ag. Production #127

Grade(s): 9, 10, 11, 12

Credit: 1

Semester: S

Prerequisite: AFNR

This class is offered for those interested in production agriculture. It will include units in crop and animal production. Business and marketing skills will be studied depending upon the interest of the class members.

Intro to AFNR #216(F) / #146 (S)

Grades(s): 9, 10, 11, 12

Credits: 2

Semester: F/S/Year

Prerequisite: None

Students participating in the Introduction to Agriculture, Food, and Natural Resources course will experience exciting “hands-on” activities, projects, and problems. Student experiences will involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. May be used to meet science requirements.

WIT Animal Science #356

Grade(s): 11, 12

Credit: 1

Semester: S

Prerequisite: Ag Production

This course introduces the student to a broad spectrum of animal science. Beef, swine, sheep, dairy, horse and poultry production are presented. Some exotic and nontraditional livestock are discussed.

WIT Agronomy #455

Grade(s): 11, 12

Credit: 1

Semester: S

Prerequisite: Ag Production

This course presents the information necessary to understand the reasons and methods of soil and crop management. The course provides answers to practical crop production questions and introduces students to further study of the sciences involved.

WIT Soil Science #457

Grade(s): 11, 12

Credit: 1

Semester: F

Prerequisite: Ag Production

This course is an introduction to the physical and chemical properties of soil including their formation, classification, and distribution. Soil fertility and fertilizer use is also discussed.

WIT Career Seminar #454

Grade(s): 11, 12

Credit: 1

Semester: F

Prerequisite: Ag Production

This course is designed to help students explore and discover the many opportunities that are available in the profession of agriculture and related industries both nationally and internationally



| |
|------------|
| ART |
|------------|

Art I – F #121, Art I – S #276

Credits: 2

Art II – F #122, Art II – S #277

Semesters: F/S/Y

Grade(s): 9, 10, 11, 12

Prerequisite: None

This course will give students opportunities to experience a variety of techniques (drawing, painting, printmaking, ceramics, and sculpture) while developing student's individual style and creative problem solving skills. Students will demonstrate their ability to respond, analyze and interpret their own artwork and the work of others through discussions and critiques.

Art III – F #119, Art III – S #278

Credits: 2

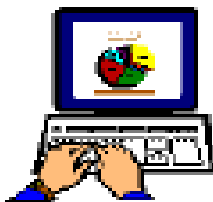
Art IV – F #120, Art IV – S #279

Semesters: F/S/Y

Grade(s): 11, 12

Prerequisite: Art I & Art II

In this course students will continue to expand their skill levels in various artistic techniques (drawing, painting, printmaking, ceramics, and sculpture) and will have more freedom of choice to focus in on desired materials or subject areas. Students will create a body of work necessary for portfolios and scholarship opportunities should they wish to continue their artistic education after high school.



BUSINESS AND COMPUTER

Business Law #68

Grade(s): 9, 10, 11, 12

Prerequisite: None

Credit: 1

Semesters: F/S/Y

Provides a good background of today's legal system and how the law affects you personally. Students will become more alert and aware of their rights, responsibilities, and risks as prescribed by law. Students will work to gain an understanding of basic legal vocabulary, occupations in the legal field, and regulations governing different types of business organizations. Some topics include: law, ethics, constitutional rights, court system, contracts, debtors, creditors, and bankruptcy. Business law is a useful and beneficial course regarding legal issues for all students before venturing into the "real" world.

Accounting I #66

Grade(s): 9, 10, 11, 12

(if room permits)

Credit: 2

Semesters: Y

Prerequisite: None

The primary focus of this class is to understand all aspects of the accounting cycle. Record keeping will be learned and practiced for a service business run as a sole-proprietorship as well as a merchandising business run as a partnership. Other topics such as checking accounts, payroll records, and special journals will also be covered. This is an essential course for those who are considering going into business.

Accounting II #67

Grade(s): 10, 11, 12

(if room permits)

Credit: 2

Semesters: F

Prerequisite: Accounting I

This course is a continuation of Accounting I. The primary focus of this class is to understand all advanced aspects of the accounting cycle. Advanced record keeping will be learned and practiced for a service business run as a sole-proprietorship as well as a merchandising business run as a partnership. Other topics such as checking accounts, payroll records, and special journals will also be covered. This is an essential course for those who are considering going into business.

Banking & Personal Finance #140

Grade(s): 9, 10, 11, 12

Credit: 1

Semesters: F/S

One semester required graduate

Students will study the basic concepts of banking. Emphasis will be placed on financial services, using credit, budgets, and insurance, **to meet the Iowa Core Curriculum 21st Century Skills Financial Literacy requirement.**

Computer Applications #62

Grade(s): 9, 10, 11, 12

Credit: 1

Semesters: F/S

Prerequisite: None

This introductory course will provide an in depth exploration of Google Docs as applied to business or personal use. The course is a hands-on exploration of Google Docs, which provides students with the ability to develop documents including flyers, papers, cover letters, resumes, tables, charts, watermarks, form letters, mailing labels, and newsletters, among other things. Students will also be exposed to Presentation (Slides), Spreadsheets (Sheets), Gmail, and other Google programs, although a majority of the time will focus on Google Docs. Beginning with the class of 2017, Computer Applications is needed to graduate.

Advanced Computer Applications #64 **Credit: 1**

Grade(s): 10, 11, 12

Semesters: 1 F

Prerequisite: Computer Applications

Advanced Computer Applications will help students master computer skills as they relate to the business world. Students will design many business documents for their own business. Some of the documents include a business plan, logo, customer database, placemat, coupon flyer, grand opening advertisement, menu, and employment application. Many Microsoft Office and other applications will be used to create these documents.

Beginning Programming #70

Grade(s): 10, 11, 12

Credit: 1

Semesters: 1 F/S

Prerequisite: Algebra I

This course will give students a broad understanding of computer and object-oriented programming. Students will learn to write, design, and execute code, understanding fundamentals such as its keyword, data types, strings, variables and arithmetic operators. The focus is on fundamental principles of problem solving and basic concepts of programming. Students will learn various control structures including If/then and Boolean operators. Using Python3, students master the building blocks of programming: functions, variables, loops, and classes.

Excel #72

Grade(s): 10, 11, 12

Credit: 1

Semesters: 1 S

Prerequisite: None

This course introduces spreadsheet users to intermediate and advanced features and techniques that will increase productivity in preparing and using spreadsheets for financial and analytical purposes. Microsoft Office Excel 2007 will be used to organize and sort data, analyze data, create pivot tables, add graphics and charts, and work with

macros, among other things. The majority of class time will be spent actually working on projects in Excel.



Family and Consumer Sciences

Family and Consumer Science classes develop skills that will be used in personal life, at home, and on the job. The courses are designed to assist the student in the development of attitudes, appreciation, understandings, and techniques necessary for these skills.

Because each person's contributions to society depends heavily on early family experiences, education for home and family life is offered to all students, both boys and girls, during their high school career. Regardless of interests, intelligence, or background, a person's success, satisfactions, and growth toward maturity will depend largely upon his/her ability to relate to others, to set realistic personal goals, and to manage resources. Ultimately, Family and Consumer Science classes prepare students for a more satisfying life.

Foods I # 75 - F

Grade(s): 9, 10, 11, 12

Class Size: 16

Credit: 1

Semester: F

Prerequisite: None

Foods I is an introductory course in basic food preparation. Proper use of small and large equipment, food safety and sanitation, and the purchase of food products will be studied. Nutrition & wellness, as well as units on the recipe, quick breads, cookies, fruit, vegetables and salads are also explored. It is an excellent course for all students, recognizing everyone will be responsible for purchasing and preparing their own food in the near future.

Foods II #143 - S

Grade(s): 9, 10, 11, 12

Class Size: 16

Credit: 1

Semester: S

Prerequisite: Foods I

This course is a continuation of Foods I. Units in pies, pastry, cake, yeast breads, cheese, milk, grains, pasta, eggs, and microwave cookery will be explored. Students will

study, prepare, sample, and evaluate foods from the various units, as well as learn more about the purchase and use of small equipment.

Foods III #144 - S

Grades: 10, 11, 12

Class Size: 16

Credit: 1

Semester: S (Even year)

Prerequisite: Foods I & II

This course is a continuation of Foods I & II. Units in Protein foods, Soups, Sandwiches, Casseroles, Cakes and Candy will be explored. There will also be Units in American Cooking and Foreign Foods. Students will study, prepare, sample and evaluate foods from the units, as well as learn more about nutrition, cooking methods and equipment.

Clothing I # 76 – F

Grade(s): 9, 10, 11, 12

Credit: 1

Semester: F (Even)

Prerequisite: None

Clothing I is an introductory course about clothing and basic clothing construction techniques. Proper use and care of sewing machines, sergers and pressing equipment will be studied. Textiles, clothing care and selection, choosing clothing for the family, and fashion trends will also be explored. Students will construct several basic sewing projects throughout the semester. Students that have an interest in careers in retail, fashion design or clothing construction will benefit from the information and hands on experiences in this class.

Child Development 1 #281 - F

Grade(s): 9, 10, 11, 12

Credit: 1

Semester: F

Prerequisite: None

This course provides students with an understanding of human growth and development. Parenting skills are developed as positive guidance techniques and child-related issues are studied. Students will learn how children develop mentally, physically, emotionally and socially from conception to age 2. Learning activities, observation techniques, and lab experiences working with children may be included in this class. This course is a valuable resource for those students who are considering careers working with children in education or child care.

Child Development II # 77 - S

Grade(s): 9, 10, 11, 12

Credit: 1

Semester: S

Prerequisite: Child Development 1

This course is a continuation of Child Development 1. Parenting skills are developed through studying positive guidance, support and protection of children. Students will learn how children develop mentally, physically, emotionally and socially from age 1-2. Students will use learning activities, observation techniques and lab experiences. This course is a valuable resource for those students who are considering careers working with children in education or child care.

Family Living #78 - F
Grade(s): 9, 10, 11, 12

Credit: 1
Semester: F (Odd)
Prerequisite: None

Family Living is designed to help students learn about and improve family relationships now and in the future. Communication skills will be a vital part of the class as the students study dating, choosing a lifestyle and marriage partner, planning a wedding, building and blending a marriage, balancing work and family, types of families and their special problems, planning for children, decision making, divorce, family stress, aging, death and dying.

Housing & Interiors # 142 - S
Grade(s): 9, 10, 11, 12

Credit: 1
Semester: S (Odd)
Prerequisite: None

Housing and Interiors is a hands on class which explores the internal design of a home, past and present housing styles, furniture styles and the principles and elements of design. Students will use the skills learned to lay out a floor plan, and then select colors, lighting, flooring, wall coverings, window treatments and furniture for their project. Students will also explore the different career possibilities in the Housing and Interior Design fields.



FOREIGN LANGUAGE

Spanish I #101

Grade(s): 9, 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: None

Spanish I is an introduction to the Spanish language. It introduces and develops the listening and speaking skills. Students are introduced to "everyday things" such as weather, time-telling, family, food, clothes, etc. Grammar includes the present tense. Culture includes learning about Hispanic speaking countries.

Performance is measured with oral and written tests, quizzes, daily assignments and projects.

Spanish II #102

Grade(s): 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: Spanish I

Spanish II is a continuation of Spanish I. There is continued emphasis on listening and speaking skills. Grammar includes the past tenses and continues to build to more advanced levels. Culture includes learning Hispanic traditions.

Performance is measured with oral and written tests, quizzes, daily assignments and projects.

Spanish III #103

Grade(s): 11, 12

Credits: 2

Semesters: Y

Prerequisite: Spanish II

Spanish III begins with a review of Spanish II. More vocabulary, grammar and verb tenses are presented. Increased emphasis on listening comprehension skills, writing, reading and speaking. Culture includes learning Hispanic traditions, artists, and legends.

Performance is measured by oral and written tests, quizzes, projects and daily assignments.

Spanish IV #104

Grade: 12

Credits: 2

Semesters: Y

Prerequisite: Spanish III

Spanish IV combines all skills: listening comprehension, speaking, reading and writing. Previous grammar is reviewed and expanded during the year. More verb tenses are presented. Listening comprehension and oral usage are expanded upon. Basic literature is introduced from in and outside of the text. Culture includes learning about Hispanic traditions, art and literature.

Performance is measured by oral and written tests, quizzes, daily assignments and projects.



| |
|--------------------------------------|
| HEALTH AND PHYSICAL EDUCATION |
|--------------------------------------|

Health – F #106, Health – S #105

Grade (s): 9, 10, 11, 12

Credits: 1 per semester

Semesters: F/S/Y

Prerequisite: None

The goal of health class is to prepare students for lifelong wellbeing. The fall semester focuses on mental health, social health, physical health, the fitness components, and nutrition. The topics for the spring semester include communicable and non-communicable diseases, STDs, pregnancy, drugs and alcohol, first aid, human anatomy and physiology, and other topics as time allows. The class is taught through lecture, projects, discussion, and many classroom activities.

Physical Education #115

Grade(s): 9, 10, 11, 12

Credit: ½

Semesters: Y

Prerequisite: None

All students are required to take physical education or strength and conditioning. P. E. classes meet twice a week and are held on Tuesday and Thursday. Students will receive ½ unit of credit per year for successfully passing the course. A wide variety of indoor and outdoor games, sports, and activities will be covered over the course of the year.

Strength and Conditioning #116

Credit: ½

Grade(s): 9, 10, 11, 12

Semesters: Y

Prerequisite: None

This class is limited to 12-14 students per period. The instructor will decide who will get in the class if more than this number signs up in any one period. Older students and students involved in athletics will be admitted first. Each student will be put on a program and worked with on an individual basis. This class meets Monday, Wednesday, and Friday all year long. Just as in physical education, students will receive ½ unit of credit per year, satisfying the physical education requirement.

Early Bird Strength and Conditioning #114

Credit: ½

Grade(s): 9, 10, 11, 12

Semesters: F/S/Y

Prerequisite: None

Students signing up for this class will meet before the school day begins. The participants will utilize the same lifting program as used during the day along with the same rules and grading. The students are expected to provide their own transportation. Just as in physical education, students will receive ½ unit of credit per year, satisfying the physical education requirement.

WIT CNA Terminology #511

Credit: 1

Grade(s): 10, 11, 12

Semester

Prerequisite: None

This course presents medical terminology as the language of medicine. It also studies spelling, pronunciation and usage, emphasis on word analysis and construction of definitions.

WIT CNA Theory # 513

Credit: 1

Grade(s): 10, 11, 12

Semester

Prerequisite: None

This course is designed to provide the student with the fundamentals of patient care in the healthcare environment. Students will learn basic anatomy, physiology, medical terminology, meeting human needs, safety measures, infection control, and physical care.

WIT CNA Clinical # 514

Credit: 1

Grade(s): 10, 11, 12

Semester

Prerequisite: None

This course expands the student's knowledge of tasks, assessments and observations of patients in the healthcare environment. Students will develop technical skills specific to complex needs of the patient.



INDUSTRIAL TECHNOLOGY

Intro to Engineering #80

Grade(s): 9, 10, 11, 12

Class size: 14

Credits: 1

Semesters: F

Prerequisite: None

Intro to Engineering courses introduce students to and expand their knowledge of major engineering concepts such as modeling, systems, design, optimization, technology society interaction, and ethics. Particular topics often include applied engineering graphic systems, communicating technical information, engineering design principles, material science, research and development processes, and manufacturing techniques and systems. The courses may also cover the opportunities and challenges in various branches of engineering. Cost: None

CAD – Level I #145

Grades: 9, 10, 11, 12

Class Size: 10

Credits: 1

Semesters: S

Prerequisite: Intro to Engineering

This course will primarily focus on the competencies needed to become a basic CAD operator. Students will learn to use computer aided drafting software, and to enhance the skill learned in Technical Drawing. This course is a must for anyone planning to pursue any engineering construction, or interior design careers.

Cost: None

Construction Engineering #82**Grade(s): 10, 11, 12****Class size: 10****Credits: 2****Semesters: Y****Prerequisite: CAD-Level I**

This course will primarily focus on developing student competencies in the area of building construction. Students will design and draw (on computer) a series of plans that encompass most areas of building construction. Students will develop an understanding of many aspects of building and of the construction industry. This course will benefit anyone interested in a career with residential construction, architectural engineering, and interior design.

Woodworking Technology #85**Grade(s): 10, 11, 12****Class size: 14****Credits: 2****Semesters: Y****Prerequisite: None**

This course offers students the opportunity to work in a more traditional shop setting. This class will allow students to learn and practice some of the most recent woodworking techniques along with some of the tried and true techniques still in use. Students will learn the proper way to use hand and power tools. Safety will be taught throughout the planning, designing, and constructing phases of this course. Students will be responsible for designing, planning, and building various projects. The cost of this class is based on the project and the material expense.

Adv. Woodworking Technology #87**Grade(s): 10, 11, 12****Class size: 14****Credits: 2****Semesters: Y****Prerequisite: None**

This course offers students the opportunity to work in a more advanced shop setting. This class will allow students to learn and practice some of the most recent and advanced woodworking techniques along with some of the tried and true techniques still in use. Students will learn the proper way to use hand and power tools. Safety will be taught throughout the planning, designing, and constructing phases of this course. Students will be responsible for designing, planning, and building various projects. The cost of this class is based on the project and the material expense.

CAD – Level II #150**Grades(s): 11, 12****Class Size: 10****Credits: 2****Semesters: Y****Prerequisite: Intro to Engin. & CAD I**

This course offers students the opportunity to expand on the concepts learned in Technical Drawing and CAD Level I. Emphasis will be placed on 3D solid models and developing technical drawings from these models. Upon completion of the course, each student will have developed a portfolio of all their work. This course is highly recommended for anyone planning on pursuing a career as a machinist, mechanical engineer, architectural engineer, or any other manufacturing technology fields.

CAD – Level III #141**Grades(s): 11, 12****Credits: 1****Semesters: F/S**

Class Size: 10

Prerequisite: CAD II

This course offers students the opportunity to expand on the concepts learned in Technical Drawing and CAD Level I & CAD Level II. Emphasis will be placed on 3D solid models and developing technical drawings from these models. Upon completion of the course, each student will have developed a portfolio of all their work. This course is highly recommended for anyone planning on pursuing a career as a machinist, mechanical engineer, architectural engineer, or any other manufacturing technology fields.



LANGUAGE ARTS

English I, II, and III are required of all students. English IV or AP English (year) are required beginning with Class of 2020. All other classes may be considered electives.

English I #31

Grade 9

Credits: 2

Semesters: Y

Prerequisite: None

This required freshman course is a continuation of the development of skills introduced in junior high language arts. English I centers around vocabulary, spelling, writing, and literature skills used on a regular basis in everyday life. A survey of literature covered includes the short story, the novel, drama, and poetry if time permits. Grades will be based on daily work and participation, test and quiz scores, and special projects.

English II #32

Grade: 10

Credits: 2

Semesters: Y

Prerequisite: English I

English II continues the development of literary knowledge, grammar and writing skills. A survey of literature studied includes short stories, drama, the novel, and poetry if time permits. Writing assignments relate to lessons in grammar and information connected to literature that is studied. Students write a research paper and give an oral presentation based on their research.

English III #33**Grade: 11****Credits: 2****Semesters: Y****Prerequisite: English II**

American Literature is a one-year, language arts requirement. It is intended to improve independent reading comprehension, develop analytical writing ability, and provide a general knowledge of American Literature.

English IV – F #34**English IV – S #284****Grade: 12****Credits: 1 or 2****Semesters: 1 or 2 F/S/Y****Prerequisite: English III**

English IV is a one-year language arts course designed as a chronological survey of the major writers of England and the rest of the area. Students are exposed to those elements, which influenced the evolution of British Literature.

AP English Fall #35**AP English Spring #37****Grade: 12****Length/Credit: F/S/Y****Prerequisite: English III; 80th% or better on the reading of the IA Assessments**

AP English is a two semester course for seniors capable of doing advanced work in reading, literary analysis, and expository writing who wish to pursue college level studies while still in high school. Material studied includes classics from short story, poetry, drama, and novel genre.

20th Century Mass Media #274 – F**20th Century Mass Media # 271 – S****Grade(s): 9, 10, 11, 12****Credits: 1****Semesters: F/S/Y****Prerequisite: None**

This course is an opportunity for students to study the literature and history of our entertainment system. Students will write brief comparisons of films and actors. They will analyze the art of humor, playing to the audience, and including political and social commentary as part of entertainment. Reading and writing will be required for this course, though not at as an advanced level of college-gearred classes.

Students will study Mass Communication by genre and its chronological development throughout the 1900s. Tapes of radio performances, clips from television, scripts of various shows, commercials, and movie samples will be some of the material used in the study of this literary form.

Communication Skills (Speech) #36**Grade(s): 9, 10, 11, 12****Credits: 1****Semesters: F****Prerequisite: None**

The purpose of this course is to give the student experience in speech communication with public speaking experience. Assessment is based on preparation, including audience

analysis and support through outside sources; organization and delivery. Formal speaking will include persuasive, process, informative, entertainment and group performance.

Creative Writing #286
Grade(s): 9, 10, 11, 12

Credits: 1
Semesters: S
Prerequisite: None

This course will offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis on this course is writing; however, students may study authors who have mastered creative writing techniques.

Writing Essentials #283
Grade(s): 11, 12

Credits: 1
Semester: F
Prerequisite: Eng II

This is a semester course that will help students develop writing skills. Students will develop different types of writing focusing on different purposes and audiences. This course will help students explore/practice descriptive, narrative, persuasive, and expository styles while writing essays, letters, applications, and other forms of professional writing.



MATHEMATICS

The mathematics program at Westwood High School is designed for the following sequence. Algebra I (*or Alg A then Alg B*), Geometry, Algebra II, Advanced Math. Other additional advanced math courses available are Calculus and Probability and Statistics. A student must take six semesters of Mathematics.

Algebra A #1

Grade(s): 9, 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: none

The first year in a 2 year sequence covering Pre-Algebra and Algebra I concepts. During the first semester of Algebra A we will cover Pre-Algebra concepts. The second semester will consist of Algebra I concepts. Only 1 of the 2 credits earned here count towards admission requirements at most 4 year colleges and universities.

Algebra B #3

Grade(s): 9, 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: Algebra A

The second year in a 2 year sequence covering Algebra concepts. This year we will cover Algebra I concepts not covered in Algebra A. Upon the completion of Algebra A & B the student will have covered the same concepts as in Algebra I. Only 1 of the 2

credits earned here count towards admission requirements at most 4 year colleges and universities.

Algebra I #4

Grade(s): 8, 9, 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: Pre-Algebra

The fundamentals of arithmetic are expanded to solve problems which are not solvable by simple arithmetic. In Algebra, letters are used instead of numbers to represent unknown quantities, and problems are solved in using these letters. Algebra attempts to develop the student's common sense thinking and reasoning powers. This course is a prerequisite for the college bound student.

Geometry #6

Grade(s): 9, 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: Algebra I or Algebra B

Geometry is a math course designed to follow Algebra I. The focus of the study is on spatial relationships of two-dimensional objects. Reasoning and continuation of algebra skills are included in the course. Geometry should be taken by anyone that intends to continue education at the college level.

Algebra II #5

Grade(s): 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: Geometry

This course contains the necessary review of first-year Algebra. Algebra II covers topics of imaginary and complex numbers, logarithms, some numerical trigonometry and functions. This course is a prerequisite for college bound students. This course is a more in depth study of the topics of Algebra I.

Advanced Math #7

Grade(s): 11, 12

Credits: 2

Semesters: Y

Prerequisite: Algebra II

Advanced Math is an upper level math course offered to college bound students who have taken Algebra II and are preparing to take A.P. Calculus. The topics covered include algebra, geometry, trigonometry, discrete math, mathematical analysis, and pre-calculus. Each student should have a scientific calculator, notebook or composition book containing graph paper. There is extensive work on a graphing calculator.

A.P. Calculus #8

Grade(s): 12

Credits: 2

Semesters: Y

Prerequisite: Advanced Math

A fifth year of math is offered to Westwood students interested in pursuing a career where math will be an essential part of their college education. This course will continue to prepare our seniors for college calculus. At the end of the course, students should be

prepared for the Calculus AB exam as administered by the AP College Board. This allows the student the possibility to receive college credit for calculus.

Probability and Statistics #9

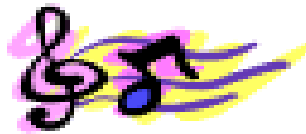
Grade(s): 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: Algebra I or Algebra B

Probability and Statistics is a course designed to give the student a comprehensive view of introductory statistics and probability. Statistics play a large part in our world today. This course will assist the student in the collecting of data, analyzing it, and making meaningful decisions based on the data.



| |
|--------------|
| MUSIC |
|--------------|

Band #92

Grade(s): 9, 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: None

Band is an elective which will consist of marching band in the first quarter, concert band in the fall and spring semesters, pep band in the fall and spring semesters, as well as solo small ensemble contests, large group contests, honor bands and numerous other opportunities for students to excel. Participation in daily rehearsals, concerts, performances, large group and solo/ensemble competitions, and lessons are all required. Fundamental techniques and skills on your instrument of choice are taught and stressed and a wide variety of music is taught.

Vocal #91

Grade(s): 9, 10, 11, 12

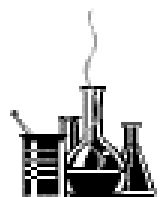
Prerequisite: None

Credits: 2

Semesters: Y

Vocal music is an elective co-curricular class which is open to all students in grades 9-12. Participation in daily rehearsals, concerts, state large group contest, and individual/group lessons are requirements for the course. Westwood currently offers the following performance opportunities: mixed chorus, treble clef chorus, bass clef chorus,

Rebelaires Show Choir (top auditioned show choir), state solo/ensemble contest, the bi-annual Renaissance Madrigal Feaste, and the bi-annual fall musical. There are four major concerts throughout the school year. Fundamental singing techniques are stressed and a wide variety of music is taught.



SCIENCE

Integrated Science #20

Grade: 9

Credits: 2

Semesters: Y

Prerequisite: None

The purpose of this course is to expose the students to the basic principles of earth and physical science. The course will give insight into the means by which scientific knowledge is acquired using the inquiry method. The class work includes discussions, labs, and projects with the emphasis on hands-on activities. The class is designed to serve as a foundation for those taking physics and chemistry later as well as students who are taking no further science.

Biology #21

Grade(s): 10, 11

Credits: 2

Semesters: Y

Prerequisite: Integrated Science

This course is designed for students who do not plan on going to a four year college program. Biology is a branch of Science devoted to the study of life. In this course students study the concepts of Biology on a basic level. A general study of ecology, cell parts and functions as well as plants and animals. Evaluation is accomplished by written daily assignments, oral and written reports, worksheets, labs; as well as chapter and semester tests.

Biology-Advanced Studies #19**Grade(s): 9, 10****Prerequisite: Integrated Science, or A in****Jr. High Science Class, or teacher approved****Credits: 2****Semesters: Y**

An extended branch of science devoted to the study of life. In this course students study more in depth events that effect ecology. They will look at how organisms have evolved and predict how they might change in the future, the “why”, and the effects they will have on the environment. They will explore what is currently going on in the field of science. Dealing with plants and animals will also be looked at. Evaluation is accomplished by written daily assignments, oral and written reports, worksheets, as well as unit and semester tests and other laboratory experiments.

Biology-Advanced Studies II #25**Grade(s): 10 - 12****Credits: 2****Semesters: Y****Prerequisite: Advanced Biology**

An extended branch of science devoted to the study of life. In this course students study to a general degree ecology, evolution as well as genetics. Anatomy (structure) and physiological (function) aspects of many living organisms will be explored. Involved within the study of organisms such as gymnosperms, flowering and non-flowering plants, invertebrates and vertebrates including the human species. Evaluation is accomplished by written daily assignments, oral and written reports, worksheets, as well as chapter and semester tests and other laboratory experiments

Natural History of Iowa #17**Grade(s): 11, 12****Credits: 2****Semesters: Y****Prerequisite: Biology**

This course will follow the changes in Iowa’s environment from the beginning of time to present. The focus will be on the changes in the geology, flora and fauna as a result of these environmental changes. There will be a special emphasis on Iowa’s unique features of the Loess Hills and tall grass prairies. This will be a year long course that will count toward the three years of science required to graduate.

Physiology #24**Grade(s): 11, 12****Credits: 2****Semesters: Y****Prerequisite: Adv. Studies Biology**

The study of the human body, its systems, and their functions in maintaining life is basically what this course is about. The course covers units in genetics, reproduction, metabolism, and fitness. Humans are compared as organisms to various animals. This course is excellent for anyone considering entering any health or medical profession.

Chemistry #22**Grade(s): 10, 11, 12****Prerequisite: completed Algebra I
or Algebra B****Credits: 2****Semesters: Y**

The course begins with a review of the general properties of matter and progresses to a study of atomic structures, elements, organization and use of the periodic table, balancing and writing equations, general reaction principles, solutions, a brief study of organic chemistry, and nuclear chemistry and principles. Students will perform lab investigations and emphasis will be placed on relating and identifying chemical processes and activities important in real-life situations

Physics #23

Grade(s): 10, 11, 12

Credits: 2

Semesters: Y

Prerequisite: Completed Geometry

The course begins with a review of math operations and graphing (using Google sheets). This course provides students with the opportunity to investigate the physics concepts related to motion, forces, work, power and energy. Lab activities and projects, which require the student to apply the concepts covered in the course, offer students the ability to develop the skills and confidence to solve problems. Students should expect the extensive use of spreadsheets, their Algebra I and Geometry skills.



| |
|-----------------------|
| SOCIAL STUDIES |
|-----------------------|

A student must take six semesters of social studies. One year of American History and one semester of American Government are the only specific requirements.

World History – F #41

World History – S #287

Grade(s): 9, 10, 11, 12

Credits: 1 or 2

Semesters: 1 or 2 F/S/Y

Prerequisite: None

This class is designed to give those students interested in history a chance to explore various questions of history throughout the recorded history of the world. First semester topics will include Ancient Greece, the rise and fall of the Roman Empire, the major religions, the Crusades, Renaissance, Reformation, French Revolution, and Napoleon's rise and fall from power. The second semester topics will include the Russian Revolution, WWI, WWII, the "Cold War", Korean War, Vietnam War, Cuban Missile Crisis, Middle East conflicts, along with current events. The focus of the class will be in relating the problems faced in the past to those we face today. A student may take World History all year or either semester.

American History #43

Grade: 11

Credits: 2

Semesters: Y

Prerequisite: None

The basic purpose of American History is to help students understand the significance of our American Heritage upon our lives today. Emphasis is on historical events, people, and the culture of the United States. The first semester will cover the founding of America to approximately 1941. The second semester will deal with the growth of the United States from 1941 to the present. Evaluation will be based on daily assignments, test scores, and outside research projects.

Government I #44
Grade 12
Required for Graduation

Credits: 1
Semesters: F
Prerequisite: American History (2 semesters)

The emphasis is on the study of our national government. Students will be looking at how the American system of government is organized, and the ways in which it functions today. Basic units will include democracy, history of the Constitution, civil rights, voting, federalism, the office of the president, congress, and the courts. Evaluation will be based on quizzes, assignments, projects, and exams.

Government II #45
Grade 12

Credits: 1
Semesters: S
Prerequisite: Government I

American Government II will be a continuation of American Government I with an emphasis on the 3 branches of American government.

World Cultures – F #42
World Cultures – S #282
Grade(s): 9, 10, 11, 12

Credits: 1 or 2
Semesters: 1 or 2 F/S/Y

World Cultures is a class that examines different cultures compared with the United States. The first semester deals with Western ideas on population, the environment, language, traditions, customs, religion and ethnic diversity. The second semester deals with cultures from Europe, Africa, Asia, South America, and Australia.

Topics I in American History #250
Grade(s): 11, 12

Credits: 1
Semesters: 1 F
Prerequisite: American History

This class will investigate different topics in American History. Some topics will include U.S. Presidents, significant periods of change for America, wars, etc. Students will write papers, complete projects, participate in class discussions, and read books surrounding topics in American History.

Topics II in American History #51
Grade(s): 11, 12

Credits: 1
Semesters: 1 S
Prerequisite: Topics in Am Hist I

This class will investigate and research different topics in American History. Topics could include history's mysteries, U.S. Presidents, significant people or groups in American History, time periods in American History, etc. Students will take assessments, write papers, complete projects, participate in class discussions, and read books surrounding topics in American History.

Community Service

Grade(s): 9, 10, 11, 12

Credits: 1 citizenship cr. upon

completion of 20 hrs.

Required for Graduation

All students will be required to complete 20 hours of Community Service in order to graduate. These hours can include, but not limited to, working school concession stand, church activities, helping with youth sports programs, salt deliveries, blood drive, family fun night, and any other service for the community. The students will need a log of their activities signed by the community member in charge and turn into the high school office for credit/tracking.