



SCOTTSBLUFF HIGH SCHOOL



REGISTRATION GUIDE
2019-2020

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REGISTRATION INFORMATION

Graduation Requirements

CREDIT HOURS NEEDED FOR GRADUATION - 270	
CAREER ACADEMY	70
Pre-Academy Course(s)	10
Foundational Academy or Pathway Courses	60
* Successful completion of two Foundational Career Academies OR one Foundational Career Academy AND one Specialized Academy Pathway is required for graduation.	
** Courses may count toward completion of both a Foundational Career Academy and core content requirements. However, they may only be counted once toward total hours needed for graduation (270).	
ENGLISH	40
English 9 or Honors English 9	10
English 10 or Honors English 10	10
English 11 or AP English Language	10
English Elective	10
MATH	30
Algebra I	10
Geometry or Advanced Geometry	10
Math Elective	10
SCIENCE	30
Physical Science	10
Biology	10
Science Elective	10
SOCIAL SCIENCES	30
Geography/World History	10
U.S. History or AP U.S. History	10
American Government	5
Social Sciences Elective	5
PHYSICAL EDUCATION	10
PERSONAL FINANCE	5

CHOICES Career Academy Graduation Requirements

CHOICES is a specialized program in itself. Students attending CHOICES will satisfactorily complete a career and college readiness program that will be in replacement of the 70 Career Academy credit hour requirements. CHOICES students must still complete 270 credit hours for graduation. Students who return to the main campus will not be penalized by attending CHOICES and their counselor will complete a credit evaluation.

Scottsbluff High School provides equal and open access for disadvantaged and handicapped students to regular programs, including career and technical education and internship/job-shadows. Scottsbluff High School utilizes a hybrid schedule with eight courses scheduled per day for the semester. Each course holds a value of 5 credits per semester upon successful completion. Some classes are “blocked” combining two class periods. Upon successful completion, a student will receive 10 credits for the “blocked” course per semester and 5 credits for “blocked” course per quarter.

Students are classified by their graduation year. Those students not meeting the following credit requirements will be considered under “Academic Probation” and not on track for graduating with their class.

Sophomores	65 credits minimum
Juniors	125 credits minimum
Seniors	186 credits minimum

Registration Procedures

1. Students in Grades 9-11 are required to take 80 credits during a school year. Seniors are eligible for one open hour per semester. Grades 11-12 may be eligible for one open period if they are taking courses at WNCC.
2. Every student entering high school should plan the courses he/she expects to take in each of their four years of high school. Even though changes may be made later, a student needs to plan a four-year program so that graduation requirements will be met and a well-rounded program will be developed to meet post-secondary goals, interests, abilities, and needs.
3. Each student is urged to read the course descriptions. If a course requires a prerequisite, this information will be found in the course description. Students should register only for those courses they fully intend to complete.
4. A student adding or dropping a class must do so within the first five school days of the semester in which the course starts. Adds or drops after the five day period must be approved through an administrator/counselor and drops may result in an “F-0%” on the student’s permanent record.
5. When a request is made for a schedule change within the first five school days of the semester which alters the coursework schedule originally signed by the parent (including a drop), the student will be required to have the request sheet signed by the teacher. If a year-long course is changed, the parent/guardian and teacher must sign the “Request to Change” form.
6. Students must attend the originally scheduled course until the course has been officially dropped and paper work has been completed.
7. Any student considering a mid-year graduation must request a personal meeting with the principal. In addition, the student and parent must submit a written request indicating the rationale. The forms may be obtained from the Counselor’s Office and must be submitted to the principal prior to the beginning of the graduating semester.
8. For policies regarding dual credit courses through WNCC, please read “WNCC Guidelines” in the registration guide.

Verified Learning Disability Requirements

For students who are verified with a disability according to the Individuals with Disabilities in Education Act (IDEA) and Nebraska Rule 51, the Individual Education Program (IEP) team will determine, on an individualized basis, the student’s course of study for his/her graduation requirements.

Career Academies

SHS offers a wall-to-wall Career Academy program. Part of our vision at Scottsbluff Public Schools is to “empower our students of today to successfully meet the challenges of tomorrow.” In order to accomplish this vision, Scottsbluff High School seeks to ensure all students are college and career ready. All students attending Scottsbluff High School will participate in at least one Career Academy during their high school career. Career Academy schools demonstrate increases in graduation rates and attendance, lower discipline referrals, and other strong qualities. Students participating in career academies are just as likely to attend college and are more likely to maintain a career post-graduation. The following Career Academy guidelines have been created to establish career readiness:

- Freshmen - Sophomores: Complete a total of 10 credits of Pre-Career Academy courses. Pre-Career Academy courses are introductory courses that align specifically to one of the six Career Academy options. These courses are designed to expose students to the many career path options available within each career academy.
- Juniors: Select a Career Academy and complete required Foundational Career Academy credits. Foundational Career Academy courses are intermediate courses that begin to narrow focus toward individual careers. One of the three courses will be an academic (core) course that aligns with the other career courses within the academy.

- Seniors: Complete required Foundational Career Academy credits or complete a Specialized Academy Pathway. Students selecting to repeat a Foundational Career Academy will select a different academy from the one selected their junior year. Students selecting a Specialized Academy Pathway must have successfully completed the preceding Foundational Career Academy. Students enrolled in a Specialized Academy Pathway will receive instruction and skills that align specifically to post-secondary degree programming or work-force entry level positions. Specialized Academy Pathways include opportunities for earning dual credit or industry-recognized certifications. Many Specialized Academy Pathways will require attendance at WNCC for one or more courses. These pathways are designed to create a seamless transition into post-secondary education or the workforce. Specialized courses include both academic and career education courses.

CATS

CATS is a one credit, 30-minute quarterly course. All freshmen are assigned to a year-long High School Success CATS course. During this time, students will learn skills necessary for high school completion. Students will also learn content relating to career searches, resume writing, academic support, social/emotional learning, among a variety of other topics. Sophomores will be required to take two quarters of advisement each year focusing on many of the same support structures discussed in High School Success. Unless changed by an administrator or counselor, juniors and seniors will be required to take one quarter of advisement: junior advisement will focus on work readiness skills and senior advisement will focus on college and career readiness. Other CATS options may include support courses, Career Student Organization courses, ACT Test Prep, AP Test Prep, ACCUPLACER remediation, or other special interest topics. CATS is a required course for all students. CATS courses will not be included in a student’s GPA. Credit will be awarded on a pass/fail basis and determined by participation, attendance, and completion of specific tasks.

Four Year Planning Guide

Students will complete a four-year plan during freshman year and will revisit their plan each year with their academic counselor. Students will create plans that match both their career and academic goals. Students should utilize the planning guide, graduation requirements, course descriptions, and career academy sequencing charts to meet their graduation goals.

Notes:

- Scottsbluff High School provides a zero hour in addition to the eight period school day.
- Dual credit courses count toward both high school and college credit
- The planning guide demonstrates course choices and does not reflect the period the actual course will be taught. The computer will generate periods and semesters in which the course will be offered in the best interest of all Scottsbluff High School students.
- Those interested in attending a four-year college are encouraged to take a minimum of two years of a World Language.

Grade 9

Semester 1			Semester 2		
1	Elective		1	Elective	
2	Elective		2	Elective	
3	Pre-Career Academy Course		3	Pre-Career Academy Course	
4	Physical Education		4	Physical Education	
CATS	HS Success	HS Success	CATS	HS Success	HS Success
5	Algebra 1 or higher		5	Algebra 1 or higher	
6	Physical Science		6	Physical Science	
7	English 9 or Honors English 9		7	English 9 or Honors English 9	
8	Geography/World History		8	Geography/World History	

*Students may substitute Physical Education for another class to avoid scheduling conflicts.

Grade 10

Semester 1			Semester 2		
1	Elective		1	Elective	
2	Elective		2	Elective	
3	Elective		3	Elective	
4	Pre-Career Academy Course		4	Pre-Career Academy Course	
CATS	CATS Advisement	CATS Advisement	CATS	Elective	Elective
5	Geometry or higher		5	Geometry or higher	
6	Biology		6	Biology	
7	English 10 or Honors English 10		7	English 10 or Honors English 10	
8	US History or AP US History		8	US History or AP US History	

Grade 11

Semester 1			Semester 2		
1	Algebra 2 or higher		1	Algebra 2 or higher	
2	American Government		2	Social Science Elective	
3	English 11 or AP English Language		3	English 11 or AP English Language	
4	Science Elective		4	Science Elective	
CATS	CATS Advisement	Elective	CATS	Test Prep	Elective
5	Foundational Career Academy (Core)		5	Foundational Career Academy (Core)	
6	Foundational Career Academy		6	Foundational Career Academy	
7	Foundational Career Academy		7	Foundational Career Academy	
8	Elective		8	Elective	

*The Foundational Career Academy (Core) will replace one of the students' core graduation requirements allowing the student to replace the core requirement with an elective.

Grade 12

Semester 1			Semester 2		
1	Elective		1	Elective	
2	Personal Finance		2	Elective	
3	Elective		3	Elective	
4	English Elective		4	English Elective	
CATS	CATS Advisement	Elective	CATS	Elective	Elective
5	Specialized or Foundational (Core)		5	Specialized or Foundational (Core)	
6	Specialized or Foundational		6	Specialized or Foundational	
7	Specialized or Foundational		7	Specialized or Foundational	
8	Elective		8	Elective	

*Social Science requirements may be satisfied either in grade 11 or grade 12. These requirements have been placed in grade 11 for the purposes of the planning guide.

**Personal Finance may be taken in either the grade 11 or grade 12 to meet graduation requirements. This requirement has been placed in grade 12 for the purposes of the planning guide.

ACADEMIC HONORS

Class Rankings, Grade Point Average, and Graduation Recognition (from Board Policy 611.06)

The official grade point average (GPA) of graduating students is based on a minimum of eight semesters of studies in order to allow students sufficient opportunity for demonstrating achievement. Current GPA's will be sent to colleges and universities who request information for admission. Following graduation, the official GPA will be furnished to post-secondary institutions upon request. Students approved and who complete early graduation requirements will receive their official GPA based upon completed semesters. Scottsbluff Public Schools utilizes the Laude Recognition System for recognizing graduates of Scottsbluff High School. In order to be recognized, seniors must meet the following criteria:

Summa Cum Laude

4.0 grade point average or above

Magna Cum Laude

3.9-3.99 grade point average

Cum Laude

3.75-3.89 grade point average

Grade Point Average

The cumulative grade point average (GPA) of a student at the end of eight semesters of high school will be used to determine graduation honors as computed by the Scottsbluff High School Counseling Office. The GPA will be calculated on a weighted scale. Only Advanced Placement (AP) and designated dual credit courses offered through Scottsbluff Public Schools will be used for weighting purposes. Transfer students may use AP courses from the school of origination in the weighting process. In order to be eligible for graduation honors, a student must complete all Scottsbluff High School graduation requirements and must be registered as a full-time Scottsbluff High School student (20 credits per semester) during their entire senior year. For further information on the weighting process, see the table below along with identified courses to be weighted.

Weighted Scale

Grade	Regular Points	Weighted Points
A 90 – 100	4.0	5.0
B 80 – 89	3.0	4.0
C 70 – 79	2.0	3.0
D 60 – 69	1.0	2.0

Weighted Courses

AP Chemistry
AP Calculus AB
AP Calculus BC
AP Statistics
AP English Language and Composition
AP United States History
AP World History
College Algebra
Composition 1
Composition 2
General Biology
Principles of Marketing

*If additional AP courses are added, they will be added to the list of weighted courses.

Honor Roll Standards

Honor Roll students will be designated at the end of the semester. Honor Roll students must carry a minimum of 25 credit hours of graded course work in order to be eligible for honor roll. Students receiving credit through alternative education are not eligible for honor roll recognition. Honor roll students are distinguished by the following GPA benchmarks (unweighted):

Superintendent's Honor Roll – 4.0

Principal's Honor Roll – 3.5-3.99

National Honor Society

Students in grades 10-12 who are in good standing at SHS are eligible for induction into the National Honor Society. In addition to the scholastic requirement of a cumulative 3.5 grade point average, each student must perform a minimum 20 hours of community service to be eligible for National Honor Society. Once selected, the minimum grade point average and 10 hours community service must be met to maintain membership. Furthermore, all members must remain in good standing with the rules and regulations of Scottsbluff Public Schools. All National Honor Society graduates will receive a gold cord to wear at the graduation ceremony.

Career Academy Honors

All students completing a Career Academy Specialized Pathway with a grade of "B" or better on all of their academy course requirements will receive a Certification of Achievement and will receive a colored cord to wear at graduation aligned to their specific career academy.

Internships

All seniors will be eligible for an internship. Students may elect to receive 10 credits toward their Career Academy graduation requirements. Students registering for an internship will be assigned an employer based on their career academy. Seniors completing Specialized Career Pathways will receive priority of placement over students enrolled in Foundational Career Academies. Prior to students entering the internship, students must fill out an application and interview with the internship coordinator and must successfully complete the 11th grade Work Readiness CATS advisement. Internships may be paid or unpaid based on employer agreement.

Career and Technical Student Organizations (CTSO)

All students will have the opportunity to join a CTSO within their selected career academy. CTSO's are student-led organizations that promote student learning, leadership, networking, work-readiness skills, service learning, and provide opportunities for regional, state, and national competitions.

Career Academy Opportunities

Agriculture, Food, and Natural Resources	Business, Marketing, and Management	Communication, Arts, and Technology	Health Sciences	Human Science and Education	Skilled and Technical Sciences
Pathway Options					
<ul style="list-style-type: none"> ● Animal & Veterinary Science ● Agribusiness ● Plant & Environmental Science ● Ag Technology 	<ul style="list-style-type: none"> ● Business Administration ● Business Technology ● Hospitality & Tourism ● Marketing & Entrepreneurship ● Cosmetology 	<ul style="list-style-type: none"> ● Graphics & Digital Design ● Journalism & Broadcasting ● Visual & Performing Arts 	<ul style="list-style-type: none"> ● Nursing ● Health Information ● Medical Specialties & Technology ● Medicine (Pre) 	<ul style="list-style-type: none"> ● K-12 Education ● Early Childhood Education ● Human Services ● Criminal Justice & Law 	<ul style="list-style-type: none"> ● Welding ● Auto Body ● Auto Technology ● Construction ● Manufacturing ● Engineering (Pre)
Career and Technical Student Organizations and Activities					
FFA	DECA ProStart Skills USA	One Acts Speech Journalism Band Choir Orchestra	HOSA	EdRising FCCLA Mock Trial	Skills USA

Air Force Junior ROTC (AFJROTC)

The mission of AFJROTC is to "Develop citizens of character dedicated to serving their nation and community." AFJROTC is not an USAF accessions program and cadets are never under any obligation to join the military. AFJROTC is a Title 10 US Code mandated citizenship training program that is designed to educate and train high school cadets in citizenship, promote community service, instill personal responsibility, character, and self-discipline.

The program achieves this through classroom education in air and space fundamentals and hands on learning opportunities in a number of fun and challenging extra-curricular activities.

The AFJROTC program is grounded in the Air Force core values of "integrity first, service before self, and excellence in all we do."

Students enrolled in the AFJROTC will be required to take one year-long course along with participating in events such as drill and color guard for each year of participation. If students are interested in the program, they will visit with their school assigned counselor at the time of registration. Please visit the AFJROTC website for more information at <http://www.airuniversity.af.mil/Holm-Center/AFJROTC/>.

Students may count AFJROTC as part of their Pre-Career Academy graduation requirements.

Project Lead The Way (PLTW)

Project Lead The Way is the nation's leading provider of K-12 Science, Technology, Engineering, and Math (STEM) programs. PLTW courses offer a rigorous curriculum that provides a comprehensive approach to STEM Education. Through activity-, project-, and problem-based curriculum, PLTW gives high school students a chance to apply what they know, identify problems, find unique solutions, and lead their own learning. Students enrolling in PLTW courses must be prepared to complete a challenging curriculum taught at an advanced level. These courses are strongly encouraged for students interested in Engineering or Medical Careers. All Project Lead The Way courses are identified by the "PLTW" acronym.

Advanced Placement Courses

The College Boards Advanced Placement (AP) courses are college-level classes offered in a variety of subjects that students can take while still in high school. They offer challenging coursework and provide rigorous preparation for future college level course credit. Students wanting to receive college course credit must take the AP course exam in May and earn a score acceptable for transferability. Visit www.apcentral.collegeboard.com for more information on AP course information, tests, and college credit and transferability or visit with a high school counselor.

Scottsbluff High School AP Courses

- AP US History
- AP World History
- AP Statistics and Probability
- AP Calculus AB
- AP English Language
- AP Chemistry
- AP Calculus BC

CHOICES

CHOICES is one of the alternative learning programs provided by Scottsbluff High School. This opportunity is available for all students in grades 10-12. The program is located at 2609 Broadway and consists of four compassionate core teachers and one dynamic, caring secretary. CHOICES embraces a holistic educational opportunity for students to learn not only their academics with rigor and relevance, but to also engage in a wide variety of college and career-ready experiences. These experiences include an annual Intensive trip designed for schoolwide trust building, teacher and peer accountability through CREW, smaller class sizes, in school career development coursework, as well as college and business visits locally and on into the surrounding states. Additionally, students must earn the minimum of a 70% on all assessments to pass each course, provide at least 30 hours volunteer service in the community, participate in two job shadows, complete 60 hours in at least one internship, and pass a college class. To become a CHOICES student and take a very active role in one's own education, students must apply, interview, participate in an activity, and be accepted. They may submit their own names or be nominated by an administrator, teacher, counselor, friend, or parent. Enrollment in CHOICES still maintains a student's Scottsbluff High School status for activities, main building courses, sports, dances, as well as graduation and the official SHS diploma. If interested, contact your SHS counselor or Mrs. Sue Herdt, Program Director, at 308.633.6256 or sherdt@sbps.net to make arrangements for a meeting.

Dual Credit Courses

While attending Scottsbluff High School, students will have many opportunities to take dual credit courses at the high school campus or at the WNCC campus. While taking dual credit courses, students will be expected to abide by both WNCC and Scottsbluff High School guidelines. Dual credit offerings, other than WNCC courses, will be expected to follow Scottsbluff High School guidelines.

WNCC GUIDELINES

Registration

WNCC registration for high school students takes place in April for fall classes and in November for spring classes. The registration process involves meeting with school counselors and WNCC college advisors. There is only one form needed for high school students to complete in order to register for college classes. Information for completion of this process will take place prior to registration for WNCC classes.

Basic Skills Assessment

Either the ACT, SAT, or WNCC ACCUPLACER test is used for placement in courses requiring an assessment score prerequisite.

The test is administered to:

- Students enrolling in English or Mathematics courses;
- Students enrolling in courses with English or Math prerequisites; or
- Students who have accumulated 12 credits of coursework.

The high school counselors have a parameter sheet explaining the scores needed for college class entrance requirements.

Grades and Credits

The college grading system requires a minimum grade of 70% to be given credit for a course as compared to 60% at Scottsbluff High School.

WNCC Academic Probation and Suspension

It is very important that students do their absolute best in their college classes. Students are considered to be making satisfactory progress if they have a WNCC GPA of 2.00 (70%) or higher.

The purpose of academic probation is to warn students of their unsatisfactory academic progress. Academic probation may also pose a problem in obtaining financial aid for college after high school. Students are placed on academic suspension after they are on probation for one semester and satisfactory academic progress has not been made.

WNCC Portal

Each student taking a college class will log into their WNCC portal. To login, a student would go to www.wncc.edu, then click on "MyWNCC" in the upper right hand corner of the page. If students are taking a class on the WNCC campus, it is important to get logged onto the portal as quickly as possible as classroom materials will be accessed through Blackboard. Students can view their schedule, instructor name, grades, and request transcripts on the portal.

Transferology and Transfer Nebraska

Transferology is a nation-wide network designed to help students explore their college transfer options. The website for Transferology is www.transferology.com. Students wanting to transfer within the state of Nebraska should visit www.transfer.nebraska.edu. Dual credit grades lower than a "C" on the college level may not transfer to other colleges.

Family Educational Rights and Privacy Act (FERPA)

FERPA is a federal law that protects the privacy of student education records. FERPA gives parents certain rights with respect to their children's education records at elementary and secondary schools that are subject to FERPA's requirements. These rights transfer to the student when he or she attends a postsecondary institution at any age. Under FERPA, an eligible student must provide a signed and dated written consent before a school discloses personally identifiable information, such as financial aid records, grades, transcripts, account balance, student conduct, or placement scores from the student's education records. Students should be responsible for knowing the status of their progress. We realize that there may be situations when parents may want to access their son's/daughter's grades. Students have access to grades on their WNCC portal. If parents want access to grades or other personally identifiable information, their son or daughter will need to sign a release of information agreement. This form is found in the portal.

Parents wishing to access student information for dual enrollment through SHS will need to work through SHS Infinite Campus for progress monitoring; however, grades and attendance are only updated at midterm and semester. Parents wishing for full access will need to access the student's WNCC portal.

Academic Help

Any student taking a class through WNCC has access to the tutoring opportunities in the Math Center and the Writing Center. These centers are typically open during the day and evening.

Student Code of Conduct (including Academic Integrity)

Students are encouraged to go on the WNCC website to view the college's policies relating to academic integrity. Students are expected to know and understand the College's policies relating to student conduct and academic integrity and are held accountable for doing so. Please refer to the student handbook found on WNCC's web page.

Transportation

Transportation will be provided for all students enrolled in courses at WNCC. All students attending class on the WNCC campus will be expected to ride the SHS/WNCC shuttle. The shuttle will run continuously throughout the day to prevent transportation barriers and ensure the safety of Scottsbluff High School students. On days that Scottsbluff High School is not in session, students will be required to provide their own means of transportation to the WNCC campus.

Tuition

Scottsbluff Public Schools will pay the tuition for students enrolling in dual credit courses on the SHS Campus and taught by an SHS instructor AND those courses that are required as part of a students' Career Academy. Although SBPS will pay tuition, it is essential that all students qualifying for the free and reduced lunch program apply for the Access College Early College Scholarship program. **Should a student fail a dual credit course, the student will be responsible for reimbursement of tuition costs to the school district.**

Drops

Students selecting to drop a course prior to the WNCC drop deadline will receive a "W" at WNCC and will take a replacement course at SHS. Those students wishing to participate in an extracurricular activity must enroll in a credit recovery course in order to maintain eligibility for the dropped course. Students choosing to drop a course after the WNCC drop deadline will receive a failing grade at both WNCC and SHS. Students who drop a course after the drop date will be ineligible for extracurricular activities. **Students that choose to drop a dual credit course will be responsible for reimbursement of tuition costs to the school district.**

Credits

College (WNCC) credits earned and how they will be computed to high school credits. Two through four credit courses at WNCC will be computed as five credit courses on an SHS transcript. Six credit courses at WNCC will be computed as a ten credit course on an SHS transcript.

Grade Replacement

Students who fail or receive an unsatisfactory grade in a college course may retake the course at their own expense and may replace both their college and high school transcript grade.

ENGLISH

Course	Grade Level	Credits	Course	Grade Level	Credits
English 9	9	10	English 12	12	10
Honors English 9	9	10	Technical Literature	12	5
English 10	10	10	Workplace Writing*	12	5
Honors English 10	10	10	English Composition 1*	12	5
English 11	11	10	English Composition 2*	12	5
AP English Language	11	10			

*Indicates dual credit courses. Courses not offered on the SHS campus are indicated by the college name placed in parenthesis

English 9

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> None			<i>Grade:</i> 9

A one year course for all students, this course includes units on composition (writing). Students will refine their skills in essay writing, construct various types of essays, present speeches on various topics throughout the year, and increase their comprehension using various types of literature ranging from classic to contemporary work.

Honors English 9

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> 8th Grade Assessment Scores/Teacher Recommendation			<i>Grade:</i> 9

This course is designed to challenge students in literature and composition. Students will be reading classical and contemporary literature and constructing essays and creative writing projects, and present speeches on various topics throughout the year. This course will prepare students for the rigor and expectations of AP and dual credit courses offered at SHS.

English 10

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> English 9			<i>Grade:</i> 10

A one year class, the literature includes a variety of world authors. The composition units reinforce the essay structures begun in English 9 and include a research project. Students will present speeches on various topics as assigned throughout the year.

Honors English 10

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Honors English 9 and/or 9th Grade Assessment Scores/Teacher Recommendation			<i>Grade:</i> 10

This course follows the English 10 curriculum holding students accountable for a higher level of rigor with essays, projects, and more in-depth textual understandings. This course is designed to prepare students for future AP and dual credit offerings.

English 11

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing and Management/Communication Arts and Technology/Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> English 10			<i>Grade:</i> 11

This course provides an in depth study of the rhetoric and style of essay writing. Students will also read and interpret passages of American literature and incorporate reading and writing skills to increase critical thinking. This course serves as a preparation for the ACT exam.

AP English Language

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> May be substituted for the corresponding English 11 Career Academy course.	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Honors English 10 and/or 10th Grade Assessment Scores/Teacher Recommendation			<i>Grade:</i> 11,12

This class entails analysis of language and rhetoric in fiction and nonfiction literature. Students will read and write a diverse selection of works to demonstrate the mastery of rhetoric and understand the function of language in society. The course emphasizes the expository, analytical, and argumentative writing that is the basis of academic and professional communication as well as the personal and reflective writing that cultivates the development of writing in any context.

English 12

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> English 11			<i>Grade:</i> 12

This is a one year course, the literature includes a variety of world authors. Students will read classical and contemporary novels, short stories, essays, and poetry. The composition units will reinforce the essay structures taught in English 11.

Technical Literature

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> English 11			<i>Grade:</i> 12

This is a one-semester course. This course exposes students to a wide range of texts. Contemporary novels, as well as industrial texts will be utilized in this course. Reading and communication skills will be emphasized

Workplace Writing

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Ag, Food, and Natural Resources/Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> English 11 and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course familiarizes students with writing strategies most often employed in vocational and technical fields and prepares them for entry-level workforce communication demands. Writing instruction and practice is given in areas such as: the development and writing of abstracts or summaries, correspondence, memoranda, job applications, and various short incident, progress, travel, or analytical reports. Evaluative emphasis is placed upon tone, content, format, grammar, and mechanics.

English Composition 1

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Ag, Food, and Natural Resources/Business, Marketing, and Management/Communication, Arts, and Technology/Health Sciences/Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> English 11 and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course provides the study of various kinds of thesis-oriented writing such as criticism, reports, reviews, précis & essay. A review of mechanics, usage and style will be given when necessary. This class will prepare students to complete college papers in all subject areas.

English Composition 2

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing, and Management/Communication, Arts, and Technology/Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> English 11 and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course offers further practice in quality writing based on the reading and critical analysis of literature as genre {such as short story, poetry, drama, novel}. In addition, the course presents library research techniques and other skills needed for writing research papers. A formal research paper is required.

MATH

Course	Grade Level	Credits	Course	Grade Level	Credits
Algebra 1	9	10	Business Math	12	10
Geometry	9,10	10	Pre-Calculus/Trigonometry	10,11,12	10
Accelerated Geometry/Alg 2	9,10,11	10	AP Statistics*	10,11,12	10
Integrated Algebra	10,11,12	10	College Algebra*	12	10
Algebra 2	9,10,11,12	10	AP Calculus AB	11,12	10
NE Math Readiness	12	10	AP Calculus BC	12	10
Intermediate Algebra* (WNCC)	12	5	Enrichment Mathematics	9,10,11,12	10

*Indicates dual credit courses. Courses not offered on the SHS campus are indicated by the college name placed in parentheses.

Algebra 1

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9</i>

This course will extend the use of variables in formulas and equations, the basic operations applied to real numbers, writing and solving linear equations in one and two variables, writing and solving systems of equations, exponents and polynomials, and statistics dealing with measures of central tendency and normal distribution.

Geometry

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9, 10</i>

This course will include a study of coordinate geometry and geometric figures in two-dimensions and three-dimensions. The emphasis is on informal proof and problem-solving within the context of these geometric figures.

Accelerated Geometry/Algebra 2

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: A or B in Algebra I and/or Teacher Recommendation</i>			<i>Grade: 9, 10,11</i>

This course combines all content from Algebra 2 and Geometry into a single year experience. The target audience for this course is students wishing to take college level mathematics courses in high school including calculus.

Integrated Algebra

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Teacher Recommendation</i>			<i>Grade: 10,11,12</i>

This course will take a combined approach to Algebra and Geometry to offer students authentic opportunities to solve real-world problems. Students will develop the ability to explore and solve problems, think critically, work cooperatively with others, and communicate ideas clearly. This course will include concepts from Algebra 1, Geometry and Algebra 2.

Algebra 2

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Algebra I and Geometry</i>			<i>Grade: 9,10,11,12</i>

This course will review essential operations of real numbers, sets, and equations as well as the study of higher degree equations, their solutions, graphs and applications. Some new topics to which the student will be introduced are exponents, logarithms, complex numbers, matrices and inverse functions.

NE Math Readiness

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Integrated Algebra or Algebra 2 and ACT or ACCUPLACER Score			<i>Grade:</i> 12

Students will review and master algebraic and geometry concepts aligned to college readiness curriculum. This course is specifically designed for senior students that have completed Algebra 2 but have not tested into Intermediate Algebra, College Algebra, or Statistics.

Intermediate Algebra (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Algebra 2 and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course is for students who have completed only one year of high school algebra or have completed MATH- 0160. Topics include: functions, graphing, systems of equations, inequalities, polynomials and polynomial functions, rational expressions and rational equations, exponents and radicals, and quadratic functions.

Business Math

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Integrated Algebra or Algebra 2			<i>Grade:</i> 12

Implemented in almost every phase of personal and business life, Business Math is essential for survival in today's world. Students will apply mathematical fundamentals to realistic business situations using common mathematical formulas.

Pre-Calculus/Trigonometry

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Algebra 2			<i>Grade:</i> 10,11,12

This course will be a review and extension of algebra, trigonometry and analytic geometry including sequences and series, polynomial and rational functions, exponential and logarithmic functions, and systems of equations. The target audience is sophomore and junior level students.

AP Statistics

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Business Marketing and Management/Health Sciences/Human Science and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Algebra 2 and ACT or ACCUPLACER Score			<i>Grade:</i> 10,11,12

This course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data as well as technical writing. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Students may either earn college credit through the AP Examination in May or through WNCC.

College Algebra

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing, and Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Algebra 2 and ACT or ACCUPLACER Score			<i>Grade:</i> 12

College Algebra will be an extension of Algebra 2 offered for both college and high school credit. It will cover topics involving algebraic operations (factoring and expanding polynomials, operations with algebraic expressions, operations with exponents, and properties of logarithms), equations and inequalities (linear, quadratic and absolute value equations and inequalities, systems of equations and inequalities, exponential and logarithmic equations), functions and their properties.

AP Calculus AB

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Health Sciences/Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Pre-Calculus/Trigonometry			<i>Grade:</i> 11,12

This rigorous course is designed for students with a strong mathematical background, as it is the equivalent of a Calculus 1 course at the collegiate level. The focus is on the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. Students must take the AP Exam administered in May and meet scoring criteria in order to earn college credit. Colleges and universities have their own policies on awarding credit.

AP Calculus BC

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Health Sciences/Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> AP Calculus AB			<i>Grade:</i> 12

This rigorous course is designed for students who have taken AP Calculus AB and received a B or higher. It is the equivalent of a Calculus II course at the collegiate level. The course includes all concepts from AP Calculus AB and expands further into series, parametric, and polar functions. Students must take the AP Exam administered in May and meet scoring criteria in order to earn college credit. Colleges and universities have their own policies on awarding credit.

Enrichment Mathematics

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Teacher Recommendation			<i>Grade:</i> 9,10,11,12

Students will complete formal proofs and technical reports for open-ended problems. Students will compete in intrascholastic/interscholastic math competitions. This class is for students who wish to refine their problem-solving techniques and critical thinking skills. Those who are interested in careers in math, science or engineering would benefit from this class. Students must be concurrently enrolled in a traditional math class. Students may elect to take this class multiple years. Special note: this course counts for elective credit.

SCIENCE

Course	Grade Level	Credits	Course	Grade Level	Credits
Physical Science	9	10	PLTW Environmental	11,12	10
Biology	10	10	Sustainability		
CP Chemistry	10,11,12	10	Conceptual Physics	11,12	10
Anatomy and Physiology	11,12	10	Physics	11,12	10
			General Biology*	11,12	10
			AP Chemistry	11,12	10

*Indicates dual credit courses. Courses not offered on the SHS campus are indicated by the college name placed in parentheses.

Physical Science

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9</i>

This course will cover the basics of the properties and structure of matter as well as the factors that affect physical and chemical changes at an atomic level. The laws of conservation of energy will be applied at a molecular level. Transfer of energy and earth systems and the study of the universe and stellar evolution will also be explored. Labs and activities aligning with the scientific method will be an integral part of the course work. Second semester will describe motion in relation to Newton's three laws, recognize the universal forces of gravity, electricity, mechanical wave properties, and the energy of waves in both light and the electromagnetic spectrum. We will also compare and contrast kinetic and potential energy as well as methods of energy transfer.

Biology

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Physical Science</i>			<i>Grade: 10</i>

This course will cover topics that include cell structure and function. An overview of the variety of living organisms will be studied as a basis for understanding the living world. New developments in technology as well as the social and ethical issues that arise in the area of biological sciences will be considered. Students will recognize how earth materials move through geochemical cycles. Students will be assigned independent lab assignments dealing with various topics. The course includes various lab assignments that center on the biological concepts taught.

CP Chemistry

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy: Ag, Food, and Natural Resources/Health Sciences/Skilled and Technical Science</i>	<i>Academy Level: Specialized</i>
<i>Prerequisites: Algebra 1</i>			<i>Grade: 11,12</i>

This course involves the study of the composition, structure, and properties of matter and the changes they undergo. Major emphasis will be placed on the study of chemical properties and their reactions; thereby, applying this knowledge to solve many problems related to everyday life. Students will conduct experiments and participate in creative problem-solving by means of invention, analytical thinking, effective writing, and descriptive chemistry. This course is of benefit to all students and is highly recommended for any student considering a scientific career.

Anatomy and Physiology

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy: Health Sciences</i>	<i>Academy Level: Foundational</i>
<i>Prerequisites: Biology</i>			<i>Grade: 11,12</i>

This course is an introduction to human anatomy and physiology which includes a review of general biological cell processes, a survey of tissue types, and a survey of the organ systems. Organ and tissue dissection labs, along with the use of Manikins® to build muscles from clay are incorporated into this course. This course is of particular value to those students who plan to enter nursing, pre-med or other medically or biologically related fields of study, but is also appropriate for those students interested in learning about their own incredible machine, their body.

PLTW: Environmental Sustainability

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Agriculture, Food, and Natural Resources	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Biology			<i>Grade:</i> 11,12

In this course, students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply, and renewable energy. Applying their knowledge through hands-on activities and simulations, students research and design potential solutions to these true-to-life challenges.

Conceptual Physics

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Biology			<i>Grade:</i> 11,12

This is an introductory-level physics course. A focus is placed on the application of physics concepts to everyday situations. Topics covered include, measurement, the mechanical advantage of simple machines, pressure, concepts of circuits and electricity, and properties of materials like thermal expansion and conductivity. Students will get to construct an atlatl and determine its mechanical advantage, calculate household electrical circuits, and learn how different properties of materials affect construction and welding.

Physics

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Biology			<i>Grade:</i> 11,12

This is a mid-level course in physics which includes topics similar to those covered in beginning college physics class such as motion in 1 and 2 dimensions, force, energy, power, light & optics. Quantum mechanics, wave particle duality, Heisenberg's uncertainty principle and Einstein's general and special theories of relativity will also be examined. If you want a deeper understanding of how the universe works, this is the class for you!

General Biology

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Ag, Food, and Natural Resources/Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Biology with grade of "C" or better			<i>Grade:</i> 11,12

This course is an extension of Biology that allows the student an in depth look at the principles of the life sciences. Topics covered include fundamental processes of cells and organisms, cell structure, genetics, evolution, classification, diversity, and interaction of organisms at the molecular, cellular, organismic, ecosystem, and biosphere level. This course may be taken for dual credit.

AP Chemistry

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources/Health Sciences/Skilled and Technical Science	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Chemistry or Teacher Recommendation			<i>Grade:</i> 11,12

This course is designed to be the equivalent of a general chemistry course usually taken during the first college year. This class focuses on the scientific principles, theories and processes which govern chemical systems. Enduring and conceptual understanding of chemistry is achieved through Inquiry/project-based learning. Laboratory experiences are extensive in this course in order to develop advanced reasoning skills necessary to engage in science practices used in chemistry. These skills include designing a plan to collect data, analyzing data, applying mathematical routines and connecting concepts. An exam will be administered in May which will determine an incoming student's credit and/or placement in college courses based on their AP Exam grade.

SOCIAL SCIENCES

Course	Grade Level	Credits	Course	Grade Level	Credits
Geography/World History	9	10	Sociology	11,12	5
United States History	10	10	Economics	11,12	5
AP United States History	10	10	Intro to Psychology*	11,12	5
International Relations	10,11,12	5	History of the American West*	11,12	5
American Government	11,12	5	America in the 1960s*	11,12	5
AP World History	11,12	10			

*Indicates dual credit courses. Courses not offered on the SHS campus are indicated by the college name placed in parentheses.

Geography/World History

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 9

A basic introduction to the study of physical and cultural geography of the world, often taught in the context of today's current events. Topics will include, but not be limited to: map reading, changing boundaries, land forms, climate, population, linkages, communication, and economics. World History standards are integrated with the Geography curriculum.

US History

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 10

First semester begins with a brief discussion of the age of Jackson and continues until the outbreak of World War I in 1914. Second semester picks up with the start of World War I and continues to the present.

AP US History

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> NWEA Test Scores, Honors English 9, or Student Written Request			<i>Grade:</i> 10

This course is designed to give students a grounding in the subject matter of United States history and in major interpretive questions that derive from the study of selected themes. The student should learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. An exam will be administered in May. Most colleges and universities in the U.S. have an AP policy granting incoming students credit, placement, or both on the basis of their AP Exam grade.

International Relations

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 10,11,12

What is going on with North Korea? Will there be a new cold war with Russia? Is this the century of Chinese domination? Why is Middle East peace so elusive? These and many other issues will be examined in this course. While current events will be a major component, there will also be historical background information provided to put events into perspective. Topics covered will be dictated, in large part, by what is happening in the world.

American Government

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 11,12

This course is designed to give students an understanding of the functions of our government as well as an understanding of the rights and responsibilities we have as citizens. This course focuses on the constitution, the functions of the three branches of government, federalism, and the role of citizens in the political process. A secondary function of the course is an in-depth look into the current issues facing the U.S. and other countries.

AP World History

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Honors English 10 or Student Written Request			<i>Grade:</i> 11,12

This class is a year-long advanced study of world history. Students will develop an understanding of the changing nature of international connections as they compare major world societies. Students will learn some of the cultural, institutional, and technological precedents that, along with geography, set the human stage from the origins of man leading to world events in our modern era. This course is organized thematically with a focus on the interconnectedness of human development around the world. Students will utilize analytical skills as they learn various interpretations of historical evidence. An exam will be administered in May. Most colleges and universities in the U.S. have an AP policy granting incoming students credit, placement, or both on the basis of their AP Exam grade.

Sociology

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i>			<i>Grade:</i> 11,12

This study of American society examines how our behavior as individuals is influenced by culture and our membership in groups. Topics studied include: peer groups, the family, formation of the self-image, socialization of children, social classes, fads, fashion, mobs, riots, panics, urban legends, population trends, traditional American values, and other basic features of our culture and society.

Economics

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food and Natural Resources/Business, Marketing, and Management	<i>Academy Level:</i> Specialized/Elective
<i>Prerequisites:</i>			<i>Grade:</i> 11,12

A study of the American economy through the basic principles of economics. A constant effort is made to relate the concepts being studied to the current economic news of the day. Topics covered include how the forces of demand and supply determine prices in a market system, basic features of capitalism, the stock and bond markets, money and banking, taxes, international trade and contrasting economic philosophies. Appropriate subjects of current economic importance such as inflation, unemployment, recent trade agreements, corporate mergers, the national debt, problems in the agricultural economy, consumer buying trends, and current economic policies of our government are discussed.

Intro to Psychology

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences/Health Sciences	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Minimum GPA of 3.0 or higher for Juniors and Seniors and ACT or ACCUPLACER Score for dual credit eligibility			<i>Grade:</i> 11,12

This course may be taken at SHS for non dual credit or at WNCC for dual credit. The course is designed to familiarize the student with the major areas of psychology. The course is directed toward the understanding of human behavior by dealing with such topics as development of behavior, perception, motivation and emotion, learning, intelligence, personality, and mental health. An application of course content to everyday behavior situations is emphasized.

History of the American West

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> ACT or ACCUPLACER Score			<i>Grade:</i> 11,12

This course is an examination of historical issues and events involving America west of the Mississippi River, including an examination of the concepts 'west' and 'frontier' themselves. Central themes in the course include an examination of who migrated to the west and why, the results of that migration and the impact of that migration and the events surrounding it on the United States as a whole. Examples of topics covered in the course include: the history and influence of the Spanish and French; cultural interaction and conflict between European explorers/settlers and indigenous peoples; early explorers and immigrants (including the fur trade); cowboys, outlaws and violence; children, marriage and families; farming, settlement and homesteading; and the "West" of the imagination.

America in the 1960s

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 11,12

Hippies, Haight-Ashbury, Vietnam, civil rights, assassinations, rock music, sitcoms—all facets of the Sixties. In many ways, this decade shaped the nation we live in today. This class will cover the events of the 1960s including the social, political, cultural and economic forces that were at work during the decade changing the ways Americans lived as well as recharting the nation's history.

FINE ARTS

Course	Grade Level	Credits	Course	Grade Level	Credits
Intro to Art	9	5	A Capella	11,12	10
Art 2	9,10	5	Orchestra	9,10,11,12	10
Art 3	10,11,12	5	Band	9,10,11,12	10
Choir 9	9	10	Percussion Techniques	9,10,11,12	10
All School Choir	10,11,12	10			

Intro To Art

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts, and Technology	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This is a beginning course designed for students who have not had previous formal art training. Students will explore technical and compositional skills in drawing, painting, sculpture, printmaking and ceramics working with the elements and principles of visual design. Art history, art terminology, aesthetic criticism and color theory are also introduced within project based units.

Art 2

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts, and Technology	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i> Intro to Art or Teacher Approval on Submission of Portfolio			<i>Grade:</i> 9,10

This is a beginning course designed for students who have not had previous formal art training. Students will explore technical and compositional skills in drawing, painting, sculpture, printmaking and ceramics working with the elements and principles of visual design. Art history, art terminology, aesthetic criticism and color theory are also introduced within project based units.

Art 3

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts, and Technology	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i> Art 2 or Teacher Approval on Submission of Portfolio			<i>Grade:</i> 10,11,12

An extension of the experiences provided in Art 2 with the opportunity to explore unique and advanced modes of creation, such as glass work, makeup effects, and mixed media. Students will focus more extensively on theory, history, and art appreciation. Students will begin exploring career opportunities and the principles and practices of various art mediums necessary for successful entry into these fields within project based units.

Choir 9

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 9

This class is designed for all who sing/perform at a basic skill level and/or those students new to SHS. Requirements for successful completion of this course include: participating in all required performances, active participation and engagement in class, completion of all assignments, attending occasional before and after school rehearsals, and participation in the musical.

All School Choir

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 10,11,12

This course is a mixed choir for those students at an intermediate level of singing, performance and music theory. Requirements for successful completion of this course include: participating in all required performances, active participation and engagement in class, completion of all assignments, attending occasional before and after school rehearsals, and participation in the musical.

A Cappella

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Audition and Teacher Recommendation			<i>Grade:</i> 11,12

This course is a mixed choir for those students at an intermediate level of singing, performance and music theory. Requirements for successful completion of this course include: participating in all required performances, active participation and engagement in class, completion of all assignments, attending occasional before and after school rehearsals, and participation in the musical.

Orchestra

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 9,10,11,12

Orchestra involves the study and performance of orchestra literature from the 16th Century through the 20th Century. Two major concerts are given annually. Various other performances are given throughout the school year. There is opportunity for small group performance and individual lessons. Wind and percussion players who are enrolled in band at SHS may perform with this group to form a full orchestra.

Band

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> 8th Grade Band OR Audition and Director Approval			<i>Grade:</i> 9,10,11,12

Band is a full-year course. The following are part of the High School Band: Marching Band (first semester only). The Bearcat Marching Band performs at all home football games, marching band festivals, and several local parades with emphasis on teamwork and discipline. Pep Band performs and promotes school spirit while at selected winter sports events. Concert Band (end of first and all of the second semester) performs concerts and at selected festivals with an emphasis on intermediate to advanced wind literature and performance techniques.

Percussion Techniques

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Percussionist with 8th grade band experience OR 3 years of prior piano experience, audition, and director approval.			<i>Grade:</i> 9,10,11,12

Percussion Techniques is a full-year course. The class focus is on continuing education in instrumental music, specifically in the area of percussion. Study will focus on all aspects of percussion performance including battery, auxiliary, and mallet percussion. Percussion technique students will perform in The Bearcat Marching Band, percussion ensemble, pep band, marching band, concert band, and have the opportunity to audition for various groups within the band program, honor bands, as wells as solos and ensembles.

PHYSICAL EDUCATION

Course	Grade Level	Credits	Course	Grade Level	Credits
Personal Fitness	9,10,11,12	5	Beg/Int Swimming	9,10,11,12	5
Recreational Sports	9,10,11,12	5	Adv Swim/Lifeguard/CPR	10,11,12	5
Beginning Weights	9,10,11,12	5	Aerobics and Fitness	9,10,11,12	5
Adv Strength and Conditioning	9,10,11,12	10			

Personal Fitness

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

This course is offered to 9th-12th grade students. Students will experience different fitness workouts. Emphasis will be put on TRX training. TRX is a suspension training program. It will improve your mobility, flexibility, strength, endurance, core strength and heart health. No workout wasted! TRX always challenges your core. Lifetime fitness and wellness will be discussed.

Recreational Sports

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

This course offers an opportunity for the student to become familiar with and participate in sports at a relaxing level. Various sports such as archery, tennis, softball, paddleball, basketball, and track. Students will participate in personal fitness daily.

Beginning Weights

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

This course is designed to teach students the proper lifting techniques. Students will focus specifically in the areas of cardiovascular, agility, and weight training. This class is designed for athletes and non-athletes.

Advanced Strength and Conditioning

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Beginning Weights, Two Sport Athlete, or One Sport With Coach Recommendation</i>			<i>Grade: 9,10,11,12</i>

The objective of this class is to gain strength, flexibility, cardiovascular conditioning, and explosiveness. In this block course students will perform workouts for the overall athletic performance of the individual. Students participating in one or more SHS sports will be given first priority for course registration. Students must provide a recommendation to the Physical Education Department from their coach in order to be enrolled in the course.

Beginning/Intermediate Swimming

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

This course is for the student who wants to learn how to swim. Students will learn basic survival, rhythmic breathing, front crawl, back crawl, side stroke, elementary backstroke, and breast stroke. This is an excellent course to prepare you for advanced swimming. Proper swimsuit attire is required. Swim goggles are highly recommended.

Advanced Swimming/Lifeguard/CPR

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 10,11,12</i>

In order to take this course the student must be able to swim 200 meters and be able to swim the five basic strokes listed in Beginning Swimming. American Red Cross testing will be administered at the end of the semester. The course will prepare the student to be a Certified Lifeguard. There is a \$30 fee to cover the cost of the certification.

Aerobics and Fitness

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

This course is offered to 9th-12th grade students. Students will explore different types of cardiovascular fitness activities. Emphasis will be placed on the wellness of the student. Activities included but not limited to: TRX resistance training, cross fit, Zumba, yoga, Pilates, and hip hop abs.

WORLD LANGUAGES

Course	Grade Level	Credits	Course	Grade Level	Credits
Spanish 1	9,10,11,12	10	German 1	9,10,11,12	10
Spanish 2	9,10,11,12	10	German 2	10,11,12	10
Spanish 3	10,11,12	10	German 3	11,12	10
Spanish 4	11,12	10	German 4	12	10
Spanish for Spanish Speakers	9,10,11,12	10	Mandarin Chinese 1	9,10,11,12	10
College Spanish*	11,12	10	Mandarin Chinese 2	10,11,12	10
			Mandarin Chinese 3	11,12	10
			Mandarin Chinese 4	12	10

*Indicates dual credit courses. Courses not offered on the SHS campus are indicated by the college name placed in parentheses.

Spanish 1

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

Spanish 1 serves as a foundation course in the study of the language. The student is introduced by means of listening, speaking, reading and writing to basic language concepts which will aid his/her understanding in Spanish and a greater understanding of the mechanics of English. Mexican culture is also presented to familiarize students with different customs.

Spanish 2

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Spanish 1</i>			<i>Grade: 10,11,12</i>

Spanish 2 is a continuation of the Spanish language and culture learning. It reinforces the knowledge learned in first year through speaking, reading, and writing skills. Students will develop a knowledge of geography of Spanish-speaking countries as well as culture and customs of Latin America.

Spanish 3

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Spanish 2</i>			<i>Grade: 10,11,12</i>

Spanish 3 will expand the students' grammatical, oral and written knowledge. Lectures are in Spanish.

Spanish 4

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Spanish 3</i>			<i>Grade: 10,11,12</i>

Spanish 4 is an introduction of classic Spanish literature and the history of Spanish speaking countries. The course will reinforce all the language skills learned in the previous three years. Community service with Hispanics and required use of the Spanish language are mandatory elements of this course.

Spanish for Spanish Speakers

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Native Spanish Speaker or successful completion of Spanish 4</i>			<i>Grade: 9,10,11,12</i>

This course is designed to enhance the native Spanish Speaker's language by developing academic language, reading, and writing in the Spanish language. The course is conducted in Spanish. Students will develop basic literacy skills along with gaining a deeper knowledge of the history, literature, and culture of the Spanish Language. Students will read and discuss informational text and some fiction as well as develop writing skills in the Spanish language. The course includes all language domains of speaking, listening, reading, and writing.

College Spanish (WNCC)

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> Spanish 1 and 2			<i>Grade:</i> 11,12

This class sets the student on the path to communication in Spanish. Students are grounded in grammar and vocabulary and practice using what they learn in the class on a daily basis. Oral and written productions are stressed in and out of class. Elements of Hispanic Cultures are also covered in the course through in-course viewings along with outside movie viewing and written commentaries. In the second semester grammar and vocabulary are the building blocks of a language, and students are required to use spoken Spanish on a daily basis in the classroom. Writing becomes more important at this stage as students are required to write short compositions on a variety of topics. Cultural elements continue to be studied through in and out of class viewings. This course is offered at WNCC.

German 1

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 9,10,11,12

German 1 is an introduction to the language and culture of Germany and other German speaking countries. The basic structures of the language are introduced through speaking, reading, listening and writing.

German 2

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> German 1			<i>Grade:</i> 10,11,12

German 2 is a continuation of German 1 with more emphasis on reading, writing, speaking and listening in the target language. Students will develop a knowledge of German culture and customs.

German 3

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> German 2			<i>Grade:</i> 11,12

German 3 is a continuation of German 2 with a focus on daily speaking in the target language. Students will read, write, and speak in the target language and complete a historical unit on the Holocaust.

German 4

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i> German 3			<i>Grade:</i> 12

German 4 is conducted primarily in the target language. It is an extensive study of literature, writing, and conversation. The students will apply the language to present projects and presentations. Emphasis will be placed on using the target language in the community.

Mandarin Chinese 1

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

Chinese 1 serves as a foundation course in the study of the language by using an audio-lingual approach; this course teaches pronunciation, vocabulary, and grammar fundamentals as essential elements in listening, speaking, reading, writing and understanding elementary Chinese. Chinese culture is also presented to familiarized students with different customs.

Mandarin Chinese 2

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Mandarin Chinese 1</i>			<i>Grade: 10,11,12</i>

Chinese 2 is a continuation of Chinese 1 with more emphasis on reading, writing, speaking and listening in the target language. Students will continue to develop a knowledge of Chinese culture and customs.

Mandarin Chinese 3

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Mandarin Chinese 2</i>			<i>Grade: 11,12</i>

Chinese 3 continues building on the students' previous Chinese knowledge by introducing new vocabulary, characters, grammar and usage. Students who complete this course should be able to initiate discussion on topics of daily life, understand more complicated sentences and write short compositions. It includes the reading of simplified texts with emphasis on oral expression and further study of Chinese history and culture.

Mandarin Chinese 4

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites: Mandarin Chinese 3</i>			<i>Grade: 12</i>

Chinese 4 is a continuation of skills and concepts learned in previous Chinese courses. Students will review and complete basic grammar and key sentence patterns of Chinese, provide practice in the appropriate use of idiomatic expressions, and further develop skill in reading and writing. It will also build vocabulary, expand reading comprehension, and encourage extensive conversation in Chinese. It will cover additional aspects about Chinese culture.

INDIVIDUAL EDUCATION PROGRAMMING

Course	Grade Level	Credits	Course	Grade Level	Credits
Healthy Life Styles	9,10,11,12	5	Fundamentals of English	9,10	5
Mathematics for Life	9,10,11,12	5	Read 180 blocked	9,10,11,12	10
Consumer Math	9,10,11,12	5	Read 180 single	9,10,11,12	5
Independent Living	9,10,11,12	5	Failure Free Reading	9,10,11,12	5
Study Strategies	9,10,11,12	5	Community Transition	11,12	5
Wilson Reading System	9,10,11	10	Job Shadowing	10,11,12	5
			Work Experience	11,12	5

Healthy Life Styles

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

Areas of a healthy lifestyles are define as emotional health; social health; physical health; spiritual health/living one's values. The curriculum will explore health through meaningful activities. The class curriculum embodies the self-determination model, and its ultimate goal is to give students the tools they need to evaluate their current life situations, identify areas in their lives they would like to improve, and make positive changes in those areas.

Mathematics for Life

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 10,11,12</i>

This course emphasizes basic skills to increase the student’s knowledge of math needed for everyday living. Math skills include measurement, money, time, budgeting, costs, purchasing and banking.

Consumer Math

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 10,11,12</i>

This course provides instruction using a variety of realistic, consumer-oriented applications. These applications reinforce and extend students’ mastery of basic math concepts utilizing grade level algebra standards.

Independent Living

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 10,11,12</i>

This course emphasizes basic skills to increase the student’s knowledge needed for everyday living. Skills are taught in an authentic learning environment that will center on authentic tasks that are of interest to the learner. Learners will be engaged in exploration and inquiry utilizing interdisciplinary teaching strategies. Scaffolded teaching strategies will be utilized to deliver a relevant, engaging, and challenging curriculum. Students will engage in complex tasks that require higher-order thinking skills, such as analyzing, synthesizing, designing, manipulating and evaluating information. This course is student-driven with teachers, parents, and outside experts all assisting/coaching in the learning process. Learners employ scaffolding techniques.

Study Strategies

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 10,11,12</i>

This semester-long class is designed to address the individual needs of each student enrolled. Students will enhance and maintain academic and management skills to increase success in school. Learning strategies, organizational skills, following and implementing directions, critical thinking skills, study skills and study habits will be emphasized.

Wilson Reading System

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11</i>

The Wilson Reading System is a Tier 3 reading intervention designed for students with significant difficulty in word-level decoding, automatic word recognition and fluency, and spelling, including students with dyslexia who require an intensive remedial program.

Fundamental English

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10</i>

This course helps students develop basic English skills to increase knowledge and ability to communicate in both written language and verbal expression. Emphasis is placed on grammar, spelling, composition skills, literature and practical communication problems of the everyday life. The course will be individualized to meet the needs of the student as described in his/her IEP.

Read 180

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

This course is designed to help the struggling reader by improving his/her vocabulary and improving reading fluency and comprehension. Students will receive instruction using a researched-based curriculum designed for struggling readers at the secondary level.

Failure Free Reading

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11,12</i>

This course is designed to meet the needs of the struggling reader through assistive technology. Failure Free Reading is a highly-structured, non-phonetic, language development program that directly teaches reading comprehension, vocabulary and fluency to students who have failed using everything else.

Community Transition

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 11,12</i>

This is a course designed for students on an Individualized Education Plan. This course provides students with opportunities to learn how to access their community independently. Students will learn safety in the community, participate in recreation/leisure activities, and visit community resources needed for independent living. A referral from the IEP team is required to take this course.

Job Shadowing

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 10,11,12</i>

Students will explore occupations which exist in the community by job shadowing at pre-arranged businesses. Training will occur from the business supervisor or designee and may be supported by the services of a Job Coach. Specific objectives will be outlined and will focus on the acquisition of work skills, healthy work attitudes and social skills development. Student will investigate careers through interest, aptitude and vocational assessment inventories.

Work Experience

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 11,12</i>

The work experience program provides an opportunity for students to gain experiences in employment situations while still attending school and receiving an academic education. Work Experience is arranged between the student, his/her school counselor and the high school transitional coordinator.



AGRICULTURE, FOOD AND NATURAL RESOURCES

Pre-Career Academy Courses 9th Grade

- Introduction to Agriculture, Food & Natural Resources

Pre-Career Academy Courses 10th Grade

- Basic Welding (AM Path)
- Animal Biology (AB or AVS Path)
- Plant Science (PES Path)

Foundational Career Academy 11th Grade (30 Credits)

- PLTW Environmental Sustainability
- Agriculture Mathematics*
- **Pathway Options (must select 2 based on interest and pre-requisites)**
- Animal Biology/Large Animal Biology/Equine Science/Small Animal Management (AVS/AB Path)
- Metal & Fabrication/Power, Structure & Tech (AM Path)
- Plant Science/Horticulture/Agronomy (PES/AB Path)

Specialized Academy Pathway 12th Grade Select Pathway: (30 Credits)

Agribusiness (ABS) Pathway

- Principals of Micro Economics (ECON 2120)
- Principals of Macro Economics (ECON 2110)
- Principals of Marketing (BSAD 2520)
- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Ag Leadership or Ag Elective
- Internship

Ag Machinery (AM) Pathway

- Technical Math (MATH 0150) or higher*
- Workplace Writing (ENGL 0500)*
- Advanced Metals Fabrication
- Ag Leadership
- Applied Ag (WNCC program)
- Internship

Animal and Vet Science (AVS) Pathway

- Equine Science
- Vet Science
- Ag Leadership
- AP or CP Chemistry
- General Biology (BIOS 1380)
- General Zoology (BIOS 1380)
- Animal Management (ASI 1303)
- Nutrition (ASI 1253)
- Beef Production (ASI 2673)
- Feeds and Feeding (ASI 2673)
- Wildlife Management
- Internship

Plant and Environmental Science (PES) Pathway

- Wildlife Management
- Horticulture or Agronomy
- Ag Leadership
- Crop Science (AGR 1103)
- AP or CP Chemistry
- General Biology (BIOS 1010)
- General Zoology (BIOS 1380)
- Natural Resource Management (AGR 1203)
- Internship

*At the Foundational or Specialized Level identified courses may be substituted with counselor or administrative approval and based on student's academic readiness. *CTA courses may vary based on college offerings.

Intro to Ag, Food, and Natural Resources

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course is designed to introduce students to the sciences, technologies, and applied practices of the progressive agriculture/agriculture industry. Emphasis is on an active learning environment enriched with technology and science-based applications. The course serves as the entry-level course for other courses in agriculture. The focus is to begin the preparation of students for further study leading to successful careers in the agricultural industry.

Basic Welding

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources/Skilled and Technical Science	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 10,11

An introductory course in shielded metal arc welding, MIG welding, and oxy-acetylene welding and cutting. Welding will be done on light gauge metal in all positions. This course is intended to introduce a beginning student to the welding standards of the American Welding Society. Procedure, set-up, practice and application are done according to the AWS standard. Upon successful completion of this course, students will be familiar with this code and understand where to find needed information. Safety skills and practices are required to be followed. Students generate grades through academic work and project work assessments. Student provides personal welding gloves and approved safety glasses. Consistent and punctual attendance is very important. Student should have the ability to work alone and with others.

Animal Biology

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Pre-Academy/Foundational
<i>Prerequisites:</i> Intro to Ag, Food, and Natural Resources			<i>Grade:</i> 10,11,12

This is a one semester course that is designed to develop basic knowledge and skills pertaining to livestock raised for human use and consumption. Course content includes: importance of domestication, breed identification, digestive systems, nutrition, selection, and meat science.

Plant Science

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Pre-Academy/ Foundational
<i>Prerequisites:</i> Intro to Ag, Food, and Natural Resources			<i>Grade:</i> 10,11,12

This course covers the basic principles of plant growth, including human and environmental influences and the theoretical and practical application of agronomic principles to crop production. Includes the historical and economic importance of crop plants for food, feed, and fiber; origin, classification, and geographic distribution of field crops; environmental factors and agronomic problems; crop plant breeding, growth, development, and physiology; cropping systems and practices; seedbed preparation, tillage, and crop establishment; pests and controls; and harvesting, storing, and marketing practices.

Agriculture Mathematics

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Algebra I and Geometry			<i>Grade:</i> 11,12

This course addresses the practical application of mathematics in the agricultural fields. Applications will be used in branches of agricultural including animal, plant, machinery, and business. Students will be applying mathematics by doing everything from fertilizer ratios to determining proper investments.

Large Animal Management

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Animal Biology			<i>Grade:</i> 11,12

The course provides an academically stimulating environment for students wishing to advance their understanding of animal science. In this course, students will study animal behavior, animal systems (circulatory, respiratory, etc), genetics and animal breeding systems. Student will examine the interrelated human, scientific, and technological dimensions of livestock production. In addition, students expand their knowledge of the scientific and technological dimensions of resources necessary for animal production.

Equine Science

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Foundational/Specialized
<i>Prerequisites:</i> Large Animal Management			<i>Grade:</i> 11,12

This course focuses on the basic scientific principles and processes related to equine physiology, breeding, nutrition and care in preparation for a career in the equine industry. Skills in biology, chemistry and mathematics are reinforced in this course. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Small Animal Management

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Foundational/Specialized
<i>Prerequisites:</i> Animal Biology			<i>Grade:</i> 11,12

Small Animal Management is a course designed to enhance the understanding of small animal care. Students will develop a deeper understanding of career opportunities, industry expectations, knowledge and skills related to the care and maintenance of small animals. In addition, students will learn about the various species and breeds of small animals, and their individual body systems. During the course of the semester, students will examine small mammals, dogs, cats, birds, amphibians, and reptiles.

Metals and Fabrication

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Basic Welding			<i>Grade:</i> 11,12

The course provides an in-depth study of metals and fabrication with metal products. It also provides the opportunity to explore the careers in agricultural metal fabrication. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Power, Structure and Technology Systems

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Metals and Fabrication			<i>Grade:</i> 11,12

This course introduces selected major areas of agricultural mechanics technology including small engine operation and repair, metal fabrication, woodworking, and electrical wiring. Learning activities include basic understanding, skill development and problem-solving. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Horticulture

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Ag, Food, and Natural Resource			<i>Grade:</i> 11,12

This course is designed to introduce the student to the basic concepts and skills utilized in horticulture. Students will receive an introduction to basic botanical concepts such as morphology, anatomy, taxonomy, physiology, genetics, and propagation as they apply to horticulture. The first quarter of this class will focus on the history and principles of floral design. Students will design a variety of floral arrangements for a variety of functions within the community. The second quarter of this class will focus on landscape design and turf grass management. In addition to propagating plants in the greenhouse, students will explore the concepts associated with designing, constructing and maintaining landscapes and their plant communities. Students will also be exposed to constructing and maintaining turf grass areas.

Agronomy

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Plant Science			<i>Grade:</i> 11,12

This course provides the study of plant physiology and morphology and its relationship to growth, development and reproduction of crop and forage plants in the global environment. Topics include: seed identification, testing and grain grading. Identification of agronomic crops and major weeds in crop production and harvesting and handling will be emphasized. Classroom and laboratory activities are supported through supervised agricultural experiences and leadership programs and experiences.

Principles of Macroeconomics (WNCC)

(See Business, Marketing, and Management Section)

Microeconomics (WNCC)

(See Business, Marketing, and Management Section)

Ag Leadership

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is an advanced study of agricultural leadership and team building. Students will be exposed to a variety of leadership activities and skill development opportunities. Students will also be engaged in using computers for computing record keeping. Much of the class will focus on developing career opportunities and preparation for employment. Students will also work in groups and teams to develop employable skills as well as enhance their leadership skills. Students should expect to take an in depth look at their lives and societal impacts.

Applied Agriculture (WNCC)

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This program is a two period block offered at WNCC. Courses will include Intro to Applied Ag, Water System Management, Ag Machinery, Pest and Weed Control, Ag Commercial Vehicle, Emerging Ag Issues, and Internship opportunities. Students enrolling in the program will be eligible for a College Certificate and be half way to completing an Associates of Occupational Studies degree. Students will also earn industry certifications aligned to local employability. This program will be available to any AFNR student who has completed their foundational academy.

Advanced Metals and Fabrication

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Metals and Fabrication			<i>Grade:</i> 12

This is a blocked course that is designed to expand on principles and skills learned through Metals and Fabrication. Students will work on independent projects utilizing all skills learned in Metals and Fabrications.

Technical Mathematics (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course provides the Math skills required in career and technical fields, including a review of arithmetic operations, exponents, algebraic operations, and right triangle trigonometry with emphasis placed on application.

Veterinary Science

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy: Resources</i> Ag, Food, and Natural	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Large Animal Management			<i>Grade:</i> 11,12

This course introduces students to the basics of animal care. Topics covered include disease, parasites, feeding, shelter, grooming, and general animal care. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities

Wildlife Management

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course focuses on the conservation of natural resources including outdoor recreation topics and provides students with the opportunity to understand and appreciate the importance of maintaining the land and ecological systems that enable non-domestic animals to thrive. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Zoology (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Ag, Food, and Natural Resources	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and General Biology			<i>Grade:</i> 12

Characteristics and relationships of the major groups from protozoa through the mammals are discussed.

Nebraska College of Technical Agriculture (Online)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Ag, Food, and Natural Resources/Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and General Biology			<i>Grade:</i> 12

Courses provided through the Nebraska College of Technical Agriculture are dual credit courses designed for students specializing within Agriculture industries. Specialized academy pathway options include Animal Science, Veterinary Science, and Plant Sciences. Students will be allowed to select from a variety of courses that align with their career academy interest. These courses may include Animal Management, Nutrition, Feeds and Feeding, Beef Production Systems, Crop Science, and Natural Resource Management. Students will attend the online courses at the Agriculture classroom.



BUSINESS, MARKETING AND MANAGEMENT

Pre-Career Academy Courses 9th-10th Grade

- Intro to Business, Marketing & Management (BAM, BT, HT, ME, COS Path)
- Info Tech Applications 1 (BAM, BT Path)
- Business Management & Leadership (BAM, BT, HT, ME, COS Path)
- Foods, Nutrition & Wellness (HT Path)
- Intro to Digital and Graphic Design (ME Path)

Foundational Career Academy 11th Grade (30 Credits)

- English 11*
- Marketing/Marketing Management
- **Pathway Options**
- Basic Accounting/Info Tech Apps 2 (BAM or BT Path)
- Advanced Foods and ProStart 1 (HT Path)
- Digital & Graphic Design (ME Path)
- Intro to Cosmetology (COS Path)

Specialized Academy Pathway 12th Grade: Select Pathway (30 Credits)

Business Administration Pathway

- Principles of Marketing (BSAD 2550)
- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- AP Stats (MATH 2170) or College Algebra (Math 1150)*
- Intro to Business Administration (BSAD 1050)
- Principles of Macroeconomics (ECON 2110)
- Principles of Microeconomics (ECON 2120)
- Principles of Management (BSAD 2540)
- Principles of Accounting 1 and 2 (ACCT 1200/1210)
- Internship

Business Technology Pathway

- Principles of Marketing (BSAD 2550)
- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Office Management (BSTC 2340)
- Intro to Business Administration (BSAD 1050)
- Achieving College Success (PRDV 1010)
- Spreadsheets (INFO 1030)
- Internship

Hospitality and Tourism Pathway

- Principles of Marketing (BSAD 2550)
- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- ProStart 2
- Internship

Cosmetology Pathway First and Second Semester

- Fullen School of Hair Design
 - Classes start in the summer
 - Full time Tuesday-Saturday
 - Students responsible for kit fees
 - Students will take online courses on Monday at SHS

Marketing and Entrepreneurship Pathway

- Principles of Marketing (BSAD 2550)
- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Advanced Digital and Graphic Design
- Internship

Intro to Business, Marketing, and Management

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course is designed as an introductory overview of the Business, Marketing, and Management Career Field. Units of study include economic systems, forms of business ownership, management, marketing, and accounting. Career opportunities will also be explored.

Information Technology Applications 1

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This introductory semester-long course will be divided into four software application components. Students will learn the proper procedures to create documents, spreadsheets, publishing, and presentations suitable for coursework, professional purposes, and personal use. Components will be studied individually and will also be integrated within the curriculum.

Business Management and Leadership

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course emphasizes the basic concepts of management and leadership within a business or organization. It addresses characteristics, organization, and operations of business as major sectors of the economy. Students will investigate management issues involved in planning, organizing, leading, and controlling an organization. They will also acquire essential skills in the areas of emotional intelligence, time management, stress management, professional growth and development, communication, and relationship skills.

Food, Nutrition, and Wellness

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This class is an introduction to the study of foods and nutrition. The course includes the basic food preparation principles, food sanitation and safety, the examination of nutritional needs and wellness throughout the life cycle and factors affecting today's consumer food decisions. There will be a student fee for participating in this course. Please refer to the Student Handbook.

Intro to Digital Design

(See Communication Arts and Technology)

Marketing/Marketing Management

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Business, Marketing, and Management			<i>Grade:</i> 11,12

Marketing provides an opportunity to explore the field of marketing, business, management, finance, and consumer awareness. The course includes topics in economics, advertising and promotion, and entrepreneurship. The curriculum utilizes communication, team building, and problem-solving skills while applying academic and critical-thinking strategies. Application of academic concepts and technology are integrated throughout the curriculum enhancing career and professional development. This course may be taken in the academy or out of the academy as an elective.

Basic Accounting

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Business, Marketing, and Management			<i>Grade:</i> 11,12

This course covers sole proprietorship accounting principles involved in the preparation and maintenance of financial records concerned with business management and operations. It is a comprehensive introduction to basic accounting including recording, summarizing and reporting, principles of income measurement and asset valuation, and accounting systems and controls. Students are exposed to careers in the accounting field and are given the opportunity to perform accounting applications using the computer. An introduction to partnerships and corporations may be included.

Information Technology Applications 2

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Information Technology Applications 1			<i>Grade:</i> 11,12

This advanced semester-long course is a continuation of Info Tech App 1. Students will create more advanced documents, spreadsheets, databases, and presentations suitable for course work, professional purposes, and personal use. Components will be studied individually and will also be integrated. Students will have opportunities to test for Microsoft Certifications in Word, PowerPoint, and Excel.

Advanced Foods

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Food Nutrition and Wellness			<i>Grade:</i> 10,11,12

This course aids students in advancing skills related to food preparation and nutrition and wellness. The course is designed to provide and prepare students with the advanced knowledge needed to properly and efficiently fuel the human body through food selection, storage and preparation methods. Students will study foods using advanced project-based nutritional and food science learning methods. Food decisions that impact throughout the life cycle will be studied.

ProStart 1

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Advanced Foods			<i>Grade:</i> 10,11,12

This foundational course is an industry-driven curriculum that prepares students for careers in the restaurant and foodservice management industry. This course will focus on the following topics: career paths, safety and sanitation, industry standards, food methods and techniques, food service management, and customer service. Students will have the opportunity to obtain a ServSafe certification. There will be a student fee for participating in this course (please refer to the Student Handbook).

Digital and Graphic Design

(See Communication Arts and Technology)

Intro to Cosmetology

<i>Credits:</i> 20	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i>			<i>Grade:</i> 11,12

The Introductory level course consists of 300 hours of training and will be blocked for the entire year. This course is a combination of classroom lectures and classroom practice of basic skills. Skill development is stressed prior to assignment to the clinic floor as Juniors and Seniors. The following subject areas are covered: Haircutting, Shampooing, Wave and Curl Formations, Scalp Treatments, Chemical Texture Services, Facials, Braiding, Nebraska Cosmetology Law, Hairstyling, Professional Image, Manicuring and Pedicuring, Hair Coloring, Facial Makeup, Safety and Sanitation.

Principles of Marketing

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Marketing/Marketing Management			<i>Grade:</i> 12

Advanced level course with emphasis on marketing research, management, merchandising, personal development, promotions, finance and business operations. The class may be taken for dual credit through Chadron State College. Registration is at the beginning of the year.

Introduction to Business Administration (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This basic business course includes an introductory discussion in the following areas: the economic setting of business, the structure of business, business financing, management, ethical and social responsibilities of business, marketing, and physical distributions of goods and services. The areas discussed in this course serve as the basic foundations for more specialized courses in business. Also offered online.

Principles of Macroeconomics (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Ag, Food, and Natural Resources/Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course is a study of the "big ideas" of macroeconomics such as GDP, inflation, unemployment, labor, and international trade. A look at public-policy decision making using macro theories such as monetary policy, fiscal policy, and other economic-stabilization theories is also presented. This course will also examine the challenges facing the global economy.

Microeconomics (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Ag, Food, and Natural Resources/Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course provides an analysis of perfect and imperfect markets, including the behavior of producers and consumers. Topics covered include price and income elasticity, public and private goods, income distribution, market structures, production costs, resource allocation, comparative advantage, and economic problems.

Principles of Management (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

The five basic functions of management: planning, organizing, directing, leading, and controlling are studied in formulating and carrying out the objectives, policies, methods, and procedures in managing a successful business enterprise. Special emphasis is placed on individual and group behavior, communication, leadership, motivation, and morale as they relate to the functions of management and the decision making process. A historical review of various management theories and philosophies is also introduced into the course.

Principles of Accounting 1 (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is designed to provide introductory knowledge of accounting principles, concepts, and practices. Included topics are the balance sheet, the income statement, the statement of owner's equity, statement of cash flows, worksheets, journals, ledgers, controlling accounts, accruals, adjusting and closing entries, internal control, inventories, fixed and intangible assets, depreciation, liabilities, equity, and financial statement analysis. This course provides a foundation for more advanced work in the fields of accounting and business.

Principles of Accounting 2 (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is a continuation of Accounting 1. Principles of Accounting 2 includes accounting for businesses organized as partnerships, LLCs, and corporations, accounting for bonds payable and investment in bonds, preparing cash flow statements, accounting for manufacturing businesses, preparing and using accounting data for management decision making, and researching, analyzing and interpreting financial statements.

Advanced Digital and Graphic Arts

(See Communication, Arts, and Technology)

Office Management (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

In this course, the student learns how to plan and organize an office, how to control office operations, and how to work effectively with people. Students also learn the fundamentals of time, conflict, and stress management.

Spreadsheets (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This introductory course focuses on the features and usage of electronic spreadsheet applications. Students are introduced to worksheet design, formulas and functions, charts and graphs, data manipulation, data consolidation, and financial forecasting. Keyboarding skills are recommended.

Achieving College Success (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 12

This course is designed to help students create greater success in college and life. It will teach proven strategies for producing greater academic, professional, and personal success.

ProStart 2

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> ProStart 1			<i>Grade:</i> 11,12

This is a year-long class using the ProStart curriculum. Topics cover the many of the aspects of the lodging industry, marketing, tourism and retail industry. Upper-level culinary art practices and skills are a key element of this course. Students will be eligible to try out for competitions. Students will try out for competitions and can advance to state competitions as an extracurricular activity. All students will need to complete the authorization form for drug testing for those involved in extracurricular activities. A ProStart certification will be obtainable for those completing the necessary work hours. In addition, there will be a student fee for participating in this course (please refer to the Student Handbook).

Fullen School of Hair Design

<i>Credits:</i> 60	<i>Dual Credit:</i> X	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This extensive program will require students to attend Fullen School of Hair Design full time Tuesday through Saturday starting the summer after the students Junior year. Students will be required to attend a normal school day at SHS every Monday in order to obtain their core graduation requirements through the online learning platform, Odysseyware. Students will be required to purchase their own cosmetology kits and books at a price of approximately \$600. Students who complete the program will graduate with their Cosmetology Certification.

Business Law

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Business, Marketing & Management	<i>Academy Level:</i> Elective
<i>Prerequisites:</i>			<i>Grade:</i> 10,11,12

A course designed to present the study of the legal rights and responsibilities necessary to be informed and productive citizens. Key concepts include contracts and torts, the role of courts, litigation, and constitutional issues including civil and criminal law.



COMMUNICATION, ARTS AND TECHNOLOGY

Pre-Career Academy Courses 9th-10th Grade

- Intro to Digital Design (All Pathways)
- Intro to Theatre (VPA Path)
- Intro to Art, Art 2, Art 3 (VPA Path)
- Journalism (JB Path)
- Intro to Music Tech (VPA Path)

Foundational Career Academy 11th Grade (30 Credits)

- English 11*
- **Pathway Options (must select 2 based on interest and pre-requisites)**
- Digital Design and Graphic Design (All Pathways)
- Digital Media Art/Studio Art (VPA Path)
- Music Tech (VPA Path)
- Video Production (JB Path)
- Theatre (VPA Path)

Specialized Academy Pathway 12th Grade: Select Pathway (30 Credits)

Digital and Graphic Design (DGD) Pathway

- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Advanced Digital and Graphic Design
- Principles of Marketing (BSAD 2550)
- Advanced Video Production
- Internship

Journalism and Broadcasting Pathway

- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Advanced Digital and Graphic Design
- Advanced Video Production
- Echoes/Bluff Staff
- Internship

Visual and Performing Arts Pathway

- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Advanced Music Tech
- Advanced Studio Art
- Advanced Digital Media Art
- Advanced Theatre
- Advanced Digital and Graphic Design
- Internship

*At the Foundational or Specialized Level identified courses may be substituted with counselor or administrative approval and based on student's academic readiness.

Intro to Digital Design

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology/Business, Marketing, and Management	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course will introduce students to the technical tools and processes used in digital design. Students will be introduced to the design process model which includes typography, color, and imagery. In addition, design software will be utilized to create graphics, animation, web pages, and video. Students will demonstrate proper use of fair use guidelines. Career opportunities in digital design will be explored. Preference will be given to Band, Choir, or Orchestra.

Intro to Theatre

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

Students in this semester-long class will learn about different styles of theatre, work to become comfortable speaking and performing in front of an audience, and learn the basics of technical theatre. Students in Intro to Theatre also will perform in a short play at the end of the semester.

Intro to Art, Art 2, and Art 3

(See Fine Arts)

Journalism

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 10,11

This course is designed to prepare students to work on the newspaper and yearbook staffs the following year. Students will study and write the following types of stories: columns, editorials, entertainment, feature, in-depth reporting, news, and sports. The course will also cover newspaper style and design, all facets of yearbook, digital photography, and advertising. The course will also include regular vocabulary tests.

Intro to Music Technology

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

Intro to Music Technology is a one semester introductory course. Prior knowledge of music is helpful but not necessary. Music Tech students will learn basic music concepts through the use of digital music software. Music Technology will explore emerging technologies related to music composition, recording and performance. Through lab projects students will learn basic musical composition and notation using MIDI. Students will learn fundamentals of digital and video production. Students will also learn the technology involved in live performance, including theatre technology and live sound reinforcement. Preference will be given to students enrolled in Band, Choir, or Orchestra.

Digital and Graphic Design

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology/Business, Marketing, and Management	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Digital Design			<i>Grade:</i> 11,12

Digital and Graphic Art is a foundational course within the CAT Academy where students focus on developing advanced skills to plan, design, and create interactive projects using the elements of text, graphics, animation, sound, video, and digital imaging through interactive projects. In addition, students will learn basic principles of web design. These skills can prepare students for entry-level positions and other occupational or educational goals. This course may be taken in the academy or out of the academy.

Digital Media Art

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Digital Design			<i>Grade:</i> 11,12

In Digital Media Art, students will learn the skills and tasks of real world creative digital art careers using technology. Students will learn various processes, applications, and advanced digital techniques. Students will communicate ideas and messages through digital creation such as user interfaces, corporate branding, and interior design. Finally, students will have opportunities to analyze and evaluate various forms of media within project based units.

Studio Art

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Art 2 and Art 3 or Teacher Approval on Submission of Portfolio			<i>Grade:</i> 11,12

In Studio Art, students will choose two art creation methods to explore in more depth, such as painting, drawing, sculpting, printmaking, collage, makeup effects, fashion design or architecture. Through advanced projects, students will further their knowledge in art history, terminology and aesthetic criticism within project based units. Students will display a portfolio of their work to the public at the end of the semester.

Music Tech

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Music Tech			<i>Grade:</i> 11,12

This course is for the musician who wishes to learn the technical side of the music industry. Students will learn the basics of music theory, composition, digital recording, music production (creating CD's or internet distribution), multimedia production, and stage technology. In order to successfully complete the course, students will suggest and create a final project based on the skills learned in the course.

Video Production

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Digital Design			<i>Grade:</i> 11,12

Students will expand their media skills of interviewing, reporting, writing, editing, videography, and design. Students will explore careers while working together to create projects in a variety of media, such as audio, video, and broadcast. The emphasis of Video and Broadcasting is on collaboration and career exploration.

Theatre

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to Theatre			<i>Grade:</i> 10,11,12

Theatre is a year-long class designed for students who are interested in performing publicly and learning more about the aspects of acting, technical theatre and set design. Students taking theatre will write plays, study works from a variety of playwrights and work to develop their acting skills. Students would also have the opportunity to direct. This class is designed for the student who has a more performance-based knowledge of theatre. Students in Theatre will participate in a more advanced play at the end of the semester. Students may take a second year of Theater with teacher permission.

Advanced Digital and Graphic Design

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology/Business, Marketing, and Management	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

Advanced Digital Design is the final course in the Digital Design Pathway. Students focus on integrating computer skills and promoting individual design concepts and approaches in digital design. Studio problems are used to continue study in a variety of visual disciplines. The course includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the real world of digital design: composition, color theory, illustrations, displays, promotional materials, packaging, logos, motion graphics, and the manipulation of photographic images.

Principles of Marketing

(See Business, Marketing, and Management)

Advanced Video Production

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

Students will apply their media skills of interviewing, reporting, writing, editing, videography, and design. Students will produce in media outlets such as broadcast, video, audio, Internet, and/or mobile. The emphasis of Advanced Video and Broadcasting is to work both independently and collaboratively to create a professional products while meeting deadlines.

Echoes Staff

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Journalism			<i>Grade:</i> 11,12

In these courses, the students are responsible for writing and publishing the school newspaper, web page, or other media outlets. Students may take two years of Echoes Staff with teacher permission.

Bluff Staff

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Journalism			<i>Grade:</i> 11,12

In these courses, the students are responsible for writing and publishing the school yearbook. Students may take two years of Bluff Staff with teacher permission.

Advanced Digital Media Art/Advanced Studio Art

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

These capstone courses are designed for those students planning on pursuing a degree or career in the digital graphic or traditional visual arts. Students will complete projects in various mediums while learning how to market and promote their talents for future career opportunities. The emphasis of this course is on production with an emphasis on the demands of real world career expectations. Student work will be displayed prominently.

Advanced Music Tech

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is an advanced continuation of Music Technology. Students will continue to build on the skills learned in Music Tech. In order to successfully complete the course, students will suggest and create an advanced final project based on the skills learned in the course.

Advanced Theatre

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Communication, Arts and Technology	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion, Theatre			<i>Grade:</i> 12

This advanced level course is designed to prepare the serious theatre student for life in the theatre beyond the high school arena. The main focus of the class will be to prepare audition pieces and portfolios for college entrance, scholarships or professional auditions. Through a rigorous series of creative projects, the advanced theatre student is challenged to work as an actor, a director, a theater technician, and theatre manager. Students study advanced principles of acting and character analysis including an exploration of objectives, obstacles, choices and given circumstances.



HEALTH SCIENCES

Pre-Career Academy Courses 9th-10th Grade

- PLTW Principals of Biomedical Science
- PLTW Human Body Systems

Foundational Career Academy 11th Grade (30 Credits)

- PLTW Anatomy & Physiology
- Medical Interventions
- Medical Terminology
- Intro to Psychology (PSYC 1810)*
- **Elective Option**
- Basic Nursing Assistant

Specialized Academy Pathway 12th Grade: Select Pathway (30 Credits)

Medical Specialties and Technology Pathway

- Basic Nursing Assistant
- EMR (EMTL 1410)
- Fundamentals of Phlebotomy (MEDT 1010)
- AP or CP Chemistry*
- EMT Basic 1 (EMTL 1520)
- Med Aid (HLTH 2190)
- Internship

Nursing Pathway

- Basic Nursing Assistant
- AP or CP Chemistry
- PLTW Medical Innovations
- Statistics (MATH 2170)
- Human Anatomy and Physiology I (BIOS 1540)
- Human Anatomy and Physiology 2 (BIOD 1620)
- General Biology (BIO 1010)
- Med Aid (HLTH 2190)
- Life Span (Psych 2150)
- Nutrition and Diet Therapy (BIOS 2050)
- Internship

Medicine (Pre) Pathway

- PLTW Medical Innovations
- AP or CP Chemistry
- AP Calculus AB*
- General Biology (BIOS 1010)
- Human Anatomy and Physiology I (BIOS 1540)
- Human Anatomy and Physiology 2 (BIOD 1620)
- Microbiology (BIOS 2460)
- Internship

Health Information Systems Pathway

- English Comp 1 (ENGL 1010)*
- Intro to Health Information Systems (HIMS 1400)
- Disease and Process 1 (HIMS 1400)
- Intro to Information Technology (INFO 1220)
- Disease Process 2 (HIMS 2400)
- Intro to Database (ACCESS)
- Legal and Ethical Aspects of HIMS (HIMS 1500)
- Internship

*At the Foundational and Specialized Level identified courses may be substituted with counselor or administrative approval and based on student's academic readiness.

PLTW: Principles of Biomedical Sciences

Credits:10	<i>Dual Credit:</i>	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade: 9</i>

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

PLTW: Human Body Systems

Credits:10	<i>Dual Credit:</i>	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i> Principles of Biomedical Sciences			<i>Grade: 10</i>

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Manikin®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

PLTW: Medical Interventions

Credits:10	<i>Dual Credit:</i>	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Principles of Biomedical Sciences			<i>Grade: 11,12</i>

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Medical Terminology

Credits:5	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i>			<i>Grade: 11,12</i>

Medical Terminology is designed to develop a working knowledge of the language of medicine. In this class, students will acquire word-building skills by learning prefixes, suffixes, roots, and abbreviations. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, and pharmacology. This class may be taken for dual credit

Basic Nursing Assistant

Credits:10	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i>			<i>Grade: 11,12</i>

This course is designed to instruct students in becoming Basic Nursing Assistants. The course provides the essential knowledge and skills to provide basic care and skills to resident/clients of healthcare facilities; including such topics as resident rights, communication, safety, observation, reporting and assisting resident/clients in maintaining basic comfort and safety. It is designed to meet the training requirements of the federal and Nebraska state law for nursing assistants working in licensed facilities. Students may receive certification upon taking the state exam. Students must be 16 years of age to sit for the exam. This course may be taken in the academy or out of the academy.

Emergency Medical Responder (WNCC)

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is designed for individuals who wish to enter the Emergency Medical Service (EMS) profession. The emergency medical responder is the entry-level of the EMS profession. With regard to Basic Life Support (BLS) training, it does not involve the transportation of patients in an ambulance. Instruction occurs through didactic classroom, hands-on lab, and clinical experiences. Upon successful completion of the entire course, the student will be eligible to take the National Registry of Emergency Medical Responder computer adaptive and skills examination. The National Registry examinations are approved by the Nebraska Health and Human Services Licensure Unit and the Nebraska Board of Emergency Medical Services for licensure in the state of Nebraska.

Fundamentals of Phlebotomy (WNCC)

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and Medical Terminology			<i>Grade:</i> 12

This course provides basic and advanced instruction on techniques, procedures, equipment, and issues pertaining to the proper collection of blood specimens for routine clinical laboratory testing. Emphasis is placed on infection prevention, universal precautions, proper patient 164 identification, specimen processing, patient complications, arterial draw, unusual tests, non-blood specimens, quality assurance, and legal issues. A laboratory is concurrent with the lecture. MLT students who possess an active Phlebotomy Technician, PBT (ASCP) certificate through the American Society for Clinical Pathology-Board of Certification (ASCP-BOC) may waive this course.

EMT Basics 1 (WNCC)

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This is the first part of the three part EMT-Basic course. The EMT-Basic candidate is familiarized with the introductory aspects of emergency medical care. Topics covered include the well-being of the EMT-Basic, medical/legal and ethical issues, the human body, baseline vital signs and SAMPLE history, lifting and moving patients, airway and patient assessment. Practice skill labs are also conducted.

Medication Aide

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Basic Nursing Assistant			<i>Grade:</i> 12

This course is designed to prepare the learner to assume the role and responsibilities of the Medication Aide. The curriculum is designed to meet the minimum basic requirements for medication aides in medication administration and pharmacology. Upon successful completion of the course, the student will be eligible to sit for an exam administered by the Nebraska Department of Health and Human Services. Successful completion of this exam will approve the student as a Medication Aide. This class may be taken for dual credit.

PLTW: Biomedical Innovations

Credits:10	Dual Credit:	Academy: Health Sciences	Academy Level: Specialized
Prerequisites: Foundation Completion			Grade: 12

This is the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent project with a mentor or advisor from a university, medical facility, or research institution.

Life Span (WNCC)

Credits:5	Dual Credit: X	Academy: Health Sciences	Academy Level: Specialized
Prerequisites: Foundation Completion, Intro to Psychology, and ACT or ACCUPLACER Score			Grade: 12

This course is an introduction to the basic concepts and issues of biological and psychological growth and development from conception through old age. Emphasis is placed on biophysical, cognitive, and psychosocial development throughout the lifetime.

Nutrition and Diet Therapy (WNCC)

Credits:5	Dual Credit: X	Academy: Health Sciences	Academy Level: Specialized
Prerequisites: Foundation Completion and General Biology			Grade: 12

This course is intended for students who need to learn basic nutritional information for the medical field. Included are the basic nutrients, their functions, food sources and the effect of deficiencies. There is an emphasis on correct information to combat food faddism. Planning for normal nutrition through the life cycle and special needs of the elderly, children and pregnant women is discussed, as well as sanitation of food, legislation, and labeling as it affects the food supply.

Human Anatomy and Physiology I (WNCC)

Credits:5	Dual Credit: X	Academy: Health Sciences	Academy Level: Specialized
Prerequisites: Foundation Completion and ACT or ACCUPLACER Score			Grade: 12

This course will cover topics covered include the introduction of human anatomy and physiology, introduction to the chemical basis of life, cells, cellular metabolism, tissues, integumentary, skeletal, joints, muscular, nervous systems 142 and somatic and special senses. Credit cannot be received for both BIOS-1160 and BIOS-1540.

Human Anatomy and Physiology II (WNCC)

Credits:5	Dual Credit: X	Academy: Health Sciences	Academy Level: Specialized
Prerequisites: Human Anatomy and Physiology I			Grade: 12

This course will cover topics covered include the introduction of human anatomy and physiology, introduction to the chemical basis of life, cells, cellular metabolism, tissues, integumentary, skeletal, joints, muscular, nervous systems 142 and somatic and special senses. Credit cannot be received for both BIOS-1160 and BIOS-1540.

Microbiology (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is a study of microbiology with emphasis on structure of microbial cells, their nutrition and growth, control of growth, genetics and genetic engineering, metabolic and biosynthesis activity, and host-parasite interactions. Accompanying laboratory study emphasizes microbiological techniques including microbial control and manipulation.

Health Information Systems (WNCC Online)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Health Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

Health Information is an online program available through WNCC. These dual credit courses are for those students specializing in Health Information Systems. Students selecting these courses will attend WNCC daily to work on their online programming. Students will be allowed to select from courses that include Health Information Systems, Disease Process 1 and 2, Healthcare Delivery Systems, and Legal and Ethical HIMS.



HUMAN SCIENCES AND EDUCATION

Pre-Career Academy Courses 9th-10th Grade

- Foundations of Law (CJL Path)
- Intro to Human Sciences & Education (ED, HS & EC Path)
- Human Growth and Development (ED, HS, & EC Path)
- Child Development (EC Path)

Foundational Career Academy 11th Grade (30 Credits)

- English 11*
- Intro to Psychology (PSYCH 1810)* and Sociology
- **Pathway Options (based on pre-requisites)**
- Intro to Education/Best Practices in Education (ED and ECPATH)
- Courts and Judicial Process/Exploring Criminal Justice(CJ Path)
- Family Supports and Interventions/Careers in Human Services (HS Path)

Specialized Academy Pathway 12th Grade: Select Pathway (30 Credits)

Criminal Justice and Law (CJ) Pathway

- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Intro to Criminal Justice (CRIM 1020)
- Intro to Corrections (CRIM 1020)
- Contemporary Issues in Criminal Justice (CRIM 2150)
- Courts and Judicial Processes (CRIM 1030)
- Internship

Early Childhood Education (EC) Pathway

- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Early Childhood Practicum
- Introduction to Early Childhood Education (ECED 1150)
- Observation, Assessments, and Guidance (ECED 1060)
- Infant/Toddler Development (ECED 1110)
- Preschool Development (ECED 1120)
- Internship

K-12 Education (ED) Pathway

- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Field Experience in Education
- Introduction to Education (EDUC 1110)
- Teaching in Technology
- Math for Elementary Teachers (MATH 1180)/or Elective Interest Area*
- Education Psychology (PSYCH 2000)
- Internship

Human Sciences (HS) Pathway

- English Comp 1 (ENGL 1010)*
- English Comp 2 (ENGL 1550)*
- Intro to Human Services (HUSR 1620)
- Intro to Counseling Skills (HUSR 2000)
- Ethics and Issues (HUSR 2380)
- Multicultural Counseling (HUSR 2450)
- Internship

Foundations of Law, Safety, and Corrections

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course provides an exploration of the five pathways of this career cluster: correction services, emergency and fire management services, law enforcement services, legal services and security and protective services, including exposure to careers within all pathways.

Intro to Human Sciences and Education

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course is intended to enable students to have a broad scope of experiences that will provide an overview and fundamental knowledge of Human Sciences with a foundation in family and consumer sciences. Students will explore career possibilities and develop a personal learning plan. Students will practice basic life and career readiness skill and learn to apply them to personal life situations.

Human Growth and Development

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course covers the study of human development (physical, mental, emotional and social) through the entire lifespan. Content includes how to develop positive interactions with others and how development can be guided at each age.

Child Development

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

This course integrates knowledge, skills and practices necessary for nurturing the growth and development of children. The study of the biological, psychological and social development of young children will be studied in addition to effective parenting and child care practices.

Intro to Education

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Human Growth and Development or Intro to Human Sciences and Education			<i>Grade:</i> 11,12

This course is designed to help students explore professional or learning support positions in education, education related careers and training. Students will research the profession of teaching and personality and leadership traits that contribute to a successful teacher. The course will provide an overview of ethics and professionalism, societal influences, classroom management and practices, and the understanding of the educational governance structure.

Best Practices in Education

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Human Growth and Development or Intro to Human Sciences and Education			<i>Grade:</i> 11,12

This course provides students with volunteer experience in fields related to education. Goals are cooperatively set by the student and supervising teacher so that students increase their understanding about the roles and responsibilities of a teacher. Opportunities may include experiencing teaching in a controlled setting by designing learning experiences and giving presentations. Classroom instruction could include questioning, developing objectives and assessments, safety practices, IEP development and technology applications.

Courts and Judicial Process

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Foundations of Law, Safety, and Corrections			<i>Grade:</i> 11,12

This course examines legal aspects of investigative and arrest as well as rules governing the admissibility of evidence in court. It focuses primarily on police and correctional due process, application of the law, and civil liability concerns. Topics include search and seizure, arrest and interrogation, revocation and probation and parole, probable cause and other timely issues.

Exploring Criminal Justice

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Foundations of Law, Safety, and Corrections			<i>Grade:</i> 11,12

This course provides an overview of the history, development and philosophies for crime control and the role of law enforcement within a democratic society. Topics would include an examination of the criminal justice system with an emphasis on the police, the courts (prosecution and defense), the correctional agencies, and exposure to careers related to criminal justice.

Family Supports and Interventions

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Human Growth and Development or Intro to Human Sciences and Education			<i>Grade:</i> 11,12

In this course, students identify positive and negative impacts on families during stress, changes in the family life cycle, grief and loss, and mental health disorders. Students will compare and contrast counseling services needed to support families and the types of services available to address conflict and abuse.

Careers in Human Services

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Human Growth and Development or Intro to Human Sciences and Education			<i>Grade:</i> 11,12

This course provides a broad overview of the human services discipline using practice settings and social problems as lenses so that the role and function of the human service provider, as well as the clients with whom they work can be understood in context. The course begins understanding yourself and your motives to become a human service provider. There will be a brief overview of what a human service provider is, and what services these professionals provide. Students should leave this class having a good idea of what a human service worker is, what they do, who they work with, as well as the gaining a deeper understanding of the mission, values and goals embraced by the human service profession. Students will gain knowledge of skills needed to do critical thinking, understand ethical values, and skills needed to successfully assist others. Assignments are based on case studies, ethical dilemmas and mock treatment plans and meetings.

Intro to Criminal Justice (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course provides an overview of the history, development, and philosophies of crime control within a democratic society. Examines the criminal justice system with emphasis on the police, the prosecution and defense, the courts, and the correctional agencies.

Intro to Corrections (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course outlines corrections in a systematic process showing the evolving changes within institutional and community based corrections. Topics include, but are not limited to: the history of corrections; the influence of social thought and philosophy on the development of corrections; the rights of the incarcerated inmate; and the duties of the correctional officer.

Contemporary Issues in Criminal Justice (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

The course will expose students to current social issues impacting the field of criminal justice and its professionals, victims, and defendants. Possible topics include racism, sexism, homophobia, poverty, hate crimes, capital punishment, addiction, ethics, gangs, child abuse, terrorism, sexual assault, domestic violence, suicide, mental illness, and other timely topics.

Courts and Judicial Process (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course provides a survey of the United States judicial system. Topics include, but are not limited to, legal and constitutional concepts, institutions, and processes. Coverage includes adult and civil courts.

Early Childhood Practicum

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course provides an examination of various types of early childhood programs and the licensure requirements related to each, program planning and evaluation, and working with special needs children. Students will partner with local daycare providers to receive hands-on experience with young children.

Intro to Early Childhood Education (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course serves as an overview of early childhood education -- the history, trends, theories, and philosophies embedded in evidence-based practices today. Examined are different program types, diversity, inclusion, licensing standards, current legislation, advocacy, and professionalism.

Observation, Assessment, and Guidance (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course introduces a variety of observation and guidance techniques used to observe children in early childhood education programs from birth to eight years. The course focuses on developmentally appropriate curriculum and positive guidance techniques found in an encouraging classroom.

Infant, Toddler Development (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course focuses on prenatal development through three years of age. Planning developmentally appropriate curriculum to include all domains of the child - physical, cognitive, emotional, and social - is examined.

Preschool Child Development (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course focuses on typical/atypical development of the child ages three through five years, in the domains of physical growth and motor skills, cognition and language, and social/emotional development.

Field Experience in Education

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is the third course in a three-course sequence. Through this capstone experience, students will apply previously developed knowledge and skills into a structured workplace experience. This experience may take place within a school environment for those seeking teaching careers, or within the business and industry community for those seeking careers in professional, educational training. Goals are set cooperatively by students, their instructor, and respective supervising professionals. Opportunities may include experience teaching in a controlled setting by designing learning experiences and facilitating presentations. Students will focus on improving their instructional strategies through coaching from their teacher and supervising professionals. Classroom, laboratory, and educational leadership activities are supplemented through Nebraska Educators Rising, a career and technical student organization.

Intro to Education (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course is designed to answer the quest “What are the things people beginning their formal study of education should know?” Included in the course is an introduction to the history and philosophies of education as well as curriculum analysis, school governance, finance, and contemporary problems in education.

Teaching in Technology (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course focuses on the integration of computers and other new technologies into the academic curricula. This course will focus on making decisions about content, instructional strategies, and the use of technology in innovative ways to supplement, enhance, and extend the curriculum. Participants will examine software tools, curriculum software, Internet resources, and computer-based projects as examples of technology that can be effectively integrated into the curriculum.

Math for Elementary Teachers (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course presents the basic structure of the whole number system, the integer system, and the rational numbers. Designed primarily for prospective elementary teachers, this is a fairly rigorous treatment of the basic operations of arithmetic using an axiomatic approach.

Education Psychology (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and Intro to Psychology			<i>Grade:</i> 12

This course is a scientific study of the three focal areas in education: the learner, the learning process, and the learning situation. The study includes development of an awareness of child behavior, comparison and contrast of various theories of learning, and identification of factors in the environment which influence learning.

Intro to Human Services (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is a general introduction to the helping professions, including human services, social work, counseling, and others. The many roles that helping professionals play in various community agencies are discussed. The attitudes, skills, and knowledge needed to effectively assist people in need are introduced. The many needs of different client groups are identified. Introductions to interviewing, listening, and report-writing skills are presented.

Intro to Counseling Skills (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is an introduction to the interviewing, listening, and report writing skills required of human service workers, including substance abuse providers. Students are introduced to counseling theory and schools of thought, combined with a brief presentation of the techniques used by some of the theorists.

Ethics and Issues (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is an introduction to the interviewing, listening, and report writing skills required of human service workers, including substance abuse providers. Students are introduced to counseling theory and schools of thought, combined with a brief presentation of the techniques used by some of the theorists.

Multicultural Counseling (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Human Sciences and Education	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and ACT or ACCUPLACER Score			<i>Grade:</i> 12

This course includes an education on cultural, social, lifestyle, spiritual, and economic factors relevant to the provision of competent and relevant counseling to varied populations. Specific populations to be discussed include those of differing race and ethnicity, ages, genders, sexual orientation, social class, religion, and abilities. Adaptations needed in the helping process to meet the needs of these varied populations is also discussed.



SKILLED AND TECHNICAL SCIENCES

Pre-Career Academy Courses 9th-10th Grade

- Basic Welding (WELD Path)
- Computer Aided Drafting (ENG or CM Path)
- Intro to the Built Environment (CM Path)
- PLTW Intro to Engineering (ENG Path)
- PLTW Principles of Engineering (ENG Path)
- Advanced Woods (CM Path)

Foundational Career Academy 11th Grade (30 Credits)

- Physics
- STEM Mathematics*
- **Pathway Electives**
- PLTW Civil & Architectural Engineering (ENG Path)
- PLTW Computer Science (ENG Path)
- Advanced Welding, Manufacturing, Auto Body, or Auto Tech (WELD, MNG, AB, or AT Path)
- PLTW Computer Integrated Manufacturing (ENG Path)
- Principles of Construction (CT Path)

Specialized Academy Pathway 12th Grade: Select Pathway (30 Credits)

Auto Body (AB), Welding (WELD), AutoTech (AT), or Manufacturing (MNG) Pathway

- Business Mathematics (BSTC 1500) or Tech Math (MATH 0150)*
- Workplace Writing (0500)*
- Auto Body, Advanced Welding, Auto Tech, Manufacturing
- Business Communications (BSTC 1210)*
- Blueprint Reading for Welding (WELD 1300)
- Internship

Engineering (ENG) Pathway

- AP Calculus AB*
- PLTW Engineering Design and Dev or PLTW Engineering Elective
- Intro to Engineering (ENGR 1010)
- Graphics for Engineers (ENGR 1070)
- AP or CP Chemistry
- AP Calculus AB*
- Statics (ENGR 2020)
- Programming and Problem Solving (ECED 1110)
- Internship

Construction Trades (CT) Pathway

- Business Mathematics (BSTC 1500) or Tech Math (0150)*
- Advanced Construction
- Advanced Woods
- Workplace Writing (0500)*
- Internship

*At the Foundational or Specialized Level identified courses may be substituted with counselor or administrative approval and based on student's academic readiness.

Basic Welding

(See Agriculture, Food, and Natural Resources)

Computer Aided Drafting

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

Students will use computer-aided drafting (CAD) software to design and draw basic 2D and 3D renderings of machine parts. In addition to computer-aided drafting, hand drafting concepts will also be introduced. Students will learn how to design and draw basic 2D and 3D plans for residential house construction. The newest versions of AutoCAD, Revit, and Inventor software will be taught. Finished drawing plans will be printed in full color on a large format plotter. This is an excellent class for any student considering a career in mechanical engineering, architectural engineering, or interior design.

Intro to the Built Environment

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

Students will develop a comprehensive knowledge of woodworking and develop woodcutting skills while building a project. All phases of woodworking are covered from the design to completion. Both hand and power tools and equipment are used. This course will help students prepare for advanced classes as well as basic life skills for vocational and avocational study and use. There will be a student fee for participating in

PLTW: Intro to Engineering Design

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i> Computer Aided Drafting			<i>Grade:</i> 9,10

Students will use computer-aided drafting (CAD) software to design and draw basic to advanced 2D and 3D renderings of machine parts and mechanical devices. The newest versions of AutoCAD, and Inventor software will be taught. Finished drawing plans will be printed in full color on a large format plotter. This is an excellent class for any student considering a career in mechanical engineering.

PLTW: Principles of Engineering

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

Wood Manufacturing/Advanced Woods Manufacturing

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Pre-Academy/Specialized
<i>Prerequisites:</i> Intro to the Built Environment			<i>Grade:</i> 10,11,12

In this class, students will be introduced to advanced woodworking techniques, processes and procedures, and specialty tool use and maintenance. Advanced joinery procedures involved in cabinet construction will be introduced including raised panel doors, how to install Formica, furniture standards and more. Safety, measurement, planing, machining, fabrication processes, and finish processes will be included. Career opportunities will also be explored. The students will design and construct individual projects throughout the course of study. There will be a student fee for participating in this course. Please refer to the Student Handbook.

STEM Mathematics

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Geometry			<i>Grade:</i> 11,12

This course addresses the practical applications of mathematics in the world outside school. Applications will center on STEM (Science, Technology, Engineering, and Mathematics) careers. Students will discover mathematics through a hands-on approach and through field experiences.

PLTW: Civil and Architecture Engineering

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational/ Specialized
<i>Prerequisites:</i> PLTW Intro to Engineering or Principles of Engineering			<i>Grade:</i> 11,12

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software.

PLTW: Computer Science

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational/ Specialized
<i>Prerequisites:</i> PLTW Intro to Engineering or Principles of Engineering			<i>Grade:</i> 11,12

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP® Computer Science Principles (AP CSP). This endorsement affirms that all components of PLTW CSP's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment.

PLTW: Computer Integrated Manufacturing

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational/ Specialized
<i>Prerequisites:</i> PLTW Intro to Engineering or Principles of Engineering			<i>Grade:</i> 11,12

In this course students will discover and explore manufacturing processes, product design, robotics, and automation, and then they apply what they have learned to design solutions for real-world manufacturing problems.

Principles of Construction

<i>Credits:</i> 10	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational
<i>Prerequisites:</i> Intro to the Built Environment			<i>Grade:</i> 11,12

Students will learn the knowledge and skills necessary for constructing a house or other similar buildings. Areas covered include reading blueprints, site layout, pouring footings and flatwork, floor framing, wall and roof framing, installing windows and hanging doors, installing siding, roofing, soffit and fascia, laying shingles, insulating, installing siding, hanging, taping and texturing sheetrock, painting, installing cabinets, finishing and installing casing and baseboard, pouring steps and walks and more. The students will do much of their learning while constructing a real-life project. Appropriate dress and behavior will be required while on site.

Auto Body (WNCC)

<i>Credits:</i> 20	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational/Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 12

This is a year-long block program taught at WNCC. Opportunities may include courses in non-structural repair, electrical and mechanical, structural analysis, basic metal, plastic adhesives, and paint and refinish based on WNCC certification requirements. This class will meet every day for the semester. Upon successful completion of this program, students will be equipped for entry-level employment position.

Auto Tech (WNCC)

<i>Credits:</i> 20	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational/Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 12

This is a year-long block program taught at WNCC. Opportunities may include courses in engine rebuilding, electrical tune-ups, brake systems, automotive electrical systems, manual transmissions, suspensions, fuel systems, and heating and cooling systems based on WNCC certification requirements. Upon successful completion of this program, students will be equipped for entry-level employment position.

Advanced Welding (WNCC)

<i>Credits:</i> 20	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational/Specialized
<i>Prerequisites:</i> Basic Welding			<i>Grade:</i> 12

This is a year-long block program taught at WNCC. Opportunities may include courses in shielded metal arc welding and MIG welding, and tungsten inert gas welding based on WNCC certification requirements. Application of these will be done in all positions. Upon successful completion of this program, students will be equipped for entry-level employment position.

Manufacturing (WNCC)

<i>Credits:</i> 20	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Foundational/Specialized
<i>Prerequisites:</i> Computer Aided Drafting			<i>Grade:</i> 12

This is a year-long block program taught at WNCC. Opportunities may include courses in intro to manufacturing, continuous control processes, solidworks 1 and 2, and blueprint reading based on WNCC certification requirements. Upon successful completion of this program, students will be equipped for entry-level employment position.

Tech Math (WNCC)

(See Agriculture, Food, and Natural Resources)

Blueprint Reading for Welders (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 12

This is a general course in blueprint reading, welding symbols, and their applications. This course covers the visualization of object shapes, reading the blueprint for finding size and location dimensions, symbols, mathematic notes, and related welding and assembly information shown on the print. This course further develops the student's understanding of how to read welding blueprints and the range of thinking required to assemble simple components and complex assemblies from welding prints.

PLTW: Engineering Design and Development

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> PLTW Intro to Engineering or Principles of Engineering			<i>Grade:</i> 12

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career.

Intro to Engineering Design (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

Introduction to the engineering profession, engineering problem solving and engineering design with an emphasis on current topics. Course material is presented using projects and group learning activities.

Graphics for Engineers (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

The engineering student learns to read and communicate technical information by means of technical drawing. The use of standard drawing equipment, the computer (CAD) as the principal tool of the drafter's workstation, and the basic principles of descriptive geometry and graphical representation of technical data are covered. Freehand sketching is also included in this course.

Statics (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion and AP Calculus AB or Calculus 1			<i>Grade:</i> 12

This course is a rigorous presentation and discussion (based on deductive reasoning) of the fundamental principles of the mechanics of rigid bodies: Statics and their application to the solution of engineering problems. Vector Methods are used. Software applications are also part of this course.

Programming and Problem Solving (WNCC)

<i>Credits:</i> 5	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

A college engineering course that introduces students to the engineering problem solving process in the context of high level structured computer programming. The course consists of a sequence of programming assignments that require students to write computer programs to solve engineering problems. All of the computer assignments are written in MATLAB.

Advanced Construction

<i>Credits:</i> 20	<i>Dual Credit:</i> X	<i>Academy:</i> Skilled and Technical Sciences	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion			<i>Grade:</i> 12

This course is designed for the student pursuing a career as a construction professional. Technical skills are combined with planning and management topics to prepare the student for all stages of a project. This course explores opportunities and career pathways within the residential, commercial, and industrial sectors, and walks the student through the planning, execution, and reporting of a project. Appropriate dress and behavior will be required while on site. Students may select a single period or double period class.

SPECIAL PROGRAMMING

Course	Grade Level	Credits
Student Assistant	11,12	5
English Language Learner	9,10,11,12	5/10
Internship	12	10
Work Study	12	5
Entrepreneurship	11,12	5
Just Words	9,10,11	5

Career Academy Internship

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i> All Career Academies	<i>Academy Level:</i> Specialized
<i>Prerequisites:</i> Foundation Completion/Work Readiness Completion			<i>Grade:</i> 12

This course will integrate classroom instruction with on-the job training. In the classroom, students will explore careers, learn how to apply for a job, participate in mock interviews, and develop workplace skills. The work site experience will be aligned to the students career academy enrollment. Students will understand how classroom content and skills are transferred into the workplace. Students will meet for classroom instruction prior to their internship as well as several times throughout the semester.

Entrepreneurship

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i> All Career Academies	<i>Academy Level:</i> Foundational/Specialized
<i>Prerequisites:</i>			<i>Grade:</i> 11,12

This course is designed for students with a career interest in entrepreneurship. Emphasis is placed on the evaluation of the business skills and commitment necessary to successfully operate an entrepreneurial venture and review the challenges and rewards of entrepreneurship. The role of entrepreneurial businesses in the United States and the impact on the national and global economy will be explored. Instructional strategies include the development of a business plan, operation of a school-based business, or actual creation of a student-run business.

Air Force Junior ROTC

<i>Credits:</i> 10	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i> Pre-Academy
<i>Prerequisites:</i>			<i>Grade:</i> 9,10,11,12

This is a first year course for the AFJROTC program. Topics will include aerospace science, leadership education, and wellness/physical training.

Student Assistant

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 11,12

This course is designed to assist students with developing the knowledge and skills necessary to work in an administrative assistant role and work under a mentoring staff member.

English Language Learners (ELL)

<i>Credits:</i> 5	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade:</i> 9,10,11,12

This course will provide ELL instruction needed to allow the student the opportunity to gain the language skills needed to perform in mainstream academic content areas.

Work Study

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 12</i>

This course is designed for students that spend time in the workforce and would like to transfer skills learned in the classroom into their jobs. The course requires obtainment of a job, 80 hours of work, journaling, a self-evaluation, and letter of appreciation.

Just Words

<i>Credits:5</i>	<i>Dual Credit:</i>	<i>Academy:</i>	<i>Academy Level:</i>
<i>Prerequisites:</i>			<i>Grade: 9,10,11</i>

Just Words is a concentrated word study program with an emphasis on phonemic awareness, alphabetic principles, word study, and English orthography which is the study of spelling structure, of English words.