# ATTACHMENT IX-I

ATTACHMENT IX-I:

2011-2012 North Boone High School Curriculum Guide

Suggested Motion:

Move to approve the 2011-2011 North Boone High School

Curriculum Guide

Recommended Action:

Approve as presented.

Attached is the 2011-2012 North Boone High School Curriculum Guide developed by the high school for the next school year. It is recommended that the Board approve this Course Guide as presented.

# **FRESHMEN**

# Welcome to North Boone High School!

The teachers, support personnel, and administration welcome all of the new freshmen students to North Boone High School. In the first weeks of school you will be adjusting to new classes, teachers, and students. Your future in school and your post-graduation choices begin now. The following information is critical to where you are going and what you plan to do.

**Have a question?** Ask for help! There are many adults available to help you succeed in high school. Some options to ask for help are your teachers, the assistant principal, the principal, the school nurse or the school counselor.

**Grades:** You high school grades will be recorded on a transcript at the end of each semester. There is information on grade point averages later in this guide.

**Activities:** High School is a time to try new activities and get involved in the school community. NBHS offers a variety of clubs, sports teams, and academic organizations. Check them out!

# Things to do your freshman year....

- Talk with friends, teachers, and your parents about college or training programs.
- Participate in extracurricular activities (clubs, sports, volunteering).
- Review your high school class plan. Take the most difficult classes you can handle. Stay focused on your schoolwork.
- Do your best on the Explore exam in April. This interest and skills assessment will help you explore careers that interest you and match your skills and abilities.
- Talk with your school counselor about career options and the education required for those careers.
- Explore internships and apprenticeships.
- Enroll in a summer enrichment program.

# **SOPHOMORES**

**Re-Evaluate** You have completed your first year at NBHS. This is a time to review what went well and what areas might need improvement. From the first day of school strive to do your best -- it will pay off!

**PSAT:** You have heard many times that being skilled will be critical for jobs of the future. English, Science and Math knowledge will be especially important. The more knowledge you have, the greater your choices for college and future careers. Taking the PSAT (Preliminary Scholastic Aptitude Test) in October is recommended; you may re-take it your Junior Year.

**No regrets:** So often, older students can be heard saying, "I wish I would have studied more and worked harder." Avoid this happening to you. You only go through high school once -- do your best so you have fewer regrets later.

# Things to do your sophomore year....

- Participate in extracurricular activities.
- Review your high school class plan. Take the most difficult classes you can handle. Stay focused on your schoolwork.
- Do your best on the Explore exam in April. This interest and skills assessment will help you explore careers that interest you and match your skills and abilities.
- Talk with your guidance counselor about career options and the education required for those careers.
- Talk with friends, teachers, and your parents about college and career training.
- Explore internships and apprenticeships.
- Enroll in a summer enrichment program.

# **JUNIORS**

**Decisions**... This can be an exciting year as you take advantage of research opportunities to explore college and career information. Making decisions about your future can be an overwhelming task. Breaking the process into smaller steps can be helpful.

College Testing Programs You will take the Prairie State Achievement Examination (PSAE) in April as part of the state's testing requirement. All students must take this test as part of the state's requirement to graduate. The PSAE is a two day test consisting of the ACT with writing and the WorkKeys exam.

It is recommended that you take the courses this school year to best prepare you for the tests. The best preparation for you will be to take the most challenging classes and work hard to learn all you can, especially in the core classes - Math, English, Science, and Social Studies.

# Things to do your junior year....

- Participate in extracurricular activities.
- Consider earning college credit while in high school through Advanced Placement or Dual Credit at RVC.
- Mentor others and have a mentor for yourself.
- Narrow down possible career options and investigate the type of education that is needed.
- Attend college and financial aid fairs.
- Request materials from schools that interest you, and visit their websites.
- Arrange campus visits to those schools that interest you. Meet with an admissions officer, a financial aid representative, faculty members and college students.
- Review your high school class plan. Take the most difficult classes you can handle. Stay
  focused on your schoolwork. Make sure you are meeting your high school graduation
  requirements.
- Enroll in a summer enrichment program.
- Get a job to earn and save money for college, or explore your skills through an internship or apprenticeship.

# **SENIORS**

Countdown Begins! You are about to begin your last year of high school to reach another milestone in your life—graduation; however, graduation should not be your only goal. Graduation will be the end of your high school career, but only a stepping stone to your future. Statistics show that you may change your career several times in your life. Will you be prepared to make those changes? Education and/or training will not only be the key, but also the requirement for most careers in the future.

# Things to do your senior year....

- Meet with your school counselor to review your high school transcript. Take the most difficult classes you can handle. Stay focused on your schoolwork.
- Create a resume of your academic, athletic and work activities as well as other achievements. Prepare a portfolio if you're interested in the arts.
- Consider earning college credit while in high school through Advanced Placement or Dual Credit.
- Arrange campus visits to those schools that interest you (if you haven't already done so).
- Retake the ACT in June, October, or December.
- Select the schools to which you will apply. Make a list of important admissions and financial aid deadlines for each school.
- Search and apply for private scholarships.
- Ask for recommendations (if required) from teachers, counselors and others who can comment on your abilities and talents.
- Apply to four to six colleges that interest you. Do not wait until just before the deadline.
- Complete the Free Application for Federal Student Aid (FAFSA) as soon as possible after January 1. You and your parents must complete your taxes before submitting the FAFSA.
- Have your high school transcript sent to those colleges to which you've applied.
- Choose a college and send in any required forms or deposits (housing, meal plan, etc.). Notify in writing those schools you don't plan to attend.

# NCAA ELIGIBILITY REQUIREMENTS

All student athletes who plan to play **DIVISION I or DIVISION II** sports must register with the NCAA Clearinghouse, preferably by the end of Junior year. ACT scores and a transcript through Junior year need to be sent to the Clearinghouse. Upon graduation a final transcript will be sent.

\*Minimum requirements for eligibility are subject to change because the standards for core curriculum, minimum GPA and SAT/ACT scores continue to rise.

See your School Counselor for additional Clearinghouse information and eligibility requirements, or check <a href="https://www.ncaaclearinghouse.net">www.ncaaclearinghouse.net</a>. The School Counselor has handbooks of NCAA criteria available for review.

NCAA Approved Core Courses at North Boone High School:

**English:** Resource English I/II, Resource English III/IV, American Literature, British Literature, Contemporary Literature, Creative Writing, English 9, Honors English 9, English 10, Honors English 11, Honors English 11, English 12, AP English 12, and Forensics (Speech)

**Mathematics:** Resource Math I/II, Resource Math III/IV, Algebra I, Geometry, Algebra II, Pre-Calculus w/ Trigonometry, and AP Calculus

**Social Science:** American Government, Current Events, Sociology, World Geography, World Cultures, US History, AP US History, AP Human Geography, and AP World History

**Natural and Physical Science:** Biology, AP Biology, Honors Chemistry, Conceptual Chemistry, Earth Science, Environmental Science, Physical Science I/II, Physics

Additional Core Courses: French I/II/III/IV - Spanish I/II/III/IV

#### Division I\*

#### 16 Core Courses:

- 4 years English
- 3 years Math (Algebra I or higher)
- 2 years of Natural/Physical Science (1 yr lab)
- 1 year additional English, Math or Natural/Physical Science
- 2 years Social Science
- 4 years of additional courses from above or modern language or nondoctrinal religion/philosophy)

### **Division II\***

#### 14 Core Courses:

- 3 years English
- 2 years Math (Algebra I or higher)
- 2 years of Natural/Physical Science (1 yr lab)
- 2 years additional English, Math or Natural/Physical Science
- 2 years Social Science
- 3 years of additional courses (from above or modern language or nondoctrinal religion/philosophy)

Please Note: Beginning August 1, 2013, students planning to attend an NCAA Division II institution will be required to complete 16 core courses.

# NORTH BOONE HIGH SCHOOL GUIDELINES

#### CLASSIFICATION OF HIGH SCHOOL STUDENTS

High school students shall be classified as follows:

<u>Freshman--0</u> to 5.5 credits: a student who has earned less than six (6.0) units of high school credit.

**Sophomore**—6 to 11.5 credits: a student who has earned six (6.0) or more units and less than twelve (12.0) units of high school credit and completed one (1) year of school.

<u>Junior</u>-- 12 to 17.5 credits: a student who has earned twelve (12.0) or more units and less than eighteen (18.0) units of high school credit and completed two (2) years of school.

<u>Senior</u>-- 18 + credits: a student who has earned eighteen (18.0) units or more of high school credit and completed three (3) years of school.

#### LETTER GRADES AND GRADE POINT VALUES

Grades are issued quarterly. Incomplete grades not removed within the specified time will become a failing grade.

# **Grade Point Values:**

	Regular	Weighted	
A+ = Excellent	4.0	5.0	<b>Grade Scale</b>
A	4.0	5.0	A+ = 100
A-	3.7	4.7	A = 99 - 95
B+	3.3	4.3	A = 94 - 93
В	3.0	4.0	B+ = 92 - 91
B-	2.7	3.7	B = 90 - 87
C+	2.3	3.3	B- = 86 - 85
C = Fair	2.0	3.0	C+ = 84 - 83
C-	1.7	2.7	C = 82 - 79
D+	1.3	2.3	$C_{-} = 78 - 77$
D = Poor	1.0	2.0	D+ = 76 - 75
D-	0.7	1.7	D = 74 - 72
F = Failure	0.0	0.0	D - = 71 - 70
I = Incomplete	0.0	0.0	F = 69 - 0
WP = Withdraw Passi	ng 0.0	0.0	
WF = Withdraw Failin		0.0	

Students who receive a grade of "P" (Passed) in Driver's Education and Career Education will be given credit for completing the course but the grade will not be included in student's grade point average.

# **QUARTER GRADES - SEMESTER GRADES**

Forty-five (45) percent of the semester grade is determined by the first quarter grade, forty-five (45) percent by the second quarter and ten (10) percent by the semester exam.

#### REPEAT/RETAKE POLICY

If a student earns a failing grade in a class and repeats the class, both grades will be figured into the grade point average. The passing grade does not replace the failing grade. Both grades will appear on the transcript, but credit is given only once.

If a student fails a course **two times** at North Boone High School, the student cannot take the course again at North Boone High School. If this course is required to meet graduation requirements, the student must take the course via Compass Learning (\$100), in a summer school, night school, or an accredited correspondence program at the student's expense.

#### HONOR ROLL

The honor roll is posted each quarter and semester. GPA and class rank are calculated at the semester only. The honor roll standard is based on a grade point average of 4.0. Students must be considered full-time students.

High Honor Roll constitutes an average of 3.50 and above.

Honor Roll is an average of 3.0 to 3.49

Students who earn a perfect 4.0 are given special notation.

#### NORTH BOONE ACADEMIC VIKING SALUTE

The North Boone Academic Viking Salute honors those students who have been on the honor roll for the first three quarters of the school year. All students receive a certificate of achievement; Students are honored with a chenille North Boone letter the first year and pins to those who achieved this honor in previous years. Students are honored each spring.

# **OFF-SITE DRIVER EDUCATION**

Students successfully completing a driver's education class in another recognized institution taught by a certified teacher would be awarded appropriate credit toward graduation. In order to receive credit, students must show proof of class completion to School Counselor. A "Pass" grade will be recorded and will not be part of the student's cumulative grade point average.

A new Illinois state law, Public Act 94-916, states that "a driver's license or instruction permit shall be canceled if a student under 18 years of age drops out of school."

/	To enroll in Driver's Education, a student must be classified as a Sophomore.
/	angle As required by the state, students must have passed 8 classes in the previous two
V	semesters to take the course.

# RESOURCES TO EARN ADDITIONAL CREDITS

A maximum of <u>9 total credits</u> from outside sources (see list below) may be counted toward the requirements for a student's high school graduation. A semester course is given 0.5 credit.

Options available include:

- **Correspondence courses** Course offered by institution accredited by NCACSS, fees paid by student, pre-approved by principal, total of 3 credits allowed.
- **Distance Learning Courses** (including virtual or online courses) Fees paid by student, approved institution offering course, pre-approved by principal.
- Summer School and Independent Study Course offered by institution accredited by NCACSS and not offered by home district, total of 3 credits allowed.

The grade given by another institution for a course will be a part of the student's cumulative grade point average and will be entered on the student's permanent record. Grades received from other institutions will be placed on the student's report card if received by the final day of our grading period. Grades that are received later than that date will be placed on the next report card.

#### COURSE SELECTION AND WITHDRAWAL

During course selection for the next academic year, please take the time to discuss options with your student(s). The registration process drives our master schedule and when/what courses are offered. Schedule changes are not encouraged. Only necessary schedule changes will be made. Changes must be made within (5) days of the semester and a fee will be charged to the student. Any student who withdraws from a course later than four weeks after the beginning of the semester will receive a grade of WP (withdraw passing) or WF (withdraw failing) or NC (no credit). Any student who withdraws after two weeks of the semester will be placed in a study hall.

Students wishing to withdraw from a class must have parental permission and pay a \$30 processing fee. Credit SHALL NOT be granted to any student for any course in which the student has accumulated six (6) or more unexcused/parent excused absences and/or three (3) truancies in any one semester.

#### **CURRICULUM PLANNING**

For information about requirements of particular career areas, vocational and technical educations programs and for college information, contact your School Counselor.

College-bound students should develop competencies in reading, writing, speaking and listening, Math, reasoning and organized study. This can be done by following a sound academic program in high school including: four years of English, three or four years of Math, three or four years of Science, three or four years of Social Studies, and two years of a Foreign Language. College-bound students should also have knowledge of computers and experience with the visual and performing arts.

**Technical** preparation for careers involves developing skills in the career area of your interest and taking the academic program that best prepares you. Some examples include, Chemistry, Physics and Advanced Biology to prepare for Nursing; Math for Electronics; courses in Relationships, Communication and Sociology for Police Science; courses in Math for Computer Science; and Accounting for Business.

For entering the **world of work** directly from high school, you should try to develop the communication, math, technical and other academic skills required for the occupation.

Planning for and selecting a course of study is a very important step. The decisions you make, to a large extent, affect your ability to achieve the goals in life you have established or will establish for yourself, your future success and happiness. By making out a four-year plan early in your high school career you can develop a program that meets the school requirements as well as the prerequisite courses for college and technical school entrance requirements. Actively seek the advice and counsel of your parents, teachers and school counselor in planning your four-year program.

# HIGH SCHOOL COURSES RECOMMENDED FOR COLLEGE

English	Four or more years (grammar, composition, literature, etc.)	
Mathematics	Three or more years (Algebra Concepts/ Algebra I and higher—does not include general math or pre-algebra)	
Natural Sciences	Three or more years (biology, chemistry, physics, etc.)	
Social Sciences	Three or more years (history, economics, geography, civics, government, etc.)	
Additional Courses	Some colleges and universities require other classes as prerequisites for admission, such as two or more years of the same foreign language or courses in the visual arts, music, theater, drama, dance, computer science, etc.	

# RECOMMENDED COURSE PLAN FOR COLLEGE BOUND STUDENTS

# Freshman Year

English 9\*
Math\* (Algebra or above)
Science\*
World Cultures\*
Foreign Language
Microsoft Office or Desktop Publishing\*
P.E.\*

# Junior Year

English 11\*
Math\*
Science\*
Social Studies
Foreign Language
P.E.\*
Elective Choice

Elective Choice

# Sophomore Year

English 10\*
Math\*
Science\*
Foreign Language
Driver Education
Health\*/PE\*
Elective Choice

# Senior Year

English 12\* or AP English 12 Math Science Social Studies Foreign Language Consumer Education\* P.E.\* Dual Credit Coursework

<sup>\*</sup> Required coursework for graduation

# **GRADUATION REQUIREMENTS – CLASS of 2012 -2015**

A total of twenty-four (24) credits are required for graduation.

	2012		2013, 2014, & 2015
4.0 Credits	English - 1 Credit in each: English 9, English 10, and English 11 with a 4th credit optional within the English Department's offerings.  Two years of writing intensive courses, one of which must be English and the other of which may be English or any other subject. When applicable, writing-intensive courses may be counted towards the fulfillment of other graduation requirements.	4.0 Credits	English - 1 Credit in each: English 9, English 10, and English 11 with a 4th credit optional within the English Department's offerings.  Two years of writing intensive courses, one of which must be English and the other of which may be English or any other subject. When applicable, writing-intensive courses may be counted towards the fulfillment of other graduation requirements.
3.0 Credits	Mathematics – 1 credit in Algebra and 1 credit Geometry. Plus an additional year of mathematics.	3.0 Credits	Mathematics – 1 credit in Algebra and 1 credit Geometry. Plus an additional year of mathematics.
3.0 Credits	Science - 1 credit in Biology	3.0 Credits	Science - 1 credit in Biology
2.5 Credits	Social Studies - 1 credit must be in U.S. History, ½ credit in American Government, and 1 credit in World Cultures. Students must pass the Illinois and U.S. Constitution tests to graduate.	2.5 Credits	Social Studies - 1 credit must be in U.S. History, ½ credit in American Government, and 1 credit in World Cultures. Students must pass the Illinois and U.S. Constitution tests to graduate.
1.0 Credits	Humanities or Vocational Education - Includes: Band, Choir, Art, Foreign Language, Family and Consumer Science, Business, Agriculture	1.0 Credits	Humanities or Vocational Education - Includes: Band, Choir, Art, Foreign Language, Family and Consumer Science, Business, Agriculture
0.5 Credit	Consumer Education - Exempt from Consumer Education course if score of 98 or better on the Illinois Consumer Proficiency Test (1/2 credit given for passing ICP Test)	0.5 Credit	Consumer Education - Exempt from Consumer Education course if score of 98 or better on the Illinois Consumer Proficiency Test (1/2 credit given for passing ICP Test)
0.5 Credit	Health	0.5 Credit	Health
0.25 Credit	Driver Education	0.25 Credit	Driver Education
0.25 Credit	Careers Program - Required only if Driver Education is taken at North Boone High School	0.25 Credit	Careers Program - Required only if Driver Education is taken at North Boone High School
4.0 Credit	Physical Education (Health will substitute for 1 semester of P.E.) Exceptions to this are in Board policy 6:310, "Physical Education". Students graduating early may have this requirement waived.	4.0 Credit	Physical Education (Health will substitute for 1 semester of P.E.) Exceptions to this are in Board policy 6:310, "Physical Education". Students graduating early may have this requirement waived.
0.5 Credit	Computer Education	0.5 Credit	Computer Education
5.0 Credit	Electives	5.0 Credit 40 Hours	Electives  Documented community service – 10 hours/ year.
	24.0 Credits		24.0 Credits

# HONORS DIPLOMA PROGRAM

Total twenty-six (26) credits: (at least two (2) AP courses or Honors courses with a grade of "C" or higher) and a cumulative 3.5 GPA or higher are required to graduate with an Honors Diploma. In addition to the above listed 24 credits, the following credits are needed:

- 3.0 Credits Math (Algebra I, Geometry, and Algebra II are required)
- 3.0 Credits Science (Biology and Chemistry required)
- 3.0 Credits Social Studies
- 2.0 Credits Foreign Language

# COMMUNITY SERVICE REQUIREMENT

# Frequently Asked Questions

# Q: How many hours do I need to graduate high school?

A: In order to graduate from North Boone High School, each student must have a minimum of 40 hours on record with the community service advisor. (This starts with the class of 2013)

# Q: How many hours should I do each year?

A: In it suggested that students try to do 10 hours per year. However, students can complete all hours in one school year

#### Q: What counts as community service?

A: Community service is volunteer work performed for a non-profit organization or individual or group in need. It must be done for neither money nor credit. It also must be performed outside of school hours. Any administrator or the community service advisor will determine eligibility on a case by case basis.

#### Q: When can I get started on Community service?

A: The start of the summer after 8th grade graduation.

### Q: How can I get started on community service?

A: Check out the <u>pre-approval list</u> on the website for places to work. Call or email the contact person listed with the place of work. Ask the community service advisor for places to volunteer. Ask your church, community, or other places if they need volunteers.

#### Q: How can I check my hours?

A: Currently they can ask the community service advisor how many hours they have. They will also receive a letter in the mail with their semester grades that state how many hours they have so far. In the near future you will be able to look on the website.

#### Q: Can I do more than 40 hours?

A: Yes! Many colleges and scholarships ask for community service hours and work. The more you do the better. The school will keep a record of all hours that students do.

### Q: Where do I pick up verification sheets and pre-approval sheets?

A: There are <u>attachments</u> on the website of these documents. Please print them off and fill them out. You may also get them from the main office of the high school or directly from the community service advisor.

# Q: What are pre-approval sheets for?

A: They are used to make sure that the volunteer work you are doing is considered community service. It must be approved by an administrator or the community service advisor to be eligible for community service hours.

### Q: Can I do something before it gets pre-approved?

A: You can do it prior to pre-approval BUT, it may not get pre-approved if it is not community service. It is better to fill out the form prior to performing the volunteer work.

### Q: What is a verification sheet?

A: This form is used to verify the hours that the students did work. They must be filled out completely before they are considered complete. It is important to bring this to your volunteer location so that the supervisor can sign it. The community service advisor will call to verify the hours as well.

# Q: How do I know I am finished with my requirements for graduation?

A: A letter will be mailed home that states they have completed the hours necessary for graduation. Please hang on to this letter in case of questions later.

### Q: What happens if I transfer in to North Boone?

A: Your hours will be pro-rated for the time you are here. We expect students to do 10 hours a year. Every incoming freshman needs 40 hours. However, if you transfer in prior to the start of the 3rd quarter you will be responsible for the hours related to that year. If you transfer in after the start of the 3rd quarter you will not be responsible for those hours. (EX: A freshmen student from Belvidere transfers in after the start of the 3rd quarter he will be responsible for only 30 hours.)

#### Q: What happens if I do not do 40 hours of community service?

A: You will not receive your diploma or graduate until the service hours have been met.

Additional Information and Forms are available on the North Boone High School Website: http://www.nbcusd.org/hs/Community\_Service.html

# **COURSE DESCRIPTIONS**

The following courses may or may not be offered subject to enrollment and Board approval.

# **AGRICULTURE**

\* There is a lab fee for all Agriculture Courses.

We offer two agriculture career pathways.

The first pathway is Agricultural Science (02.0100). Courses included in this program are Introduction to the Agriculture Industry, Supervised Agriculture Experience I, Basic Agricultural Science, Agriculture Environmental Science, Supervised Agriculture Experience II and Agricultural Biotechnology.

The second pathway is Agricultural Business and Management (01.0100). Courses included in this program are Introduction to Agriculture Industry, Supervised Agriculture Experience I, Basic Agricultural Science, Agricultural Sales and Marketing, Supervised Agriculture Experience II, and Agricultural Business Management.

#### CAREER PATHWAYS IN AGRICULTURAL EDUCATION

# Agricultural **Business** Management

- Introduction to the Agricultural Industry
- Supervised Agricultural Experience I
- Basic Agricultural Science

# Agricultural Science

- Introduction to the Agricultural Industry
- Supervised Agricultural Experience I
- Basic Agricultural Science

# ORIENTATION LEVEL COURSES (9<sup>th</sup> & 10<sup>th</sup>) PREPARATION LEVEL COURSES (11<sup>th</sup> & 12<sup>th</sup>) (11th & 12th)

- Agricultural Business Management
- Agricultural Business Sales & Marketing
- Supervised Agricultural Experience
- Agriculture Environmental Science
- Agricultural Biotechnology
- Supervised Agricultural Experience

# Introduction To The Agricultural Industry (4001/4002, 1.0 credit, Grades 9, 10) Prerequisite: None

Course Description: This introductory course provides an opportunity for students to learn how the agricultural industry is organized, its major components, the economic influence of agriculture at state, national, and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, agricultural resources, agribusiness management and agriculture mechanics are included. Microcomputer applications to the area of agriculture are also introduced.

Students are required to join the FFA and to have a satisfactory Supervised Agricultural Experience Program. (16001, Introduction to Agricultural Industry)

# Basic Agricultural Science (4011/4012, 1.0 Credit, Grades 10, 11,12)

Prerequisite: Introduction to the Agriculture Industry or approval of instructor.

Course Description: This second year course builds on the basic knowledge gained from the introductory course. Major units of introduction include advanced plant and soil science, advanced animal science and food science and technology. Applied math/science skills are stressed throughout the course. Microcomputer applications are utilized as they relate to each instructional unit.

Students are required to join the FFA and to have a satisfactory Supervised Agricultural Experience Program. (10501, Basic Agricultural Science)

# Agricultural Business Sales & Marketing I (4511, 0.5 Credit, Grades 11, 12)

Prerequisite: Introduction to the Agriculture Industry or approval of instructor.

Course Description: This preparation course is designed to develop student knowledge and skills in the areas of agribusiness operations. Instructional units include the organization and functions of agricultural businesses, agricultural business math, agricultural business procedures including microcomputer applications and human relations skills, as well as sales-related duties.

Students are required to join the FFA and to have a satisfactory Supervised Agricultural Experience Program. (10503, Agricultural Business Operations I). **This course will be offered 2011-12.** 

# Agricultural Business Sales & Marketing II (4522, 0.5 Credit, Grades 11, 12)

Prerequisite: Agricultural Business Sales & Marketing I

Course Description: The goal of this course is to increase student knowledge and skills in appropriate agricultural product and service areas indicated by regional and/or state labor market data.

Students are required to join the FFA and to have a satisfactory Supervised Agricultural Experience Program. (10504, Agricultural Business Operations II). **This course will be offered 2011-12.** 

# Agricultural Business Management I (4101, 0.5 Credit, Grades 11, 12) Agricultural Business Management II (4102, 0.5 Credit, Grades 11, 12)

Prerequisite: Introduction to Agricultural Industry or approval of instructor.

Course Description: This course is designed to develop student skills in the area of advanced agricultural business procedures, establishment of agriculture business, managing the agribusiness, financing agribusiness, marketing and advertising, sales technique, and strategies. Product knowledge is stressed. Students are required to join FFA and to have a satisfactory Supervised Agricultural Experience Program. (10505 and 10506 Agricultural Business Management I & II).

This course will be offered 2012-2013.

# Agriculture Environmental Science (4201/4102, 1.0 Credit, Grades 11, 12)

Prerequisite: Introduction to the Agricultural Industry or approval of instructor.

Course Description: This course examines the relationship of agriculture and the environment. The impact of plant and animal production practices on the environment and the adoption of practices that lead to improved environmental, air, and water quality are investigated. Areas of environmental emphasis include: identification and management of ecosystems, management of waste, chemicals and the environment, soil conservation, land uses, regulation, and ordinances, water quality, and air quality. Students will examine the emerging agricultural occupations relating to environmental science. Students are required to join FFA and to have a satisfactory Supervised Agricultural Experience Program. (16008, Environmental Science).

This course will be offered 2011-12.

# Agricultural Biotechnology I (4531, 1.0 Credit, Grades 11, 12) Agricultural Biotechnology II (4532, 1.0 Credit, Grades 11, 12)

Prerequisite: Introduction to the Agricultural Industry or approval of instructor.

Course Description: This course examines the agricultural applications of biotechnology, the use of living organisms to solve problems or make useful products. Applications include technologies used in bioprocessing, cell/tissue culture, genetic engineering and protein engineering. Specific units of instruction include: impacts of biotechnology, genetics and genetic engineering, biotechnology in plant science and microbial biotechnology. Students are provided with information needed for considering a career in the emerging occupation of agricultural biotechnology technician. Experimentation and student research projects are an integral component of the course. These activities may be conducted as Supervised Agricultural Experience Programs and/or FFA activities. Because FFA and SAE are integral components of this course, students are required to maintain an SAEP and to participate in activities of the FFA organization. (16009/16010, Agricultural Biotechnology I & II).

This course will be offered 2012-13.

# Supervised Agricultural Experience (4302, 0.5 Credit, Grades 9, 10)

(Students do not register for this program.)

*Prerequisite: Introduction to the Agriculture Industry* 

Course Description: The experience program based outside the classroom is for students in the 9th and 10th grades. Students receiving credit in this area must be enrolled in an approved agricultural program sequence. Individual students will have a minimum of one approved project or acceptable plans for doing so. Supervised study, project record bookwork, training plans and agreements, report writing, and instructor project visitation and supervision are essentials of the supervised occupational experience. Students are required to be FFA members in good standing. (16011, Supervised Agricultural Experience I)

# Supervised Agricultural Experience II (4402, 0.5 Credit, Grades 11, 12)

(Students do not register for this program.)

Prerequisite: Supervised Agricultural Experience I

Course Description: This experience program is for 11th and 12th grade agriculture students. The opportunities and responsibilities are similar to those discussed under Supervised Agricultural Experience I, with the exception that the experiences are conducted at a more advanced level of skill training. The project should be expanded as the student progresses through the agricultural program. Emphasis will be placed upon entry-level employability skills. Some projects may make use of school facilities and agriscience land or horticulture laboratories. Students are required to be FFA members in good standing. (16012, Supervised Agricultural Experience Program II)

# ART

All art courses at North Boone High School are one semester in length. Each class can be appreciated at any level whether beginner or advanced. In order to proceed within the art program students must obtain a **C+ or better** in all previous art courses. Sculpture, Drawing, Painting, Adobe® Photoshop, and Advanced Art may be repeated for credit at incremental course names with instructor approval (i.e. Drawing I, II, III).

(Course number) – Name	Credit		Gra	de Leve	<u>el</u>	Prerequisite
		9	10	11	12	ALL (C+ or better in previous)
(1001) - 2 D Concepts	.5	X	X	X	X	None
(1011) - 3 D Concepts	.5	X	X	X	X	None
(1021) - Sculpture	.5		X	X	X	3D Concepts
(1026) - Drawing	.5		X	X	X	2D Concepts
(1025) - Painting	.5		X	X	X	2D and Drawing
(1030) - Advanced Art	.5			X	X	2D, 3D + 2 other offerings
(1060) – General Art	.5	X	X	X	X	None

2 Dimensional Concepts			Prerequisite: None
Students will be introduced	to anything that is fl	at. Projects will be focus	ed on the Elements and
Principals of Design. This of	course is an introduc	tion to art concepts for stu	udents who intend to
take future course in drawin	g and painting.	-	

3 Dimensional Concepts	.5 credit	Grades: 9-12	Prerequisite: None
This course is designed to crea			
students will learn to create th	ree dimensional o	objects with various r	materials (Paper, Wire, Clay,
and Plaster).		· ·	

Sculpture I, II, III, IV	.5 credit	<b>Grades: 10-12</b>	Prerequisite: 3D
Students will get more ha	ands on learning of proc	cesses with materials used	in 3D concepts. The
student will also be given	to a chance to explore	the medium of choice at a	a more advanced level.
This course will be offer	red 2011-2012.		

Drawing I, II, III, IV	.5 credit	<b>Grades: 10-12</b>	Prerequisite: 2D
This course teaches the	student how to comi	municate visually through	the use of a pencil, pen and
ink and charcoal techniq			1

Painting I, II, III, IV	.5 credit	<b>Grades: 10-12</b>	Prerequisite: 2D and
_			Drawing

This course is an extension of drawing and is intended for the advanced student. Students will explore various water based painting techniques and media.

This course will be offered 2012-2013.

Advanced Art I, II, III, IV	.5 credit	<b>Grades: 11-12</b>	Prerequisite: Drawing and
			Painting

This course is open to the student who has demonstrated above average interest and ability in previous art classes and would like to explore art on a more personal and independent level.

General Art	.5 credit	<b>Grades: 9 – 12</b>	General Art
This course is designed to give			
take art further or not. This is	a general exp	loratory art course that	covers a sample of all other
art courses offered at NBHS			

# **BUSINESS**

# Introduction to Business (1851/1852, 1 credit, Grades 9, 10)

Prerequisite: None

Course description: This class is an elective open to freshman and sophomore students. The course will provide an overview of all aspects of business marketing and management, including the concepts, functions and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership as well as the basic functional areas of business finance, management, administration, and production. Students will be introduced to a wide range of careers in fields as accounting, financial services, information technology, marketing, and management. (30001, Basic Business)

# Introduction to Adobe Photoshop (1050, 0.5 Credit, Grades 10, 11, 12)

Prerequisite: None

Course description: This course is open to students who have an interest in graphic art and design and would like an opportunity to explore Adobe® Photoshop further.

# Adobe Photoshop (1055, 0.5, Grades 10,11,12)

Prerequisite: Introduction to Adobe Photoshop

Course description: This course is open to students who have an interest in graphic art and design and would like an opportunity to build upon the concepts learned in Introduction to Adobe Photoshop.

# Accounting I (1701/1702, 1.0 Credit, Grades 10, 11, 12)

Prerequisite: None

Course description: The Accounting I course presents the fundamental principles of accounting and emphasizes theory as well as practice. The accounting cycle is presented as it pertains to sole proprietorships, partnerships, and corporations. Extensive accounting vocabulary and theory challenges students to develop skills they will use in life as well as a career in the business or accounting field. Computerized accounting problems and simulations are used throughout the course in order to evaluate the student's ability to apply what they have learned. (20501, Accounting I)

#### Accounting II (1711/1712, 1.0 Credit, Grades 11, 12)

Prerequisite: Minimum grade of C in Accounting I

Course description: Accounting II (Advanced Accounting) is designed for both college bound and vocational students. Much of the same material that students will study in a beginning college accounting course is included in this course. However, the material is presented at a level suitable for a high school student. Topics to be covered include a review of the accounting cycle (covered in Accounting I): special accounting procedures for asset, liability, and stockholder's equity accounts; financial statement analysis; and special accounting procedures for partnerships. As in Accounting I, the integration of computer applications throughout the course will evaluate the student's ability to apply what they have learned. (20503, Accounting II).

# Entrepreneurship (1720, 0.5 Credit, Grades 10, 11, 12)

Prerequisite: None

Course description: Entrepreneurship is a one semester course designed to give students the skills needed to develop an idea for a product or service and start a profitable business. Specifically, students will learn to evaluate potential business opportunities, conduct a feasibility study, write a business plan, conduct market research, plan a store layout, and market a business. Furthermore, students will have the opportunity to apply these skills through the start-up of an actual class business.

This course will be offered 2011-2012.

# Small Business Management (1730, 0.5 Credit, Grades 10, 11, 12)

Prerequisite: None

Course description: Small Business Management is a one semester course designed to give students the skills needed to manage the assets and human and financial resources of a small start-up operation. Specifically, students will study management theory and principles, evaluating sources of financing, financial management strategies, risk management principles, and the development of strategies for growth. Furthermore, students will have the opportunity to apply these skills through the use of the Virtual Management software and the startup and management of a school store.

# Microsoft Office (1810, 0.5 Credit, Grades 9,10)

Prerequisite: None

Course description: This class introduces some of the main elements of Microsoft Office: *Internet Explorer, Word, Excel, Access, and PowerPoint.* The goal is to help students understand how Microsoft software is organized and help users teach themselves according to their own learning styles and preferences. Students successfully completing the course may select to sit for *Microsoft Office User Specialist (MOUS) Core Certification.* (30007, Information Processing I)

# Desktop Publishing (1820, 0.5 credit, Grades 10, 11, 12)

Prerequisite: Completion of Microsoft Office, Middle School recommendation, or approval of High School teacher.

Course description: This class emphasizes professional communication skills with desktop publishing and multi-media software. Students will become familiar with advance features of *AdobeCS3* and *Publisher*. They will be introduced to the elements of good design with a focus on newsletter design. Students will have the opportunity to help produce the NBHS newsletter. The class is structured to move students from an understanding of software features to creation of a portfolio of authentic projects, professional layouts using effective communication skills and creativity. Students successfully completing the course may select to sit for *Microsoft Office User Specialist (MOUS) Core Certification*. (30008, Information Processing II)

# Web Page Design I (1840, 0.5 Credit, Grades 10, 11, 12)

Prerequisite: Completion of Microsoft Office or Desktop Publishing.

Course description: This computer class emphasizes the development of websites using the HTML and basic Java Script languages. This course is designed to give students the skills to develop a variety of websites. Students will have the opportunity to create a personal website, a website for a school, a business website, and a variety of other projects. (30011, Web Page & Interactive Media Development I)

### Web Page Design II (1841, 0.5 Credit, Grades 10, 11, 12)

Prerequisite: Minimum of a C in Web Design I

Course description: This computer class extends the concepts learned in Web Design I. This class focuses on using Dreamweaver software as well as other programs within the AdobeCS3 Suite. Students will use Adobe Dreamweaver and Photoshop to create high quality websites that include, multimedia, animation, audio, video, and interactive forms. Assignments will have students create professional web sites for "real-world" scenarios. (30012, Web Page & Interactive Media Development II)

# Journalism I (2821/2822, 1.0 Credit, Grade 11)

Prerequisites: A minimum grade of B in English 10 AND a minimum grade of B in Desktop Publishing AND teacher recommendation

Course description: This one year course will focus on advanced desktop publishing, yearbook design, and journalism topics. The specific topics we will cover are: yearbook design principles, journalism introduction and history, copy editing, editorial writing, Adobe InDesignCS3, photography, editing, yearbook vocabulary, headlines, captions, feature story writing, interviewing, and reporting. Students will have the opportunity to help Journalism 2 create the North Boone High School Yearbook.

### Journalism II (2831/2832, 1.0 Credit, Grade 12)

Prerequisites: Minimum grade of B in Journalism I AND a minimum grade of B in English AND teacher recommendation

Course description: During the second year, students will produce and edit the yearbook. In addition to the responsibilities of a first year student, the second year students will be responsible for planning and editing the yearbook. The specific topics we will cover are; editing, copyright law, 1<sup>st</sup> amendment, reporting, media, libel, journalism ethics, online journalism, entertainment journalism.

# Business Law (1870, 0.5 Credit, Grades 10, 11, 12) WRITING INTENSIVE

Prerequisite: None

Course description: Business Law is one-semester course focusing on the study of the American legal system and contract law. Specific topics to be studied include: ethics, criminal and civil trial procedure, criminal and tort law, fraud, and the elements of legally binding contracts. A combination of reading and writing assignments, oral presentations, mock trials, and case studies are used to help students become active participants in their school and community as well as the American system.

This course will be offered 2012-2013.

#### Marketing (1900, 0.5 Credit, Grades 10, 11, 12)

Prerequisite: None

Course description: Marketing is a one semester course focusing on the study of the process of planning and executing the conception, price, promotion, and distribution of ideas, goods, and services. Specific topics to be covered include: the marketing concept, international marketing, personal selling, promotion, distribution, pricing, marketing research, and product management. A combination of reading and writing assignments, oral presentations, sales demonstrations, and case studies will be used to help students understand and apply marketing, management, and entrepreneurial principles. Finally, all students will have the opportunity to start and run their own business through the use of Virtual Business Retailing software.

This course will be offered 2011-2012.

# Consumer Education (4900, 0.5 Credit, Grade 12)

Prerequisite: None

Course description: This course is designed to provide students with the practical knowledge to help them become competent consumers in today's highly competitive marketplace. Specific areas addressed include: comparison-shopping, consumer protection, banking, budgeting, housing, insurance, investing, public services, saving, tax preparation, transportation and use of credit.

Students use numerous Internet sites, projects, business readings, lectures, discussion groups and guest speakers to obtain their knowledge. This course is required by the state of Illinois (School Code, Section 27-12) for graduation.

# CAREER EDUCATION

Career Education (1300, 0.25 Credit, Grade 10)

Prerequisite: Concurrent enrollment in driver education at NBHS

Course description: This 9-week course for students in grade 10 is designed to increase student awareness of the importance of planning and preparing for a career. Students will use BRIDGES, an on line career information program available on any computer with Internet access. Students develop career plans by building self-awareness, a key to decision-making. In addition, they will create career and thank you letters as well as a resume and do individual research on a chosen career. Course culminates in mock interviews with members of the business community.

# DRIVER EDUCATION

Driver Education (1200, 0.25 Credit, Grade 10)

Prerequisites: Sophomore standing and as required by the state, students must have passed 8 classes in previous two semesters to take the course.

Course description: Driver Education is divided up into two parts, classroom and behind the wheel. The first two weeks of the classroom is spent teaching the Illinois Rules of the Road manual so the student may obtain an instruction permit. The written and vision tests are administered during class time. The remaining seven weeks are used to cover the class textbook. Instruction during this time will include: responsibilities of driving, basic courtesies associated with driving, basic maneuvers, dealing with intersections, city and rural driving, interstate driving, driving in adverse conditions, and how to handle emergencies. The classroom instruction will be graded on a pass/fail basis.

The second part of Driver Education is the behind the wheel instruction. It is during this part where the student receives driving lessons. Drive Right has been contracted to provide 6 hours of Behind-the-Wheel experience for each student who chooses to participate. Topics to be covered include: basic maneuvers, parking, turnabouts, city driving, interstate driving, and driving in business districts. Grades will be kept for the purpose of determining passing or failing, but a grade is not given for transcript purposes.

\*\*There is an additional fee for behind the wheel instruction.

# **ENGLISH**

English 9, 10 and 11 and 2 English electives

# English 9 (2011/2012, 1.0 Credit, Grade 9)

Prerequisite: None

Course description: English 9 includes a review of writing skills, study skills, and reading comprehension. Literature, including short stories, poetry, plays, and novels, will be studied.

Emphasis will be placed on vocabulary building and writing skills across the curriculum as well as skills in literary analysis. Students will identify the elements of literature (plot, theme, character, setting, and point-of-view) and be able to analyze literature using those elements.

The four types of essay writing (descriptive, expository, narrative, and persuasive) will be introduced, and the writing of essays using word processing software will be a long-term goal for the year. Literature will include "Romeo and Juliet," excerpts from "The Odyssey" and various novels.

# Honors English 9 (2111/2112, 1.0 Credit, Grade 9)

Prerequisites: Test scores and Middle School recommendation

Course description: This course focuses on individual responsibility for participation and learning in the areas of reading, writing and speaking. Study skills will be reinforced, with students maintaining time management and organizational strategies throughout the year. Writing skills will be emphasized, and students will be required to write essays (descriptive, narrative, expository, and persuasive) on a regular basis. Peer-editing and group work will emphasize the cooperative work environment.

Usage and development of critical thinking skills will be essential in the analysis of literature. Required reading will include short stories, "Romeo and Juliet," excerpts from "The Odyssey" and various novels. Special projects relating to literature, both individual and group, will incorporate critical reading and analytical thinking.

Honors students are expected to work independently as well as cooperatively in a setting dedicated to improving their skills. Students not completing assignments, lacking adequate skills, unable to succeed, or who participate inappropriately will be switched to a more appropriate English class.

#### English 10 (2021/2022, 1.0 Credit, Grade 10) WRITING INTENSIVE

Prerequisite: Passing grade in English 9

Course description: Students will work to improve critical reading and writing skills through the study of world literature. Short story units will focus on vocabulary building and reading comprehension as well as literary analysis. Required reading: *The Catcher in the Rye, Antigone*, and *Julius Caesar* 

Required speeches: Persuasive and informative

# Honors English 10 (2121/2122, 1.0 Credit, Grade 10) WRITING INTENSIVE

Prerequisites: Minimum grade of B in Honors English 9 or an A in English 9

Course description: The focus of Honors English 0 is the study of world literature. Students read from a variety of literary genres. This course challenges students to become critical thinkers through diverse writing assignments, reading selections, and collaborative projects. Required reading: *The Metamorphosis, Lord of the Flies, Things Fall Apart, Antigone, and Julius Caesar.* Required speeches: Persuasive and informative

Honors students are expected to work independently as well as cooperatively in a setting dedicated to improving their skills. Students not completing assignments, lacking adequate skills, unable to succeed, or who participate inappropriately will be switched to a more appropriate English class.

# English 11 (2031/2032, 1.0 Credit, Grade 11) WRITING INTENSIVE

Prerequisite: Passing grade in English 10

Course description: This course will retrace America's history as seen through the literature of the United States from Colonial times through the twenty-first century. The course will include grammar study as well as composition. Students will write compositions based on literature they have read. More advance writing and research skills, including the completion of a lengthy research paper utilizing MLA format, will be covered.

# Honors English 11 (2131/2132, 1.0 Credit, Grade 11) WRITING INTENSIVE

Prerequisites: A grade of B or better in Honors English 10 or an A in English 10

Course description: This course will take an in-depth look at the literature that represents America. Students should prepare for a challenging reading list including the novels *The Great Gatsby, Incidents in the Life of a Slave Girl, The Crucible, Ethan Frome*, and study Transcendentalists.

Students will write extensively on literature, as well as compose a lengthy research paper utilizing MLA format. This coursework will work on fine-tuning students' writing skills. Students will review the basics and study more advanced grammar. Vocabulary will be developed through weekly vocabulary lessons and quizzes.

Honors students are expected to work independently as well as cooperatively in a setting dedicated to improving their skills. Students not completing assignments, lacking adequate skills, participate inappropriately, or are unable to succeed will be switched to a more appropriate English class.

#### English 12 (2041, 0.5 Credit, Grade 12) WRITING INTENSIVE

Prerequisite: Passing grade in English 11

This section of English 12 is divided into two units whose focuses center around two major contexts in which individuals communicate: Public World and Academic World. The major goal of this course is to review and perfect students' oral and written communication skills so that they can enter the world of work, college, and/or business, reading and communicating effectively and comfortably. Students will spend the majority of the semester in the Public World Unit where they will examine the skills needed to operate in the setting where they live and breathe everyday of their lives. A review of critical reading skills along with an examination of logic, reasoning, and the fallacies associated with reasoning are the focus of this unit. The culminating project for this unit will be a fifteen minute presentation on an issue connected to a current event.

Students will finish the semester exploring the communication skills exercised in the Academic World. With a focus on literature, students will examine the history of the sonnet along with its variety of structures and rhyme schemes. After reading and interpreting several sonnets, students will complete their final project for the school year: a memorized oral interpretation along with a visual presentation of a sonnet.

Because a strong, sophisticated vocabulary is fundamental to successful communication in either of the contexts mentioned above, students will be completing vocabulary exercises each week. This will be in addition to the exercises of the above units. Vocabulary quizzes assessing students' knowledge of as well as application of each vocabulary word will be given weekly.

# English 12 (2042, 0.5 Credit, Grade 12) WRITING INTENSIVE

Prerequisite: Passing grade in English 11

This section of English 12 focuses on the communication skills exercised within the Work World.

In this course, students will explore possible careers and then after settling on one, will proceed through the process involved in obtaining that job. Finding job opportunities, filling out application forms both on paper and online in addition to composing letters of application, resumes, and follow up letters are the major exercises. The final project for this unit will involve composing a play that demonstrates students' interviewing skills. While completing the activities for this course, we will be exercising our skills in comprehension, analysis, synthesis, and evaluation.

Because a strong, sophisticated vocabulary is fundamental to successful communication in the world of work, students will be completing vocabulary exercises each week. This will be in addition to the exercises of the above units. Vocabulary quizzes assessing students' knowledge of as well as application of each vocabulary word will be given weekly.

# British Literature (2201, 0.5 Credit, Grades 11,12) WRITING INTENSIVE

Prerequisites: Passing grade in English 10

Course description: Students will read classics of British Literature, including Beowulf, Chaucer, and Shakespeare. Epic poems, plays, novels, and poetry will be included, along with an overview of British history. Significant amounts of reading will be expected.

This course will be offered 2011-12.

# Contemporary Literature (2212, 0.5 Credit, Grades 11, 12) WRITING INTENSIVE

Prerequisites: Passing grade in English 10.

Course description: Various contemporary novels will be read and discussed throughout the course. Intensive reading and class discussions are critical to making this class an enjoyable learning experience.

This course will be offered 2012-13.

# Forensics (Speech) (2342, 0.5 Credit, Grades 11, 12)

Prerequisites: Passing grade in English 10 or teacher recommendation

Course description: Students will learn extemporaneous speaking for all occasions. Extensive research using the Internet, work on composition skills, and outside speaking experiences will assist the student in presentation skills. PowerPoint presentation software and other visual aids will be utilized in several speeches. Opportunities will be provided for students who wish to participate in speech/debate competitions.

# Creative Writing (2520, 0.5 Credit, Grades 11, 12) WRITING INTENSIVE

Prerequisite: Passing grade in English 10 or English 11

Course description: This course is designed to encourage students to expand their writing talents to more non-traditional forms of expression such as poetry, drama, and myths. Students will write on a daily basis. Projects for individual or groups will be required. Students will work on improving communication skills both written and verbal.

AP Literature and Composition (2741/2742, 1.0 Credit, Grade 12) Writing Intensive Prerequisites: A grade of A or B in Honors English 11 or an A in English 11. \*There is a \$90 course fee associated with this course that will cover the required AP examination fee.

Course description: This is a college-bound course that is reading and writing intensive. College-level material will be used in preparation for the required AP Literature and Composition Exam in May. Required reading will include *The Awakening, Frankenstein, Othello, The Importance of Being Earnest, Cadide, The Metamorphosis,* as well as various short stories and modern and traditional poetry. A major focus of the class will be on developing students' critical analysis skills and their ability to convey ideas through the spoken and written word. Formal and informal writing will be done both in and out of class. Students will be expected to complete independent reading projects each quarter as well as study weekly vocabulary.

# College Prep Reading (2750, 0.5 Credit, Grades 11, 12) WRITING INTENSIVE

Prerequisite: College bound reading at or above grade level. A minimum grade of C in English.

Course description: This course is designed to prepare students for the reading they will encounter in college as well as honors and advanced placement (AP) classes at North Boone. Emphasis is placed on reading comprehension, speed, and vocabulary. Pre and post tests are given to determine progress course objectives are met. Students are required to complete two independent reading projects.

# **Introduction To Dramatic Literature (2900, 0.5 Credit, Grades 11,12)**

Prerequisite: none

Course description: The emphasis in this course is on reading and appreciating drama. Students will read plays from a variety of genres both in the classroom and independently. Students will also complete a unit of study on the history of drama. Field trips to play performances will be scheduled throughout the semester when appropriate and available. Assignments will include but are not limited to reading, vocabulary study, literary analysis, research projects, and presentations.

#### English Skills Lab 9 (2001 or 2002, 0.5 credit, Grade 9)

Prerequisite: none

Course description: Placement in the skills lab course is determined by Language Arts and Reading grades in 8<sup>th</sup> grade and test scores (ISAT/Explore). The student will be required to complete one semester of skills lab to supplement skills in reading fluency, comprehension, vocabulary, English grammar, and writing as it relates to reading. Students will utilize the latest technology-based resources to improve their skills in addition to teacher instruction and intervention strategies.

# English Skills Lab 12 (2003 or 2004, 0.5 credit, Grade 12)

Prerequisite: none

Course description: Students who do not meet state standards on the PSAE during their junior year will be required to take this course in order to graduate per school board policy. The student will be required to complete one semester of skills lab to supplement skills in reading fluency, comprehension, vocabulary, and writing as it relates to reading. Students will utilize the latest technology-based resources to improve their skills in addition to teacher instruction and intervention strategies. Students will write several types of papers as well as professional business letters and resumes using word processing software. A principal goal of the course is to prepare the student for writing and reading skills needed in college and in everyday life.

# PSAE Reading Lab (9997, 0.5 credit, Grade 11)

Prerequisite: None

Course description: This class is required for students who do not meet the College Readiness Benchmarks on the PLAN test taken in 10<sup>th</sup> Grade. The course will focus on non-fiction reading in preparation for the Prairie State Examination, which includes the ACT test.

# FOREIGN LANGAUAGE

# Spanish I (3111/3112, 1.0 Credit, Grades 9, 10, 11, 12)

Prerequisite: None

Course description: Students will concentrate on beginning vocabulary, dialogue, and reading skills. Students will be introduced to the cultures of the Spanish-speaking world.

Spanish II (3121/3122, 1.0 Credit, Grades 10, 11, 12)
Prerequisite: Minimum grade of C in Spanish I and teacher recommendation

Course description: Students continue to build Spanish language skills through listening, reading, speaking, and writing activities. There is more emphasis on verbal communication. Students continue to explore the cultures and traditions of Spanish-speaking countries.

#### Spanish III (3131/3132, 1.0 Credit, Grades 11, 12)

*Prerequisite: Minimum grade of C in Spanish II and teacher recommendation* 

Course description: Spanish will be the primary language in the classroom. Students will work on fine-tuning their speaking, writing, reading, and overall comprehension skills. Students will expand their knowledge of Hispanic history and geography.

### Honors Spanish IV (3141/3142, 1.0 Credit, Grade 12)

*Prerequisite:* Minimum grade of C in Spanish III and teacher recommendation.

Course description: Spanish will be the primary language of the classroom. Students will do independent research, oral presentations, and written essays in Spanish. Students will continue to study the cultures and geography of Spanish-Speaking countries.

### French I (3011/3012, 1.0 Credit, Grades 9, 10, 11, 12)

Prerequisite: None

Course description: Emphasis is on the basics of elementary spoken and written French. Beginning students will learn simple vocabulary, phrases and dialogue. Students will also be introduced to French history, culture and geography.

#### French II (3021/3022, 1.0 Credit, Grades 10, 11, 12)

Prerequisite: Grade of C or above in French I and teacher recommendation

Course description: Students continue to build language skills - listening, speaking, reading and writing. There is more emphasis on communication. Students develop an appreciation and understanding of the Francophone cultures.

# French III (3031/3032, 1.0 Credit, Grades 11, 12)

Prerequisite: Grade of C or above in French II and teacher recommendation

Course description: This level presents advanced grammar, reading and writing. Students do independent research and oral presentations. Emphasis is on oral and written communication. Class will be conducted as much as possible in French. Students will also continue to build knowledge in Francophone history, culture and geography.

# Honors French IV (3041/3042, 1.0 Credit, Grade 12)

Prerequisite: Grade of C or above in French III and teacher recommendation

Course description: Focus is on literary works, independent research and oral communication skills in addition to continuing studies in grammar and Francophone culture. Class will be conducted primarily in French.

# FAMILY AND CONSUMER SCIENCE

# Introduction to FACS (Family and Consumer Science) 4901/4902, 0.5 Credit, Grades 9, 10 Prerequisite: None

Course description: This class is an elective open to freshman and sophomore students. The course will provide an overview of learning skills needed to succeed in Food & Nutrition I, Food & Nutrition II, Parenting, and Adult Living. There will be eight (8) two-week sections which will cover; Learning About Myself, Managing My Time, Taking Care of Children, Good Eating Habits, Meal Planning and Preparation, Taking Care of Clothes, Taking Care of a Home, and Job Skills for the Future. We will be using the textbook, "Building Life Skills" and creating many practical projects. (64001, Learning for Independence, Family & Employment)

# Foods I (4600, 0.5 Credit, Grades 11, 12)

Prerequisite: None

Course description: This course includes basic classroom and laboratory experiences in basic food service preparation and nutrition. Included in the class are food sanitation and safety, kitchen equipment, health and skills needed for successful employment in the food service industry. The class emphasizes good eating habits and weight management throughout the semester. Units of study include measurements and substitutions, cooking techniques, fruits, vegetable, grains and cereals, quick breads, yeast breads, and pie, cakes, cookies and candy. (64003, Foods & Nutrition I)

# Foods II (4602, 0.5 Credit, Grades 11, 12)

Prerequisites: Grade of C or above in Foods I

Course description: This course is a continuation of Foods I. It is designed for students who have an interest in advancing the food preparation techniques and nutrition knowledge that they had begun in Foods I. This course will stress food service, meal management, table settings, etiquette and other food career skills. Units of study will include eggs, dairy, meats, fish, garnishing, cake decorating and regional American and international foods. Diets as they pertain to correcting and preventing health problems will be stressed throughout the semester. (64005, Foods & Nutrition II)

# **Adult Living (4821, 0.5 Credit, Grades 11, 12)**

Prerequisite: None

Course description: This course is designed to assist students in becoming a part of a vital adult society. Throughout the class, the emphasis will be on learning to become independent financially, in careers, relationships and in taking care of ones emotional and physical needs. Units of study will also include: preparation for college and career, dating, prevention of sexual harassment and abuse, practical skills for autonomy, apartment and home selection, health and addictions, marriage preparation and etiquette. The management of adult problems will also be included. (60511, Adult Living)

### Parenting (4832, 0.5 Credit, Grades 11, 12)

Prerequisite: None

Course description: This course is designed to prepare students for the responsibilities, satisfactions and stresses of parenthood. The course content includes goals and skills in decision-making, birth control, child development, parenting skills, childhood health and diseases, child psychology and problems parents face. "Baby Think It Over" simulators are an integral part of this class. There will be an emphasis on childcare skills that can translate into a career. Teenage parenthood and their unique problems and the sources that can assist them will be discussed throughout the semester. (60509, Parenting)

# **MATHEMATICS**

A minimum of three (3) credits must be earned in Mathematics.

Math Sequence

$9^{\rm th}$	10 <sup>th</sup>	11 <sup>th</sup>	12th
Algebra Concepts	Geometry Concepts	Integrated Algebra II	Pre-Calc w/ Trig
Algebra I	Geometry	Algebra II	H Pre-Calc w/ Trig
Geometry	Algebra II	H Pre-Calc w/ Trig	AP Calculus

A math placement test will be given to any new students and in January to all 8<sup>th</sup> grade students.

To qualify for Algebra I students must have a strong grasp of solving and evaluating one step equations, order of operations, absolute value, variable substitutions and graphing on a number line.

To qualify for Geometry students must have a strong grasp of solving multiple step equations with variables on both sides and distributing, graphing and knowledge of linear equations, multiplying and factoring polynomials and applying formulas.

# Algebra I (6311/6312, 1.0 Credit, Grade 9)

Prerequisites: Placement based on performance of high school placement test.

Course description: This course covers the properties and operations of real numbers. Students learn techniques on solving and graphing linear equations and inequalities. They learn about slope, the slope intercept and point-slope forms of an equation. Students perform basic operations and factoring techniques on polynomials. Students learn to solve word problems by translating them into algebraic equations.

# Algebra Concepts (6111/6112, 1.0 Credit, Grades 9)

Prerequisites: Placement based on performance of high school placement test.

Course description: Similar in content to Algebra I, Integrated Algebra, will progress at a slower pace to enhance content retention. This course covers properties and operations of real numbers, solving and graphing linear equations, slope and the equation of a line, and translating and solving word problems. Upon successful completion, students will be enrolled in Integrated Geometry.

# Geometry (6411/6412, 1.0 Credit, Grades 9, 10, 11, 12)

Prerequisite: Placement based on performance of high school placement test (for freshman) or a passing grade Algebra I.

Course description: This is a course in Euclidean Geometry dealing with points, lines planes and polygons. Students learn about congruency and similarity on the basic figures of geometry. Parallel and perpendicular lines are studied with their relationship to slope. Formulas for finding the areas of 2 and 3 dimensional figures are investigated. Properties and theories involving triangles are studied. Inductive and deductive reasoning skills are developed and used in formal proofs.

# Geometry Concepts (6113/6114, 1.0 Credit, Grades 10)

Prerequisite: Passing grade in Algebra Concepts.

Course description: Using algebraic strategies, students will observe, verify and explain geometric relationships of perpendicularity, parallelism, congruence and similarity. Students will demonstrate the use of formulas in finding the area and volumes of circles, polygons and polyhedrons. Students will learn to apply appropriate theorems, postulates and properties on basic geometric figures and translate them into algebraic equations. The interpretation and graphing of linear equations will be revisited.

#### Algebra II (6321/6322, 1.0 Credit, Grades 10, 11, 12)

Prerequisites: Passing grade in Geometry.

Course description: A second course in Algebra extends studies of real numbers in solving equation and inequalities. Concepts covered include relations, functions, systems or equations, polynomials, rational expressions, powers, roots, complex numbers, quadratic equations and exponential and logarithmic functions.

# **Integrated Algebra II (6323/6324, 1.0 Credit, Grades 10, 11, 12)**

Prerequisites: Passing grade in Geometry Concepts.

Course description: Similar in content to Algebra II, Integrated Algebra II will progress at a slower pace to enhance content mastery and retention. This second year of Algebra extends studies of real number in solving equations and inequalities. Concepts covered include relations, functions, systems of equations, polynomials, rational expressions, powers, roots, complex numbers, and quadratic equations.

# (Honors) Pre-Calculus with Trigonometry ((6501/6512 or 6500/6511), 1.0 Credit, Grades 11, 12)

Prerequisite: For honors level a minimum grade of B in Algebra II. Non honors level passing grade in Algebra II or a B or higher in Integrated Algebra II.

Course description: This course will take an in-depth look into the relationships of triangles, trigonometric functions, and the unit circle. The students will strengthen their analytical reasoning by verify trigonometric identities, deriving inverse functions, factor and graph higher degreed polynomials and graphing rational functions. Other topics that may be covered include polar coordinates, vectors, the complex plane and parametric equations. The non honors level will progress at a slower pace to enhance content mastery while still covering the same core topics.

# AP Calculus (6701/6702, 1.0 Credit, Grade 12)

Prerequisite: Minimum grade of B in Honors Pre-Calculus with Trigonometry or teacher approval. Student must complete the AP Calculus Summer Packet prior to the beginning of the school year. \*There is a \$90 course fee associated with this course that will cover the <u>required</u> AP examination fee.

Course description: This course is the equivalent of a first semester college calculus course. Students will study functions, limits, derivatives, and integration. Students will be required to take the AP Calculus exam at the end of the year.

### Mathematics Skills Lab 9 (6010 or 6011, 0.5 credit, Grade 9)

Prerequisite: none

Course description: Placement in the skills lab course is determined by Mathematics grades in 8<sup>th</sup> grade and test scores (MAPS, ISAT). The student will be required to complete one semester of skills lab, which will provide a resource for better understanding mathematics. The purpose of the Math Skills Lab is to re-explain, rebuild, relearn and/or reinforce important math skills. Students will utilize the latest technology-based resources to improve their skills in addition to teacher instruction and intervention strategies.

# Mathematics Skills Lab 12 (6012 or 6013, 0.5 credit, Grade 12)

Prerequisite: none

Course description: Students who do not meet state standards on the PSAE during their junior year will be required to take this course in order to graduate per school board policy. The student will be required to complete one semester of skills lab, which will provide a resource for better understanding mathematics. The purpose of the Math Skills Lab is to re-explain, rebuild, relearn and/or reinforce important math skills. Students will utilize the latest technology-based resources to improve their skills in addition to teacher instruction and intervention strategies.

#### PSAE Math Lab (9998, 0.5 credit, Grade 11)

Prerequisite: None

Course description: This class is required for students who do not meet the College Readiness Benchmarks on the PLAN test taken in 10<sup>th</sup> Grade. The course will focus on math concepts in Algebra and Geometry in preparation for the Prairie State Examination, which includes the ACT test.

# **MUSIC**

# Band I, II, III, IV (1111/1112, 1.0 Credit, Grades 9, 10, 11, 12)

Prerequisite: Successful membership in Middle School Concert Band or Equivalent

Course description: The concert/athletic band is open to all students enrolled in grades 9-12 with the assumption that the student has experiences previous instruction on his or her primary instrument. The band program is designed to acquaint the student with a wide variety of instrumental music literature through study and performance. Emphasis is given to music of all historical periods. Instruction is intended to broaden each student's experiences and develop an understanding and sensitivity to music meant to last through adulthood.

All, students participate in an athletic band, which ranges in shape from a marching band to pep band at various athletic events. Large emphasis is placed on effort and participation throughout this time. Students work to achieve proficiency in marching fundamentals and music performance.

At the completion of the athletic season (approx. end of first quarter) the band transitions into wind ensemble literature, where students work to achieve greater efficiency in basic musicianship while developing the technical skill necessary to play an instrument.

The concert/athletic band performs throughout the school year. This course also provides exposure and learning related to music theory, history, and literature.

### Chorus I, II, III, IV (1121/1122, 1.0 Credit, Grades 9, 10, 11, 12)

Prerequisite: None

Course description: The choir is open to all students and does not require auditions or any previous singing experience. Classes focus on learning the basics of music reading, proper use of the voice for singing, and the preparation of music for public performances during the school year. Choral concepts are presented through a combination of large-group rehearsals, sectional work, and individual voice lessons to students during their study hall or outside of school hours.

Choir performs unisons, two-part, and three-part music during the course of a year. The course also provides exposure and learning related to music appreciation, history, theory, and literature from varying time periods.

# Auditioned Chorus (1131/1132, 1.0 Credit, Grades 9, 10, 11, 12)

Prerequisite The student must audition for the director for placement the spring before the school year.

Course description: This class is for students that are dedicated to learning at a higher level musically. This ensemble will work on music in a variety of styles that are all four part music, some of which will be a cappella. The students will be working on music skills that exceed basic musicianship. They will also be working on leadership skills through sectional leading.

# PHYSICAL EDUCATION

Students are required to participate in Physical Education each semester of attendance, except when taking Health. Students are expected to dress for PE on a daily basis. Students may be exempt if any of the following occurs: (1) Of Junior or Senior standing and participating in an interscholastic athletic program; (2) enrollment in academic class required for admission to a higher education institution conflicts with a PE class; or (3) medical reasons exist. Junior and Senior athletes need to complete a form to indicate he/she will not be participating in daily class.

\*Physical Education may not be taken as an elective credit\*

# Physical Education (7555/7566, 0.5 Credit, Grades 9, 10, 11, 12)

Prerequisites: None

Course description: Selected individual and team activities will be learned which promote physical growth, physical fitness and recreational enjoyment. Course will motivate effective and continuous participation after graduation. Beginning, intermediate, and advanced skills will be presented in each activity.

# <u>PE - Fitness (7565/7566, 0.5 Credit, Grades 9, 10, 11, 12)</u>

Prerequisites: None

This class provides a great opportunity for students to exercise, enjoy it and to continue exercising when they get into the real world. This unit allows the student to try a variety of exercises in a group setting. Fitness/Body Sculpting will focus on aerobic exercise 2-3 days a week including but not limited to: Cardio kickboxing, TaeBo©, Step Aerobics, Hip Hop and Line Dancing. Resistance Training 1-2 days per week: Resistance Bands, Light Weight Workout, Butts and Guts and Stability Ball. And 1 day of Relaxation which will feature Yoga, Pilates and Deep Breathing Meditation.

# Health (7800, 0.5 Credit, Grade 10)

Prerequisite: None

Course description: This course explores the ever changing, dynamic world of health and wellness, with a focus on teenage health issues, including, but not limited to Relationships, Selfesteem, Depression, Suicide, Fitness and Nutrition, Drugs, Alcohol, and Tobacco and the Environment. According to the guidelines of the American Red Cross course in Adult CPR and Basic First Aid will also be taught. If successful, the student will receive two certification cards (CPR and First Aid).

# **SCIENCE**

All students must earn three (3) credits in science (1 credit in Biology or Biology Concepts). Many important decisions will need to be made in the future that will demand an understanding of many scientific principles. For a strong background in science-related careers such as nursing, engineering and college-bound students, the following sequences should be followed:

9 <sup>th</sup>	10 <sup>th</sup>	1 1 <sup>th</sup>	12th
Earth	Biology Concepts	Environmental Science	General Chemistry
Biology Concepts	Environmental Science	General Chemistry	Honors Physics or AP Biology
Biology	Honors Chemistry I	Honors Physics or AP Biology	AP Biology, Honors Physics, or Honors Chemistry II

# Earth Science (8010/8011, 1 Credit, Grade 9)

Prerequisite: None

Course Description: This course will introduce students to the basic concepts of Earth Science. Students will explore topics including geology, meteorology, oceanography, astronomy and environmental issues. The scientific methods will be an integral part to both the class and field studies.

# Biology Concepts (8198/8199, 1.0 Credit, Grades 9,10)

Course Description: Similar in content to Biology, Biology Concepts will progress at a slower pace to enhance content mastery and retention. Students will be introduced to the basic concepts of Biology. Some of the topics covered will include the scientific method, cell biology, genetics, ecology, animal classification, and evolution. This course will involve doing lab work, including the dissection of animals.

#### Biology (8201/8202, 1.0 Credit, Grades 9)

Course Description: Students will be introduced to the basic concepts of Biology. Some of the topics covered will include the scientific method, cell biology, genetics, ecology, animal classification, and evolution. This course will involve doing lab work, including the dissection of animals.

#### Environmental Science (8101/8102, 1 Credit, Grades 10, 11, 12)

Prerequisite: None

Course Description: This course will introduce students to ecosystems and what roles humans play in those ecosystems. Students will also have a working knowledge of some of the environmental problems that face us today, along with some solutions to help reduce these problems. Topics include and Introduction to Ecosystems, Water and Air Pollution, Greenhouse Effect, Global Warming, Biodiversity, Land, Food, and Energy. The scientific method will be an integral part to both the class and field studies.

#### General Chemistry (8250/8251, 1.0 Credit, Grades 10, 11, 12)

Prerequisite: Passing grade in Algebra I and Biology.

Course Description: General Chemistry is a course enriched with many lab activities. Topics studied include the relationship between matter and energy, atomic theory, quantum mechanics, the periodic table, chemical bonding, molecular geometry, chemical equations, stoichiometry, and kinetic theory.

# Honors Chemistry I (8401/8402, 1.0 Credit, Grades 10, 11, 12)

Prerequisite: B or above in Biology, B average in math courses.

Course Description: Chemistry is the study of matter and its changes. Honors Chemistry explores chemistry through a more mathematically oriented approach. Topics studied include the relationship between matter and energy, atomic theory, quantum mechanics, the periodic table, chemical bonding, molecular geometry, chemical equations, stoichiometry, and kinetic theory. Co-requisite: Enrollment in Algebra II or Geometry.

# Honors Chemistry II (8501/8502, 1.0 Credit, Grades 11, 12)

Prerequisite: Successful completion of Honors Chemistry I

Course Description: Honors Chemistry II is a continuation of Honors Chemistry I, continuing a mathematical approach to chemistry. Topics studied include Solutions and equilibrium, acids-base chemistry, oxidation and reduction, kinetics and thermodynamics, and organic chemistry.

Advanced Placement (AP) Biology (8301/8302, 1.0 Credit, Grades 11, 12) Writing Intensive Prerequisite: Must have completed Biology and Chemistry (Honors Chemistry is recommended). Grades of B or higher in both Biology and Chemistry are recommended. \*There is a \$90 course fee associated with this course that will cover the required AP examination fee.

Course Description: AP Biology is for college bound students. This class is meant to be equivalent to an introductory college course. AP Biology is a challenging class that will provide students the opportunity to develop a conceptual framework for modern biology emphasizing the integration of the general topics of biology through the following major themes: Science As A Process; Evolution; Energy Transfer; Continuity and Change, Relationship of Structure And Function; Regulation; Interdependence In Nature; and Science, Technology, and Society. This class will involve lab work and the dissection of animals. An additional fee is required to take the AP Biology exam for possible college credit if the student chooses to do so.

Honors Physics (8601/8602, 1.0 Credit, Grades 11, 12)

Prerequisite: Grade of C or above in Chemistry and in Algebra II Co-Requisite: Concurrent enrollment in Pre-Calculus or Calculus

Course Description: Honors Physics is a mathematically oriented course for college-bound students that deal with the fundamentals of forces and motion, forms of energy, heat, sound, light, electricity, magnetism, and nuclear physics. Physics deals with problems at the atomic level, in the real world, and at the galactic level.

# **SOCIAL STUDIES**

Students are required to earn 2.5 credits in Social Studies. One credit must be U.S. History, 0.5 credit in American Government, and 1 credit in World Cultures. Also, students must pass the State-mandated Constitution test given in American Government class.

# World Cultures (9401/9402, 1.0 Credit, Grades 9, 10)

Prerequisite: None

Course description: Students in this course will study the religions, social lives, philosophies, politics, economics, history and geography of the regions of the world. There will be special emphasis on global interactions. Methods will emphasize and enforce language skills including reading, writing, and speaking. There may be projects associated with each unit encouraging individual exploration of more specific topics.

#### U.S. History (9201/9202, 1.0 Credit, Grades 10, 11)

Prerequisite: None. You may not take U.S. History and AP U.S. History

Course description: A multicultural study of our nation's past that encompasses the stories of all groups of people who have contributed to our political, social, and economic development from 1492 to the present. Students will be expected to interpret primary source documents, participate in class discussions, complete assigned projects, take notes from lectures, and view films when appropriate.

# Advanced Placement U.S. History (9301/9302, 1.0 Credit, Grade 10, 11) WRITING INTENSIVE Prerequisite: You may not take U.S. History and AP U.S. History.

Grades of C or higher in both Freshman World Cultures and Freshman English.\*There is a S90 course fee associated with this course that will cover the **required** AP examination fee.

Course description: The evolution of the United States becoming an increasingly industrial, urbanized, and pluralistic society in this century will be the focus of this course. Throughout the year, students will discover the struggles our nation has had with various domestic and international problems. While the content is similar to the standard U.S. History course, certain topics will be explored in greater depth both in class and through independent research. Projects will be assigned throughout the course to supplement topics of learning. Students will have the option of taking the AP test; Students pay test fee.

#### AP World History (9470/9471, 1.0 Credit, Grades 10, 11, 12) WRITING INTENSIVE

Prerequisite: Grades of C or higher in both Freshman World Cultures and Freshman English. \*There is a \$90 course fee associated with this course that will cover the <u>required</u> AP examination fee.

Course description: Students in this course will study topics in World History in depth beginning with the foundation of early civilization and focusing on rising empires, world religions, a world economy, revolution and globalization in the 20<sup>th</sup> century. Coursework will focus on developing skill in recognizing and understanding cause and effect, trends, themes, and interactions over periods of time. The AP exam is optional and fees would be paid by the student.

This course will be offered 2012-13.

#### AP Human Geography (9475/9476, 1.0 Credit, Grades 10, 11, 12) WRITING INTENSIVE

Prerequisite: Grades of C or higher in both Freshman World Cultures and Freshman English. \*There is a \$90 course fee associated with this course that will cover the <u>required</u> AP examination fee.

Course description: Students in this course will study topics in Human Geography in depth beginning with population and demographics and focusing on cultural patterns, rural and urban land use, economic development, and finally political organization of space. Coursework will focus on developing skills in using and thinking about maps and spatial data, defining and evaluating regions, and analyzing interconnections among places. The AP exam is optional and fees would be paid by the student.

This course will be offered 2011-12.

### American Government (9500, 0.5 Credit, Grades 11, 12)

Prerequisite: None

Course description: Students will receive a comprehensive overview of the democratic process in the United States with the three separate branches of government (legislative, executive, and judicial) as a foundation. Additional topics will be covered to reflect major public policies, participating in government, and comprehending the laws of the federal, state, and local levels. Students are expected to read and analyze both primary and secondary documents, participate in classroom discussions, take through notes, view films when appropriate, and pass both the U.S. Constitution and Illinois Constitution exams.

#### Current Events (9600, 0.5 Credit, Grades 11, 12)

Prerequisite: None

Current Events is a one semester elective course in social science. During the course, current global and national events will be studied as they become relevant. Special emphasis will be placed on linking theses current events to other courses and topics studied throughout the curriculum. Contemporary economic ideas will be discussed, as they are pertinent to the issues dominating the glove. Daily activities include discussion, journals, editorial critiques, cartoon analysis, *Newsweek* weekly magazine reading, as well as a variety of news programming. Students are expected to take thorough notes, research for greater depth and meaning, and participate in daily discussions.

## Diversity: Race, Prejudice, and Discrimination (9610, 0.5 Credit, Grades 11, 12)

Prerequisite: None

Course description: This course is designed to help develop a basic understanding of the causes of discrimination and prejudice, and an awareness of and tolerance for different minority groups. The design of this course should enable the student to do two things: first, challenge their understanding of race, discrimination, and prejudice; and second, help them challenge racism and discrimination throughout their life. Students will look at historical, legal, and current issues surrounding various groups of people who in the past, and still today, have been discriminated against.

#### **Economics** (9800, 0.5 Credit, Grades 11, 12)

Prerequisite: None

Course description: This course focuses on basic economic concepts, economic institutions, and approaches for analyzing and evaluating economic problems, actions, and policies. Students will explore the roles of consumers and producers in economic life and how money, goods, and services flow. Topics will include the economic problem, supply and demand, command economy, mixed economy, GNP, fiscal policy and the multiplier, national dept, money and monetary policy, inflation, problems of growth, development, and affluence.

## This course will be offered 2012-13.

#### Sociology (9900, 0.5 Credit, Grades 11, 12)

Prerequisite: None

Course description: Students will analyze the various social institutions (such as family, peer groups, church, and school) that influence human interaction and relationships. At the center of the analysis are three major theories through which professional sociologists assess the world. The topics discussed during the semester include culture, socialization (the process through which we become people), social class (wealth and power), deviant behavior, criminal justice, and education.

This course will be offered 2011-12.

## SPECIAL EDUCATION

District 200 provides special education services to students who are identified as eligible according to law. In order to receive services in the resource program at North Boone High School, an educational evaluation must be given and a Multi-Disciplinary Conference (MDC) must be held to determine eligibility. Students with disabilities will have an Individual Education Plan (IEP) designed to meet their specific educational needs.

In addition to our specially trained teaching staff, a school psychologist, social worker, physical therapist, occupational therapist, and other program consultants also provide services.

Currently, North Boone High School offers the following courses for eligible students: English 9, 10, 11, 12 Paced Math I, II, III, IV Paced Study Skills

## **CEANCI PROGRAM – SKILLED TECHNOLOGIES**

North Boone High School students are welcome to enroll in the CEANCI program of skilled technology courses available at regional high schools. The student must complete an application for the program of his/her choice and submit it to the NBHS counselor by **Early March 2011**. The student must provide his/her own transportation to the class site and complete the two semesters of coursework. **Students are NOT allowed to drop a CEANCI course**.

The courses available include:

- Certified Manufacturing Associate (site is RVC)
- Pre-Engineering (site is Hononegah High School)
- Graphic Communications (site is Harlem High School or Hononegah High School)
- Automotive Service Technology (site is RVC or Hononegah High School)
- Health Occupations (site is RVC)

## **DUAL CREDIT COURSEWORK**

Courses taken through a college program with the approval of the Principal may be substituted for some high school courses. The students requesting dual credit will have the class grade count in his/her overall cumulative grade point average. The opportunity to take coursework for both college and high school credit benefits the students in many ways...

- 1. The student can supplement the high school curriculum with courses not available at the high school.
- 2. The student can begin earning credits toward their college degree.
- 3. The student becomes more aware of the college setting and then is more prepared to attend college full-time after graduation.

If you are interested in enrolling in a college course for dual credit, please review the Rock Valley College Dual Credit Enrollment Information on this page.

#### Move ahead with Dual Credit classes

Dual credit courses are real college level courses and have the same content and expectations as all Rock Valley College courses. Dual credit courses should not be used as a way to "make-up" courses that you failed in high school.

As a dual credit participant, you are required to follow all drop and withdrawal policies of RBC as stated in the RVC credit schedule and are responsible for credit schedule and are responsible for all tuition, fees, textbooks, and other costs associated with the dual credit course.

RVC courses, including dual credit courses, that have an \*IAI designation will transfer to most colleges and universities in Illinois. There are a few colleges and universities that will not allow college credit to be used toward degree completion if the same credit was used to complete a high school graduation requirement. Students are strongly encouraged to contact the institution in which they plan to attend to verify transferability. Also, the acceptable passing grade for any college course is a C. If a D or F is earned, the course will not be recognized for transfer.

\*Illinois Articulation Initiative, see <a href="https://www.itransfer.org">www.itransfer.org</a> for more information.

Remember... when you enroll in a college course it becomes part of your permanent transcript and will follow you, even if you enroll at another college or university!

Are you eligible to enroll in an RVC dual credit class? Yes, if you are..

- Enrolled in high school.
- At least 16 years of age on the first day of class AND
- In good standing with your high school.
- Successful complete the application process, including Accuplacer test

## **AWARDS**

There are many opportunities for students to receive awards throughout high school, especially Senior year. (Senior Awards and scholarship opportunities are too numerous to include in this Guide.) The following are special awards given each year to North Boone students.

## Illinois Boys and Girls State

One girl and one boy from the Junior class are selected by the faculty to attend State conference in the Summer. Criterion for selection includes honesty, leadership, good character, scholastic achievement and cooperation.

#### Valedictorian and Salutatorian

The two Seniors who academically rank first or second in their class after *seven semesters* will receive recognition as North Boone High School Valedictorian or Salutatorian.

If, after seven semesters, those in the running for valedictorian and salutatorian have all straight As, the determination of valedictorian and salutatorian would be decided as follows...

- The student with the highest number of honors/AP courses between those eligible would be considered valedictorian.
- If students have all As and take the same number of honors/AP courses, then the student who earned the highest number of credits would be named valedictorian.
- Decision for salutatorian would work the same way.

In the event that students have identical grade point averages, number of honors/AP courses, and total number of credits, a Co-Valedictorian/Co-Salutatorian will be named.

In addition to being recognized during the Graduation ceremony, each student is given a medal and presented a scholarship from the North Boone Education Association (faculty of all District #200 schools).

## SCHOLASTIC ACTIVITIES

#### Math Team

Math Team competes in the ICTM (Illinois Council of Teachers of Mathematics) Regional Competition. Winners can advance to State level competition. Interested students in all grades are eligible to participate.

#### Porter Scholar Program at Beloit College

The Beloit College Porter Scholar Program is an educational opportunity available to qualifying Seniors. Students in the top 10% of the Junior class are eligible to apply by completing the usual Beloit College application process. Students are notified of acceptance into the program in May. They then can register for a college class that will fit into their North Boone Senior year schedule. Students will receive High School credit and college credit. There is no cost to the students, but they must provide their own transportation.

This is an outstanding, inexpensive way to experience the college environment while still attending high school.

#### **Scholastic Bowl**

This involves interscholastic competition and is open to anyone who would like to participate. A Scholastic Team Meet consists of answering questions in the areas of Math, Science, Literature, Social Science, Language Arts, Fine Arts, Performing Arts, and others. These questions are responded to in direct, head-to-head competition with teams from other schools. Competition begins at the conference level with the opportunity to advance to state level competition.

#### Science Olympiad

This is a National Interscholastic competition. Teams of two or three members compete in events to earn points for the school's teams. Science Olympiad events involve all of the sciences along with building events.

### WYSE Academic Challenge Team

This is an interscholastic test competition in which the participants are chosen by faculty recommendation. These students then compete against other schools by taking a test in a certain subject area. The subject areas include Chemistry, Math, Physics, English, Biology, Computer Fundamentals, and Engineering Graphics.

## **CLUBS/ORGANIZATIONS**

#### **Chess Club**

The Chess Club is open to all students and offers the opportunity to participate at the level of their ability. Seasoned players who have displayed their skill by climbing our "chess ladder" make up our Varsity and Junior Varsity teams. Newcomers to the game get an opportunity to hone their game at weekly matches.

#### Drama Club

Each year the North Boone Drama Club puts on two full length shows. We put on a play in the fall and a musical, in conjunction with the music department, in the spring. Students have the opportunity to audition for roles in both shows. One does not have to be in choir in order to audition for the musical. Most rehearsal times are after school. There are also opportunities for students to become involved in the many technical aspects of theater. For each show we need people to run a computerized light board, man the spot light and help with the sound system. Each show also needs a crew for costumes, make-up and props. If you have and artistic bent or enjoy building things, using a hammer and nail or a skill saw, we meet one or two Saturdays during show times to build the set.

#### French Club

French Club is an activity-based club, open to all students interested in French culture. The club meets each month with seasonal activities including Halloween, Christmas, Mardi Gras and Valentines Day as they are celebrated in France. Other activities include French videos and preparing French foods. The year-end activity is a dinner at a French restaurant. Come celebrate everything French with us — allez viens!

## Future Farmers of America

The primary purpose of FFA is to serve young people who are interested in a variety of agriculture careers. In FFA students learn by doing. Students will develop personal and leadership skills they will use the rest of their lives. FFA members experience a variety of activities including career development and community service.

Students must be enrolled in an Agricultural Class to be an FFA member.

# National Honor Society

Membership in the National Honor Society is one of the highest honors that can be awarded to a High School student. The NHS strives to bring the accomplishments of outstanding students to the attention of parents, teachers, peers and community. No student is automatically inducted simply because of a high academic achievement. Students are nominated based on a cumulative grade point average of 3.0. Each student nominated may seek membership by completing the required paperwork by the deadline. A five member faculty committee then makes the final selection of members.

### Natural Helpers Program

Natural Helpers is a student organization that strives to improve the condition of the community around us through volunteer work such as: helping serve dinner at Rockford Rescue Mission, organize a holiday food and clothing drive, visit Maple Crest Nursing Home, and make Easter baskets for Catholic Charities. We also raise money throughout the year to help others in need by doing fun activities such as selling candy bars and planning a spaghetti dinner.

#### Spanish Club

The North Boone High School Spanish Club, "Los Companeros" is open to those students who are currently enrolled or have been enrolled in Spanish. The Spanish Club exists mainly to allow students to engage in activities beyond those of the classroom. The club seeks to enable interested students to familiarize themselves with the habits, dialects and customs of the Spanish speaking people by offering trips abroad and through other field trips.

#### Spirit Club

Spirit Club is open to all students. Purpose of the club is to get all students involved to attend games, design a spirit shirt and support our teams. 1<sup>st</sup> meeting is at the beginning of basketball season.

#### **Student Council**

Student Council is a student government organization working for academic and social improvement at North Boone High School. Student Council, "Stu-Co", actively works for open communication between the high school, middle school, elementary schools, and the community. Three representatives from each class are elected by the student body and two representatives from each class are selected "at large".

Among the many projects Stu-Co is involved in ranges from Homecoming events, staff breakfasts, teacher appreciation week, NBHS wall of pride, donations for those in need and school assemblies. Student representatives need to be dependable, have a good attitude, and be willing to work.

#### Students Against Destructive Decisions (S.A.D.D.)

S.A.D.D. is a peer leadership organization dedicated to preventing underage drinking and drug use by focusing attention on the potentially life threatening consequences of destructive decisions. Issues discussed include not wearing safety belts when in a car, sexually transmitted diseases, smoking, steroid use, and suicide. S.A.D.D. also addresses violence, bullying, and harassment.

S.A.D.D.'s mission is to provide students with the best prevention and intervention tools possible to deal with many issues facing today's teens.

#### Change Inc.

Change Inc. is an organization that is all about students with respect. We have adopted the Mission Statement of "Instead of letting our differences divide us, we will celebrate them." We also have the following as our Unity Code:

- We will not make assumptions about who people are.
- We will respect individuality without prejudgment.
- We will attempt to resolve our difference without verbal or physical abuse.

## INTERSCHOLASTIC ACTIVITIES

#### **SPORTS**

Fall: Cross Country, Football, Soccer, Volleyball

Winter: Basketball, Wrestling

Spring: Baseball, Golf, Soccer, Softball, Track

All sports are part of the Big Northern Conference and are offered to students in grades 9-12.

#### **CHEERLEADING**

Fall: Varsity and Junior Varsity Football
Winter: Varsity and Junior Varsity Basketball

Cheerleading tryouts are usually held in Spring for the following year. Everyone is welcome to try out. New cheerleaders are encouraged to attend cheerleading camp during the summer. Cheerleaders need a good positive attitude and a willingness to work together as a team. Our major goal is to build school spirit at North Boone.



# nsportation, Automotive Technology

## **COURSE DESCRIPTIONS**

The following Automotive Technology courses are offered for juniors and seniors. Check with your high school counselor for course locations, times, and registration procedures. Courses are offered at RVC and local High Schools. Enrollment is limited.

#### Introduction to Brake and Chassis Systems

Open to: Juniors and Seniors

The Introduction to Brake and Chassis Systems course offers the student an introduction to automotive brake and steering/suspension systems. Theory and operation of these systems is covered. Students will complete basic service procedures on brake and steering/suspension systems to prepare them for initial employment in the automotive service industry and further training in the Automotive Service Technology program. Safety in the use of automotive tools, equipment and chemicals is also covered.

Credit: 3 semester hours

RVC#: ATM 105

CEANCI #: 75003

Introduction to Automotive Electrical Systems and Powertrains

Open to: Juniors and Seniors

The Introduction to Automotive Electrical Systems and Powertrains course offers the student an introduction to automotive electrical and engine/transmission systems. Theory and operation of these systems is covered. Students will complete basic service procedures on electrical and engine/transmission systems to prepare them for initial employment in the automotive service industry and further training in the Automotive Service Technology program. Safety in the use of automotive tools, equipment and chemicals is also covered.

Credit: 3 semester hours RVC#: ATM 106 CEANCI #: 75004

#### Engine Diagnosis and Repair

Open to: Juniors and Seniors

The Engine Diagnosis and Repair course provides basic information on gasoline engine theory, construction, systems, and diagnosis. This information will be applied to mechanical testing and repair procedures for the entire engine. The school provides late model engines for disassembly and reassembly. Live cylinder head work will be provided by the student.

Credit: 6 semester hours

RVC#: ATM 140

CEANCI #: 75007

Brakes

Open to: Seniors

The Brakes course continues the student's studies of automotive brake systems. This course covers in depth diagnosis, service, and repair procedures of base brake systems and anti-lock brake systems. Live work will be performed on customer vehicles in a real-world shop environment.

Credit: 4 semester hours

RVC#: ATM 114

CEANCI #: 75006

#### Automotive Electrical Fundamentals

Automotive Electronic Fundamentals is a continuation of Introduction to Automotive Electrical Systems and Powertrains. This class will emphasize electrical and electronic theory and analysis and introduce students to solid-state electronic components and systems. Students will determine circuit types and analyze both mathematically and with a digital multimeter.

Prerequisite: ATM 105, ATM 106 or consent of instructor.

Credits: 4 semester hours RVC#: ATM 107 CEANCI #: 75005

#### Steering and Suspension

Open to: Juniors and Seniors

Open to: Seniors

The Steering and Suspension course continues the student's studies of automotive steering and suspension systems. This course covers in-depth diagnosis, service, and repair procedures of steering and suspension systems, and electronic suspension and steering. Live work will be performed on customer vehicles in a real-world shop environment.

Credit: 4 semester hours

RVC#: ATM 221

For the listed course(s), students may be eligible to receive Rock Valley College dual or articulated credit. For dual or articulated credit requirements, students should contact their high school counselor or the Rock Valley College, HIGH SCHOOL CONNECTIONS office.

Career College courses are taken for College credit and can lead to a certificate.



# Certified Manufacturing Associate

Open to: Seniors

Open to: Seniors

Open to: Seniors

Open to: Seniors

## **COURSE DESCIPTIONS**

The following Certified Manufacturing Associate courses are offered for seniors. Check with your high school counselor for course location, times, and admission procedures. The program has special requirements and requires admission to Rock Valley College. One-year of high school Algebra and a 2.0 or higher grade point average on a 4.0 scale are required.

#### CNC Machine Setup/Operation - MET 120

CNC Machine setup/Operation studies the setup and operations of computer numerical control (CNC) machine tools. The course is designed to provide knowledge on the latest CNC machines using turning centers and machining centers in the CIM Laboratory. Lecture and laboratory projects emphasize practical problems, demonstrations, and student operations of CNC equipment.

Credit: 2 semester hours

CEANCI#: 76003

#### Fundamentals of CNC Programming (Manual) - MET 121

Fundamentals of CNC Programming (Manual) are a study of the fundamentals of computer numerical control programming for machine tools within the manufacturing environment. Emphasis is on application, operation of a CNC program, tooling and machines. Students will write programs and verify those using machine or computer graphics.

Credit: 2 semester hours

CEANCI#: 76004

#### Introductory CAD and Blueprint Reading - MET 100

Introductory Drafting and Blueprint Reading is designed for the student without recent high school or industrial drafting experience. The basic concepts required to create and interpret industrial drawings are presented and practiced. This course provides the fundamental information required to interpret drawings for the required dimensions and tolerances, shape descriptions, machine operations, notes, symbols, and other pertinent data.

Credit: 3 semester hours

#### Manufacturing Processes I - MET 110

Manufacturing Processes I provides an introduction to machining processes including milling, turning, grinding, drilling, and cutoff operations. Laboratory activities include the fundamentals of machine operations, tooling, precision measurements, process safety, care and maintenance. This course is offered at a regional training center in partnership with Rock Valley College. Prerequisite: CDT 100 or consent of instructor.

Credit: 3 semester hours

Open to: Seniors

Metrology I introduces the science of measurement for engineering technicians, machinists, and technical personnel through basic measurement principles, selection, operation, and application of English and Metric measuring instruments. Lecture and lab exercises cover basic dimensional metrology, measuring instruments, gauging, high-amplification comparators, surface plates, angular instruments, sine bar, pneumatic gauging, and CMM systems. Related topics introduce data analysis, variable versus attribute, MSA, calibration systems, and modern standards for quality systems and metrology.

Credit: 3 semester hours

During their spring semester, students may apply for the College's *Career Advancement Program (CAP)*. CAP is a two year paid cooperative education partnership with area employers. CAP students receive an Associate in Applied Technology at the end of two years.

Career College courses are taken for College credit and can lead to a certificate.



# Certified Nursing Assistant

## COURSE DESCIPTIONS

The following Health Science courses are offered for seniors. Check with your high school counselor for course location, times, and admission procedures. The CNA program has special requirements and requires admission to Rock Valley College. Enrollment is limited.

#### Nursing Aide - NAD 101

Open to: Seniors

*Nursing Aide* provides an introduction to the principles of patient care. Emphasis is placed on communications and technical skills necessary to function as an important member of the nursing team. Students are given opportunities to develop their skills in a variety of classroom and clinical settings. (Approved by the Illinois Department of Public Health.)

Credit: 6 semester hours

CEANCI#: 50104

#### Introduction Health Care Careers - HLT 101

Open to: Seniors

An introduction to health care and health care careers. Topics: Health, illness, lifestyles and common illnesses; human response to illness and the needs of clients who are experiencing illness, health care delivery systems and issues for health care systems and care providers; and employment and careers.

Credit: 2 semester hours

CEANCI #: 50002

Students completing NAD 101 *Nursing Aide* are eligible to sit for the Illinois Certification as a Nursing Assistant (CNA) test.

Career College courses are taken for College credit.



# Cisco Networking

## **COURSE DESCIPTIONS**

The following Cisco Networking courses are offered for juniors and seniors. In the two-year high school Cisco Networking program, students will take four Cisco Networking Academy courses and may earn a Cisco Certified Networking Associate (CCNA). Check with your high school counselor for course locations, times, and registration procedures. Enrollment is limited.

A+ Part 1	Open to: Sophomores, Juniors and Seniors
information security skills, safe	vledge in the latest hardware and software technologies, ety and environmental issues, and soft skills for career This curriculum is provided online and aligns with the new
Prerequisites: Computer expe	erience and interest in Computer Networking.
A+ Part 2	Open to: Sophomores, Juniors and Seniors
opportunities for students to p	ed computer concepts in greater depth and provides articipate in hands on labs in advanced installation of networks, and computer security. This curriculum is the new Comp TIA A+
Cisco Networking I	Open to: Juniors and Seniors
program. Topics include in this oprotocols, safety, cabling, router	e first of four courses in the Cisco Networking Academy course are networking standards, networking terminology, rs, and addressing. Decision-making and problem-solving e network problems. Additional instruction is provided in re, tools, and equipment.
Prerequisites: Computer expe	erience and interest in Computer Networking.
Cisco Networking II	Open to: Juniors and Seniors
Networking Academy program.	ies is the second course of four courses in the Cisco Topics included in this course are safety, standards,

Networking Academy program. Topics included in this course are safety, standards, TCP/IP, routing, and administration. Decision-making and problem-solving techniques are applied to solve network problems.

## Cisco Networking III

Advance Routing and Switching is the third course of four courses in the Cisco Networking Academy program. Topics included in this course are advanced router configuration, LAN switching, network management, and advanced network design. LAN segmentation and fast Ethernet will also be covered.

Open to: Seniors

Prerequisites: Successful completion of Cisco Networking II.

#### Cisco Networking IV

Open to: Seniors

WAN Networking Design is the fourth course of four courses in the Cisco Networking Academy program. Topics included in this course are advanced network design projects and advanced network management projects. ISDN and PPP are some of the other topics included in this class.

For the listed course(s), students may be eligible to receive Rock Valley College dual or articulated credit. For dual or articulated credit requirements, students should contact their high school counselor or the Rock Valley College, HIGH SCHOOL CONNECTIONS office.





## **COURSE DESCRIPTIONS**

The following Construction courses are offered for sophomores, juniors and seniors. Check with your high school counselor for course locations, times, and registration procedures. Enrollment is limited.

	Construction I	
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Open to: Sophomores Juniors, Seniors

Construction I Trades provides experience related to the design and construction of residential buildings. Planned learning activities allow students to become knowledgeable of fundamental principles and methods necessary to design, and construct a building in the classroom. Typical duty areas covered include: Applying safety practices, constructing concrete masonry, sharpening tools, installing rough framing, installing roof components, installing exterior finishes, and using climbing equipment.

## Construction II

Open to: Sophomores, Juniors, Seniors

Construction II is designed to provide experiences related to the finishing of the interior of a building. Mastery of tasks related to interior finishing and cabinet construction and installation are the focus of this course. Typical duty areas covered include: Applying safety practices, estimating materials, sharpening tools, installing interior finishes, assembling and constructing stairs, installing lighting fixtures, installing switch boxes and outlet boxes, trimming out electrical devices and appliances, and finishing surfaces.

For the listed course(s), students may be eligible to receive Rock Valley College dual or articulated credit. For dual or articulated credit requirements, students should contact their high school counselor or the Rock Valley College, HIGH SCHOOL CONNECTIONS office.





## **COURSE DESCRIPTIONS**

The following Engineering Project Lead the Way courses are offered for freshmen, sophomores, juniors, and seniors. Check with your high school counselor for course locations, times, and registration procedures. Enrollment is limited.

Introduction to Engineering Design

Open to: Freshmen, Sophomores, Juniors, Seniors

Introduction to Engineering Design is a course that teaches problem solving skills using a design development process. Students use computer software to produce, analyze, and evaluate models of project solutions. They study the design concepts of form and function, and then use state of-the-art technology to translate conceptual design into reproducible products. Students will be engaged in team work and apply adaptive design concepts in developing sketches, featured parts & assemblies, and map property calculations will be used to evaluate parametric models. Additionally a portfolio will be demonstrated with an understanding of cost analysis, quality control, marketing, and staffing.

Prerequisites: Interest in Engineering.

#### Principles of Engineering

Open to: Freshmen, Sophomores, Juniors, Seniors

Principles of Engineering is a broad based course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students participate in the design, development, construction, and testing of several projects. The projects are designed to develop the student's skills in planning and design and problem solving. Projects include a marble sorter, ballistics launcher, simple machine, bridge, and materials testing. Student's learning is enhanced through the use of programming, modeling, static engineering, and materials testing software. Math and science concepts and methods are introduced and reinforced. Students will also do research projects using the internet and other sources. Microsoft Word, Excel, and PowerPoint are introduced in order for the student to complete assignments and present his/her work.

Prerequisites: Interest in Engineering.

#### Digital Electronics

Open to: Sophomores, Juniors Seniors

Digital Electronics introduces students to applied digital logic, a key element of careers in engineering and engineering technology. This course explores the smart circuits found in watches, calculators, video games and computers. Students use industry standard computer software in testing and analyzing digital circuitry. They design circuits to solve problems, export their designs to a printer circuit auto routing program that generates printed circuit boards and use appropriate components to build their designs. Students us mathematics and science in solving world engineering problems. This course covers several topics including: analog and digital fundamentals, number systems and binary addition, logic gates and functions, Boolean algebra and circuit design, decoders, multiplexers and de-multiplexers.

Prerequisites: Completed Principles of Engineering or Introduction to Engineering Design

#### Civil Engineering and Architecture

Open to: Juniors, and Seniors

Civil Engineering and Architecture provides an overview of the fields of Civil Engineering and Architecture, while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art 3D software, Revit, to document projects, solve real world problems, and communicate solutions to their peers and members of the professional community through hands-on projects and activities. This course covers topics including the roles of civil engineers and architects, project planning, site planning, building design, and project documentation and presentation.

Prerequisites: Completion of two of three Principles of Engineering, Introduction to

Engineering Design, and Digital Electronics sequence.

#### Computer Integrated Manufacturing

Open to: Juniors, and Seniors

Computer Integrated Manufacturing (CIM) is a course that applies principles of prototyping, robotics, and automation. It builds on the sold modeling skills developed in IED. You will use computer-controlled rapid prototyping and CNC equipment to solve problems by constructing models of their three dimensional designs. You'll also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. You'll evaluate your design solutions using various techniques and modifications before you produce the prototype.

**Prerequisites:** Completion of two of three *Principles of Engineering, Introduction to Engineering Design, and Digital Electronics* sequence.

#### Engineering Design & Development

Open to: Juniors, and Seniors

Engineering Design and Development is a capstone course designed for students wishing to continue their pre-engineering experiences in the Project Lead the Way curriculum. Students will use mathematical analysis, scientific inquiry and engineering design, as appropriate to pose questions, seek answers, and develop an individual project. Emphasis is placed on demonstrations, discussions, and hands-on projects. Supplies needed for the course will cost approximately \$25.00.

**Prerequisites:** Completion of any two of the following courses: *Principals of Engineering, Introduction to Engineering Design, Digital Electronics, Civil Engineering and Architecture, Computer Integrated Manufacturing.* One must be *Principles of Engineering or, Introduction to Engineering Design.* 

For the listed course(s), students may be eligible to receive Rock Valley College dual or articulated credit. For dual or articulated credit requirements, students should contact their high school counselor or the Rock Valley College, HIGH SCHOOL CONNECTIONS office.



# Graphic Communications

## COURSE DESCRIPTIONS

The following Graphic Communication courses are offered for juniors and seniors. Check with your high school counselor for course locations, times, and registration procedures. Enrollment is limited.

Introduction to Graphic Communications

Open to: Freshman, Sophomores, Juniors and Seniors

Introduction to Graphic Communications is a one-year course for high school juniors and seniors. The course includes a variety of graphic arts technology introductory learning experiences. Students will be introduced to the printing industry and the many career opportunities. Areas covered will include digital file preparation, image captures, digital file output, printing press operation, and binding and finishing. Students will also be taught industry/equipment safety procedures, housekeeping, recording keeping, and math/science skills related to the printing industry. A course portfolio is required for students working toward \*PrintED® Certification at Harlem and, Hononegah.

#### **Production Printing**

Open to: Junior, Seniors

This course is on-the-job training in Harlem's print shop designed to prepare students for careers in the printing industry. Current technology is utilized in the production of printed material including digital file preparation and output, image capture, offset and digital press operations, binding, and finishing. Students will follow safety, housekeeping, and record keeping procedures. They will design and produce printed material for nonprofit organizations in addition to inner-school and district projects. Field trips are taken to printing establishments enabling students to relate their training to actual jobs. Students may elect to take the PIA exam for certification in Graphic Communications. A course portfolio is also required to receive PrintEd Certification.

**Prerequisites:** C or better in *Introduction to Graphic Communications* and instructor approval.

For the listed course(s), students may be eligible to receive Rock Valley College dual or articulated credit. For dual or articulated credit requirements, students should contact their high school counselor or the Rock Valley College, HIGH SCHOOL CONNECTIONS office.



# JAVA Programming

The following JAVA Programming course is offered for seniors. Check with your high school counselor for course locations, times, and registration procedures. Enrollment is limited.

CIS 240 Introduction to JAVA Programming

Open to: Seniors

Introduction to JAVA Programming is a course designed to introduce the student to JAVA software development. Students will write platform-independent object-oriented code for conventional, Internet- and Intranet-based applets and applications. Topics covered include graphical user interface (GUI) development; multimedia (images, animation, and audio); graphics strings, exception and security; application portability. A number of programming assignments will be given to enable the student to build real-world JAVA applications.

Prerequisites: Computer experience and interest in Computer Programming.

For the listed course, students may receive Rock Valley College credit toward the College's Associate in Applied Science Degree. For college credit requirements, student should contact their high school counselor or the Rock Valley College, High School Connections office.



## **COURSE DESCRIPTIONS**

The following Welding Technology courses are offered for juniors and seniors. Check with your high school counselor for course locations, times, and registration procedures. Courses are offered at RVC and local High Schools. Enrollment is limited.

#### Basic Gas and Electric Welding

Open to: Juniors, Seniors

Basic Gas and Electric Welding concentrates on oxygen acetylene, SMAW, and gas metal arc welding on mild steel. An emphasis is placed on techniques and safety. Students may receive dual Kishwaukee College credit for WT 116 Basic Gas and Electric Welding.

Prerequisites: Interest in manufacturing welding and/or related field.

## M.I.G. Welding WLD 157

Open to: Juniors, Seniors

M.I.G. Welding covers M.I.G. (wire) welding in all positions on plate. Safety rules and equipment will be emphasized.

Credit: 3 semester hours

CEANC#: 76014

## Fundamentals of Welding Theory WLD 100

Open to: Juniors, Seniors

Fundamentals of Welding Theory: introduces students to high tech welding through theory and hands on lab. Special emphasis is placed on welding and cutting safety as well as welding terms. Basic blueprint reading, metallurgy, welding codes and symbols are also covered.

Credit 3 semester hours

#### Arc Welding: Flat WLD 153

Open to: Juniors, Seniors

Arc Welding: Flat covers electric welding on plate in the flat position. Safety rules and equipment usage are emphasized. An introduction to oxygen acetylene cutting is covered.

Credit: 3 semester hours

CEANC#: 76012

## Arc Welding Horizontal WLD 155

Open to: Juniors, Seniors

Arc Welding: Horizontal covers electric welding on plate in the horizontal position. Safety rules and equipment usage will be emphasized. Oxygen acetylene burning will also be covered.

Credit: 3 semester hours

CEANC#: 76013

Prerequisites: WLD 153 Arc Welding Flat

## Advanced Industrial Welding

Open to: Juniors, Seniors

Advanced Industrial Welding offers training in shielded metal arc welding, gas metal arc welding, and multiple pass welding in all positions on mild steel. Emphasis is placed on efficient production welding. Students may receive dual Kishwaukee College credit for WT 218 Advanced Industrial Welding.

Prerequisites: Basic Gas and Electric Welding

For the listed course(s), students may be eligible to receive Rock Valley College dual or articulated credit. For dual or articulated credit requirements, students should contact their high school counselor or the Rock Valley College, HIGH SCHOOL CONNECTIONS office.

Career College courses are taken for College credit and can lead to a certificate.