

ATTACHMENT NO. XI-D: High School Curriculum Proposals

Potential motion: Move to approve the adoption of six new curriculum proposals for the 2013-2014 school year.

Recommended action: Approve the motion.

On November 19, 2012, the C.I.A. Committee: Curriculum, Instruction, Assessment met to consider several new curriculum course proposals from NBHS staff. After discussion of the merits, need and advantages of each course proposed, the Committee recommended the following:

1. ACT Reading – Given Elective Credit, not English credit; however, the intention is to motivate students to improve and prepare for the ACT test. This course would eliminate the Reading Skills Lab 12 test. We feel it makes more sense to provide a supportive course prior to the PSAE than a “punishment” course after the PSAE. We would also like to eliminate the Math Skills Lab course requirement for students failing the math section of the PSAE. Mr. Hubert and the NBHS staff will present some alternative motivational strategies for encouraging PSAE performance later in the spring.
2. AP Chemistry – Designed to give those higher achieving students another science option and prepare students for the AP exam. It would be taught in sequence AFTER Honors Chemistry; most likely as an alternating offering with AP Biology.
3. AP Psychology – To fill the need for an AP course in this discipline. It would most likely result in the reduction of the number of Diversity Sections and we feel is a stronger college preparatory option for students.
4. Career Exploration and Post-Secondary Planning – To assist those students who do not intent to go to college focus on the type of work for which to prepare. We would like to see this as a sophomore option over time and potentially helping to direct some students towards CEANCI programming.
5. Honors Algebra II – A more in-depth and intensive course with a rigorous schedule, including some Statistics and Trigonometry within the course.
  - a. Honors Geometry – An entry level course for our 9<sup>th</sup> graders who will be coming from NBMS prepared for Geometry as an entry level course. This course would complete the honors sequence for math students.
6. Landscaping and Turf Management – For those students interested in future studies in architecture. Would attract students from other school districts through CEANCI and/or other partnerships and may lead to a summer internship options in the future.

ATTACHMENT NO. XI-D

Attached are the course proposals and Mrs. Peed's summary of what other districts in the area are doing and the potential impact of each of these courses on staffing, etc.

Also included are the survey results from the Course Survey sent out to staff, students and parents.

## Course Study

### Potential New Course Offerings – NBHS 2013

**Course:** Landscaping and Turf Management

**Department:** Agriculture

**Staffing:** Proposed by Sarah Timmons

**Staffing Impact:** Sarah is currently teaching a full-time load of five agriculture elective classes. While her classes are picking up steam as far as enrollment, all are under enrolled (between 8 and 22 students). There is room to consolidate and offer some courses on an every other year basis.

Current Teaching Load:

Expression	Term	Course #	Course	Sec #	Room	Enrollment
P2(A)	<u>S1</u>	4001	<u>Intro.to Ag.Industry</u>	<u>1</u>	120	<u>15</u>
P3(A)	<u>S1</u>	4531	<u>Ag. Biotechnology I</u>	<u>1</u>	120	<u>15</u>
P4(A) A50(A)	<u>S1</u>	4201	<u>Ag Env Studies I</u>	<u>1</u>	120	<u>14</u>
P5(A)	<u>S1</u>	4511	<u>Ag. Sales &amp; Marketing I</u>	<u>1</u>	120	<u>15</u>
P7(A) A29(A)	<u>S1</u>	4011	<u>Basic Ag.Sci.</u>	<u>1</u>	120	<u>22</u>
P2(A)	<u>S2</u>	4002	<u>Intro.to Ag.Industry</u>	<u>1</u>	120	<u>15</u>
P3(A)	<u>S2</u>	4532	<u>Ag. Biotechnology II</u>	<u>1</u>	120	<u>17</u>
P4(A) A50(A)	<u>S2</u>	4202	<u>Ag Env Studies II</u>	<u>1</u>	120	<u>16</u>
P5(A)	<u>S2</u>	4512	<u>Ag. Sales &amp; Marketing II</u>	<u>1</u>	120	<u>8</u>
P7(A) A29(A)	<u>S2</u>	4012	<u>Basic Ag Sci.</u>	<u>1</u>	120	<u>20</u>

**Departmental Sequence:**

	<i>ORIENTATION LEVEL COURSES</i> <i>(9<sup>th</sup> &amp; 10<sup>th</sup>)</i>	<i>PREPARATION LEVEL COURSES</i> <i>(11<sup>th</sup> &amp; 12<sup>th</sup>)</i>
<b>Agricultural Business Management</b>	<ul style="list-style-type: none"> <li>• Introduction to the Agricultural Industry</li> <li>• Basic Agricultural Science</li> </ul>	<ul style="list-style-type: none"> <li>• Agricultural Business Management</li> <li>• Agricultural Business Sales &amp; Marketing</li> </ul>
<b>Agricultural Science</b>	<ul style="list-style-type: none"> <li>• Introduction to the Agricultural Industry</li> <li>• Basic Agricultural Science</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculture Environmental Science</li> <li>• Agricultural Biotechnology</li> </ul>

**Departmental Offerings:**

Same as courses taught, she is the only Agriculture teacher.

**Our Neighbors:**

## **Belvidere North**

### ***Horticulture Production and Management 1 Credit Grades 11-12***

Prerequisite:

This course offers students opportunities to develop skills needed for employment in the Horticulture industry. Instruction includes both floriculture and landscaping. Units of study will include greenhouse management, growing crops in the greenhouse, care and handling of cut flowers, and floral design. Also included are landscape design, installation, and maintenance. Students will also learn nursery management and turf production. This course makes extensive use of the greenhouse facility. (16007, Horticulture Production and Management)

## **Hononegah**

### **Ornamental Horticulture I (Year-2 credits 10, 11,12) Course #206**

(CEANCI #16003)

This is a basic course in the methods and procedures needed for the growth and care of plants for their aesthetic and ornamental use in society. Included are topics on careers in Horticulture, basic botany, floriculture and flower arranging, care and establishment of houseplants, poinsettia production and care, soil science—including container soils and amendments, landscape design and installation, landscape maintenance, transplanting trees and shrubs, bedding plant production and turf grasses. This course is project orientated and makes use of the greenhouse and opportunities to plant outdoors in the spring as well as help maintain the school landscape. This course does not meet accreditation as a lab science requirement for college admissions.

### **Ornamental Horticulture II (Year-2 credits 11,12) Course #208**

(CEANCI #16005)

*Prerequisite: Ornamental Horticulture I.*

This advanced course builds on knowledge obtained from Ornamental Horticulture I. Included are topics on experimental techniques, plant insects and disease, flower and vegetable gardening, sexual and asexual production, budding and grafting, plant growth and development, pesticide safety and use. Also covered are greenhouse management, pruning fruit trees, hydroponics, soil fertility, herb production and careers in horticulture. This course does not meet college requirements as a lab science.

## **Boylan**

**No Agriculture, but offers a Botany/Zoology Course**

### **INTRODUCTION TO BOTANY/ZOOLOGY 531**

1 Credit Full Year Elective: Grade 11

Prerequisite: Biology 523

Introduction to Botany/Zoology is a laboratory course surveying plants and animals. This course is designed to compliment the material in Biology 523.

## **Marengo**

### **LANDSCAPING & TURFGRASS MANAGEMENT 311/312 (10,11,12) (YEAR) (1-CREDIT - G)**

This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of study include: identifying landscape plants, designing landscape plans, hardscape construction techniques, and installing landscape plants. Also included are nursery production, turfgrass production, small engine repair, and maintenance of existing landscapes. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising, and sales. Improving computer and workplace skills will be a focus.

Offered In 2013-2014 (alternate years)

**HORTICULTURE PRODUCTION & GREENHOUSE MANAGEMENT 315/316** (10,11,12) (YEAR)  
(1 CREDIT - G)

This course provides students with an introduction to the following areas of study: greenhouse crops, nursery crops, floral arranging, landscape designing, and vegetable production. The course includes selected laboratory experiments and "hands-on" projects to reinforce classroom instruction.

Offered In 2012-2013 (alternate years)

**Course:** AP Chemistry

**Department:** Science

**Staffing:** Proposed by Matt Sbertoli

**Staffing Impact:** Below is Matt's current teaching load, he is full time with 5 classes each semester. The Environmental Science sections are not as full as they could be, depending on demand they could be consolidated to another teacher (currently Hayden has two sections with similar numbers). Based on what other schools are doing and the rigor of AP Chemistry, I would not recommend replacing General or Honors Chemistry with AP Chemistry, but rather having it as an upper level option (See Our Neighbors, for more information).

Current Teaching Load:

Expression	Term	Course #	Course	Sec #	Room	Enrollment
P1(A)	S1	8101	Environmental Science	3	212	20
P2(A)	S1	8250	General Chemistry	1	212	17
P3(A)	S1	8201	Biology	1	212	30
P4(A) A50(A)	S1	8250	General Chemistry	2	212	17
P7(A) A29(A)	S1	8250	General Chemistry	3	212	24
P3(A)	S2	8202	Biology	1	212	22
P4(A) A50(A)	S2	8251	General Chemistry	1	212	22
P5(A)	S2	8102	Environmental Science	3	212	21
P6(A)	S2	8251	General Chemistry	2	212	25
P7(A) A29(A)	S2	8251	General Chemistry	3	212	18

Sequence: NBHS Science Sequence

All students must earn three (3) credits in science (1 credit in Biology). 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>	11 <sup>th</sup>	12 <sup>th</sup>
Biology Concepts	Earth Science	Environmental Science	General Chemistry
Biology (C or lower)	Earth Science General Chemistry	Environmental Science	General Chemistry Honors Physics
Biology (B or higher)	General Chemistry Honors Chemistry I	Honors Physics AP Biology (even)	Honors Physics AP Biology (12-13)

		AP Chemistry (odd)	AP Chemistry (13-14)
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Departmental Offerings:

Biology Concepts (8198/8199, 1.0 Credit, Grades 9,10) Hayden – 1 Section  
 Biology (8201/8202, 1.0 Credit, Grades 9, 10) Sbertoli & Stachowiak-Brady – 4 Sections  
 Earth Science (8010/8011, 1 Credit, Grade 10) – Hayden – 2 Sections  
 Environmental Science (8101/8102, 1 Credit, Grades 10, 11, 12) Hayden & Sbertoli – 3 Sections  
 General Chemistry (8250/8251, 1.0 Credit, Grades 10, 11, 12) Sbertoli & Vickery – 5 Sections  
 Honors Chemistry I (8401/8402, 1.0 Credit, Grades 10, 11, 12) Vickery – 2 Sections  
 Advanced Placement (AP) Biology (8301/8302, 1.0 Credit, Grades 11, 12) Stachowiak-Brady – 2 Sections  
 Honors Physics (8601/8602, 1.0 Credit, Grades 11, 12) Vickery – 1 Section

Our Neighbors:

**Belvidere North**

***Advanced Placement (AP) Chemistry 1 Credit Grades 11-12***

Prerequisite: Biology and Chemistry

**Note:** It is advisable that students enrolling in this course have earned at least C's in Algebra and Chemistry. AP Chemistry is the equivalent of a first-year, college, general chemistry course. The course builds on material covered in Chemistry or Chemistry Ac. Emphasis is placed on laboratory activities which include recording data properly, doing calculations related to the data and solving problems. Problem solving is a very important part of this course. Students are given a large amount of responsibility for the learning activities during the year. At the end of the course students have the option of taking the Advanced Placement (AP) examination in chemistry which may lead to earning first year chemistry credit or advanced standing in college. Grades are based on laboratory write-ups, research papers, problem sets, and unit tests.

**Hononegah**

***Advanced Placement (AP) Chemistry 1 Credit Grades 11-12***

Prerequisite: Biology and Chemistry

**Note:** It is advisable that students enrolling in this course have earned at least C's in Algebra and Chemistry. AP Chemistry is the equivalent of a first-year, college, general chemistry course. The course builds on material covered in Chemistry or Chemistry Ac. Emphasis is placed on laboratory activities which include recording data properly, doing calculations related to the data and solving problems. Problem solving is a very important part of this course. Students are given a large amount of responsibility for the learning activities during the year. At the end of the course students have the option of taking the Advanced Placement (AP) examination in chemistry which may lead to earning first year chemistry credit or advanced standing in college. Grades are based on laboratory write-ups, research papers, problem sets, and unit tests.

**Boylan**

**ADVANCED PLACEMENT CHEMISTRY 558 (A.P.)**

1 Credit Full Year Elective: Grades 11, 12

**Prerequisite: B or better in Chemistry 537**

Corequisite: Physics 545 or 547 and fourth year of math

This course is intended for the student planning to major in science or engineering. A.P. Chemistry provides a solid foundation in reaction stoichiometry, kinetics and equilibrium. The course also provides a rigorous treatment of atomic theory as well as kinetics, gas laws, acid-base equilibrium, and oxidation-reduction. A short introduction to organic chemistry is also included. Students are required to take the A.P. exam in May. Class fee includes the exam cost.

### **Marengo**

#### **CHEMISTRY AP 231/232 (11,12) (1 CREDIT - H)**

AP Chemistry is equivalent to an introductory freshmen level college chemistry class. Emphasis is placed on lab skills, critical thinking logic and the problem solving skills necessary to pass the AP exam. Student must maintain a "C" or better in the first semester to maintain enrollment.

*PREREQUISITE:* "B" or better in both semesters of Accelerated Chemistry or "A" or better in both semesters of Chemistry plus necessary summer preparation, additional time commitment (early start), and teacher recommendation.



**Course:** Psychology or AP Psychology

**Department:** Social Studies

**Staffing:** Proposed by Brian Arenz

**Staffing Impact:** Brian is full time teaching 5 sections each term. He teaches the required Government course as well as the wildly popular Diversity class. There is potential space in Social studies as Deb Torrison currently teaches 3 sections of Compass Learning, which could be managed by someone else. Adding this course may impact enrollment in other social studies AP course as well as elective like Sociology, Economics, Diversity, and Current Events. With purposeful planning though I think it would be an exciting addition to our offerings.

Current Teaching Load:

Expression	Term	Course #	Course	Sec #	Room	Enrollment
P1(A)	<u>S1</u>	9500	<u>Amer.Govt.</u>	<u>1</u>	224	<u>30</u>
P3(A)	<u>S1</u>	9500	<u>Amer.Govt.</u>	<u>2</u>	224	<u>26</u>
P4(A) A50(A)	<u>S1</u>	9500	<u>Amer.Govt.</u>	<u>3</u>	224	<u>26</u>
P6(A)	<u>S1</u>	9610	<u>Diversity</u>	<u>1</u>	224	<u>22</u>
P7(A) A29(A)	<u>S1</u>	9610	<u>Diversity</u>	<u>2</u>	224	<u>23</u>
P1(A)	<u>S2</u>	9500	<u>Amer.Govt.</u>	<u>4</u>	224	<u>17</u>
P3(A)	<u>S2</u>	9610	<u>Diversity</u>	<u>3</u>	224	<u>27</u>
P4(A) A50(A)	<u>S2</u>	9500	<u>Amer.Govt.</u>	<u>5</u>	224	<u>17</u>
P5(A)	<u>S2</u>	9500	<u>Amer.Govt.</u>	<u>6</u>	224	<u>23</u>
P6(A)	<u>S2</u>	9610	<u>Diversity</u>	<u>4</u>	224	<u>26</u>

**Sequence:** Students are required to earn 2.5 credits in Social Studies. One credit must be U.S. History or AP U.S. History, 0.5 credit in American Government, and 1 credit in World Cultures or Honors World Cultures.

Also, students must pass the State-mandated Constitution test given in American Government class.

**Departmental Offerings:**

World Cultures (9401/9402, 1.0 Credit, Grades 9) Baker – 4 Sections

Honors World Cultures (9403/9404, 1.0 Credit, Grades 9) Baker – 1 Section

U.S. History (9201/9202, 1.0 Credit, Grades 10, 11) Brady – 4 Sections

Advanced Placement (AP) U.S. History (9301/9302, 1.0 Credit, Grade 10, 11, 12) Brady – 1 Section

Advanced Placement (AP) World History (9470/9471, 1.0 Credit, Grades 10, 11, 12) Torrison – 1 Section\*

Advanced Placement (AP) Human Geography (9475/9476, 1.0 Credit, Grades 10, 11, 12) 2013-14\*

American Government (9500, 0.5 Credit, Grades 11, 12) Arenz – 6 Sections

Current Events (9600, 0.5 Credit, Grades 11, 12) Torrison – 2 Sections

Diversity: Race, Prejudice, and Discrimination (9610, 0.5 Credit, Grades 11, 12) Arenz – 4 Sections

Economics (9800, 0.5 Credit, Grades 11, 12) Torrison – 1 Section\*

Sociology (9900, 0.5 Credit, Grades 11, 12) 2013-14\*

\*Every other year rotation

### **Our Neighbors:**

#### **Belvidere North**

##### ***Psychology .5 Credit Grades 10-12***

Prerequisite:

This course examines the influences that affect the formation of behavior patterns in humans. Units of instruction include: History of Psychology and Experimental Design, Human Growth and Development, Personality Development, and Stress, Biological Basis of Behavior, Sensation and Perception, and Learning & Psychological Disorders. Class activities include lecture, discussion, lab activities, extra readings, and written assignments. Students electing to take this course thereby agree to participate in class experiments.

##### ***Psychology 2 .5 Credit Grades 10-12***

Prerequisite: Psychology

This course is a continuation of Psychology. Units of instruction include Psychological Therapies, States of Consciousness, Thinking & Language, Motivation & Emotion, Psychological Testing, and Intelligence & Social Psychology. This course concludes with a major cumulative project.

##### ***Advanced Placement (AP) Psychology .5 Credit Grades 10-12***

Prerequisite: Psychology

The goals of this course are to learn about the discipline of Psychology, to prepare students to for taking the AP exam in Psychology, and to experience the rigor of college level work while in high school. Emphasis is placed on application of theories from the introductory psychology class as well as new topics. Units of study include: Advanced Personality Theory, Psychological Disorders & Psychological Therapies, Experimental Design & Intelligence, Cognition, Motivation & Emotion, and Social Psychology. Critical thinking is essential to this course. Students will be required to complete application projects and critical thinking exercises as written assignments. The course concludes with a comprehensive book review on a psychological topic.

#### **Hononegah**

##### **Social Psychology (1 semester-1 credit 11,12) Course #328**

This is a reading and writing intensive course. This one-semester course introduces the student to the study of individual behavior. Topics studied will include perception, learning, intelligence, creativity, life cycles from birth to death, the brain, states of consciousness, personality and abnormal behavior. Required projects will include book reports and reaction papers. Methods of evaluation include objective and essay tests. Students who take Social Psychology are not eligible to take AP Psychology.

##### **AP Psychology (Year-2 credits 10,11,12) Course #215**

The AP course in Psychology will introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Coursework will be taught and assessed at the college level in preparation for the AP Psychology Exam. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice. Each of the units is linked to the type of research methodology that

supports and/or produces the information. Students will understand and critique descriptive, predictive, and experimental research methods while applying critical thinking skills and enhanced writing skills that promote clarity and knowledge of concepts using appropriate terminology. Student evaluations include tests, homework, presentations, and class projects. **Students who have taken Social Psychology are not eligible to take this course.**

### **Boylan**

#### **PSYCHOLOGY 454(2)**

½ Credit One Semester Elective: Grade 12

Prerequisite: Signature of current History teacher ½ Credit One Semester Elective: Grade 12

Prerequisite: Signature of current History teacher

This introduction to the study of the science of psychology will encourage students to consider how psychological concepts apply to everyday living. Topics will include: myth vs. fact regarding psychology as a science, human development, states of consciousness, sensation/perception, learning, memory, psychological disorders, and social psychology.

#### **PSYCHOLOGY 455 (1) 456 (2) (Academic)**

½ Credit One Semester Elective: Grade 12

Prerequisite: Signature of current History teacher

This is a semester-long introduction to the study of psychology, the science of behavior and mental processes. Topics include: what psychology is and how psychologists study people, human development, states of consciousness, learning, memory, psychological disorders, and social psychology. Students will be required to complete a semester project.

#### **PSYCHOLOGY 457 (1) 458 (2) (Honors)**

½ Credit One Semester Elective: Grade 12

Prerequisite: Signature of current history teacher

This is a semester-long introduction to the study of psychology, the science of behavior and mental processes. Topics include: what psychology is and how psychologists study people, the brain and its relationship to human behavior, sensation and perception, states of consciousness, thinking and language, psychological disorders, and types of therapy. Students will be required to complete a semester project. Class is quick paced and writing-intensive.

#### **ADVANCED PLACEMENT PSYCHOLOGY 459(1) 460(2) (A.P.)**

½ Credit One Semester Elective: Grade 12

Prerequisite: Signature of current history teacher

Advanced Placement Psychology is an introductory college level psychology class. The course curriculum includes physiological psychology, developmental psychology, motivation and emotion, altered states of consciousness, learning, memory and mental illness. All students in this course are required to take the A.P. exam in May and a non-refundable fee for the A.P. exam is required.

### **Marengo**

#### **PSYCHOLOGY 291 (11,12) (SEMESTER) (1/2 CREDIT - G)**

This is a study of basic psychological concepts and their applications. Topics include psychological methods and measurement, human development and motivation, theories of personality, principles of learning, intelligence and creativity, and personality disturbances. NOTE: Students should have at least average reading skills.

**Course:** Honors Algebra II

**Department:** Mathematics

**Staffing:** Proposed by Dustin Berthold

**Staffing Impact:** Dustin is currently teach a full load in Algebra II, which he shares with Bart Zadlo, he also teaches Statistics and AP Statistics. I feel that one section could be converted into an Honors level dependent on student grades and demands. It would behoove us to consider this for Geometry as well so that a student could follow an all Honors/AP track in math if they wish to do so. AP Statistics could easily be one section, as there were many course drops.

Current Teaching Load:

Expression	Term	Course #	Course	Sec #	Room	Enrollment
P1(A)	S1	6748	Statistics	1	216	22
P2(A)	S1	6321	Algebra II	1	216	28
P3(A)	S1	6750	AP Statistics	1	216	14
P6(A)	S1	6750	AP Statistics	2	216	11
P7(A) A29(A)	S1	6321	Algebra II	2	216	29
P1(A)	S2	6749	Statistics	1	216	24
P2(A)	S2	6751	AP Statistics	1	216	14
P4(A) A50(A)	S2	6322	Algebra II	1	216	20
P6(A)	S2	6751	AP Statistics	2	216	10
P7(A) A29(A)	S2	6322	Algebra II	2	216	28

**Sequence:**

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

Math Sequence

9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Algebra Concepts	Geometry Concepts	Integrated Algebra II	Pre-Calc w/ Trig AP Statistics
Algebra I	Geometry	Algebra II	AP Statistics (H) Pre-Calc w/ Trig
Geometry	Algebra II	AP Statistics H Pre-Calc w/ Trig	AP Statistics AP Calculus

## **Departmental Offerings:**

Our Neighbors:

### **Belvidere North**

#### ***Algebra 2 Ac 1 Credit Grade 10***

Prerequisite: Geometry Ac

Algebra 2 Ac is the third course in the accelerated math program designed to challenge and motivate the best mathematics students. Students receive an enriched content of Algebra 1 and Algebra 2 topics. Review and drill are kept to a minimum. Computer applications and work with graphing calculators are included where appropriate. Emphasis is placed on depth of content and problem solving skills in addition to developing algebraic skills. It is recommended that students have a Texas Instrument graphing calculator. Sophomores who wish to take Algebra 2 Ac and Geometry simultaneously may do so, but must have teacher and parent permission.

### **Hononegah**

#### **Honors Algebra II (Year-2 credits 10, 11) Course #118**

*Prerequisite: A grade of "A" in Geometry or recommendation of math teachers.*

In addition to the concepts studied in Algebra II, this course will also cover probability, matrices, conics and trigonometric functions. Students enrolling in this course will be challenged to use higher order thinking skills to solve challenging problems and are expected to complete a project in addition to their regular daily assignments.

### **Boylan**

#### **ALGEBRA 2 WITH TRIGONOMETRY 335 (Academic)**

1 Credit Full Year Elective: Grades 10-12

Prerequisite: 314 and 324 with test average of "B" or better or 315 and 325 with test average of "C" or better, departmental approval.

"TI 83 Plus" or "TI 84 Plus" calculator required

This is the second year of algebra in which the structure and properties of real numbers are reviewed and extended. Problem solving techniques are developed for problems dealing with mixtures, uniform motion, work and percentages. Other topics include linear, quadratic and polynomial functions, systems of equations, irrational and complex numbers, exponential and logarithmic functions, progressions, factoring and graphing linear and quadratic inequalities. Trigonometry and analytic geometry are also covered in this course.

### **Marengo**

#### **ALGEBRA II HONORS 141/142 (10,11,12) (YEAR) (1 CREDIT - H)**

This course is an extension of Algebra I and requires some familiarity with geometry. Students will solve problems and equations involving linear functions, systems of equations, radicals and irrational numbers, complex numbers, and polynomials. Homework will be required almost daily. *PREREQUISITE:* Algebra I and Geometry

**Course:** Freshman Orientation Class

**Department:** Social Science

**Staffing:** Would be taught by World Cultures Teacher – currently Phil Baker

**Staffing Impact:** Currently the World Cultures courses are full. This would create minimal impact if it was offered as part of the existing curriculum. We would need to re-evaluate our graduation requirements if it were to become a semester long class, as currently two semesters of world history/ world geography are required for graduation from NBHS. Lastly, many colleges require world history and/or world geography for admission.

**Sequence:** NA

**Departmental Offerings:** (see AP Psych for social science departmental offerings)

**Our Neighbors:**

**Belvidere North**

Does not offer a mentoring or Freshman orientation course.

**Hononegah**

Does not offer a mentoring or Freshman orientation course.

**Boylan**

**CRITICAL THINKING** Required: Grade 9 ¼ Credit

Critical Thinking is a mini-course required of all freshmen. The concepts are taught in a large group lecture followed by small group activities that give the students a chance to apply the concepts. The topics covered include the basics of logic, common errors in reasoning, scholarly debates, and using critical thinking to interpret advertisements and propaganda.

**Marengo**

**FRESHMEN MENTORING PROGRAM**

The Freshman Mentoring Program is a program that provides assistance and support for *every* incoming freshman that passes through the doors of MCHS, to manage a comfortable transition to high school. Freshmen meet with their mentor groups two times a month for the first semester of school. Mentors are juniors and seniors who will act as a friend and a guide to freshmen and teach them all about MCHS. Mentors should possess leadership characteristics, be mature and dependable, outgoing and friendly and be involved in school activities. Mentors need to apply in March, meet the requirements and then go through a selection and interview process.

**Richmond Burton Community High School**

Freshmen Seminar

.5 credit (Class of 2015)

Beginning with the Class of 2015, all freshmen enrolled at RBCHS will be required to take this pass/fail course.

The course is designed to provide structured support and enrichment in the areas of Reading and Mathematics.

Classroom activities will be largely determined by individual student ability levels and will include computer-based

lessons and some independent work.

Course: ACT Reading Lab/ ACT Math Lab

Department: English/Math

Staffing: Weiffenbach/Prohaska and Math Staff

Staffing Impact: We currently offer PSAE remediation labs for Seniors that did not meet state standards on their Reading and Math exams. We have offered labs for Juniors in the past, the degree of success was not assessed. This course will pull an English and Math faculty member from another teaching obligation which could create the ability to offer less courses. If it were to replace the existing Senior labs, then we have the ability to accommodate that with our current staffing.

Sequence: NA

Departmental Offerings:

**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.

**(Old Offering 2010-11 and 2011-12) 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.

**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.

**(Old Offering 2010-11 and 2011-12) 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.

Our Neighbors:

**Belvidere North**

No similar course is offered.

**Hononegah**

**Math PSAE Preparation (1 semester-1 credit 11) Course #190/191**

*1st Sem./2nd Sem.*

*Prerequisite: Required for students who need additional math preparation prior to the PSAE Test.*

Math PSAE Preparation is a required course for students in danger of not meeting the minimum mathematics standards on the PSAE Exam. The placement of students in the course is based on detailed data analysis. The focus of the course will be the development of test taking strategies as well as a comprehensive coverage of all topics covered on the PSAE Exam. The course will review the following topics: whole numbers, rational numbers, integers, percents, statistics, proportions, exponents and radicals, algebraic operations, equations and inequalities, geometry, functions, and story problems.

**Boylan**

No similar course is offered.

Marengo

No similar course is offered.



Course: Career Exploration and Post-Secondary Planning

Department: Student Services

Staffing: Proposed by Tracy Peed, School Counselor

Sequence: NA

Departmental Offerings: NA

Our Neighbors:

**Belvidere North**

No similar course is offered.

**Hononegah**

**Career/Consumer Education (1 semester-1 credit 11,12) Course #340**

The first nine weeks of this course will introduce the student to the principles of the American economy and prepare them to make informed economic decisions. They will have hands-on experience of buying and selling stock by participating in a stock market simulation. The second nine weeks emphasizes career opportunities (including a Job Shadowing experience), college planning, budgeting, taxes, banking, etc. Daily reading and occasional out-of-class assignment/projects can be expected. Grades will be based on performance on tests, quizzes, assignments and projects.

**This course may not be accepted by colleges and universities for Social Studies credit.**

**Boylan**





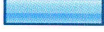


No similar course is offered.

**Marengo**

**COLLEGE IN HIGH SCHOOL**

“College in High School” is a high school course of study that teaches specific career and technical skills. It begins with a solid foundation of applied academics in English, math, and science. In the junior and senior years, the emphasis will include training in specialized technical courses. Students may participate in work-site training to gain practical, on-the-job experience. One of the best things is that it doesn’t end after high school. Students have the option of articulating courses with McHenry County College, attending a four-year college, or continuing with the work experience.

## 1. Please indicate your current grade/status:

		Response Percent	Response Count
Grade 8		11.1%	22
Grade 9		10.1%	20
Grade 10		12.1%	24
Grade 11		13.1%	26
Grade 12		15.1%	30
<b>Parent/Guardian</b>		<b>25.1%</b>	<b>50</b>
Staff Member		13.6%	27
<b>answered question</b>			<b>199</b>
<b>skipped question</b>			<b>0</b>

**2. Freshman Orientation: This course would be required for all grade 9 students.**

**Description:** The Freshman Orientation class would be a required course for incoming freshman designed to assist them in becoming successful in high school. Students who come to high school don't often know how to study for finals and struggle with term papers. This class will help establish the expectations of the high school while developing the student's ability to make good sound decisions and use critical thinking skills. Students will also have the opportunity to work through character building units to assist them through the social situations they are exposed to as teenagers. Students will also have the opportunity to use Career Cruising, which is a software high school students can use to give them focus and direction for a future beyond high school.

		Response Percent	Response Count
Yes, I would take this course [Would have wanted to take it as a Freshman?]		45.9%	72
Maybe		25.5%	40
No, I am not interested in this course		28.7%	45
		answered question	157
		skipped question	42




**3. Career Exploration and Post Secondary Planning: This course would be a semester long elective available to 10-12 grade students. Description: Making the connection between high school curriculum and career/post-secondary options is vital and necessary for our students' future success. The Career Exploration and Post-Secondary Planning Course will offer students the opportunity to explore who they are, and their related interests, attitudes, values, and beliefs regarding the world of work. It will help to foster connections between high school pathways of study and career outcomes. Finally, the students will be able to decide on a plan of action to pursue their career(s) of choice. Experiential learning, guest presenters, use of technology and relevant topical information will allow students to maximize their career potential and decision-making.**

		Response Percent	Response Count
Yes, I would take this course		57.1%	92
Maybe		29.2%	47
No, I am not interested in this course		13.7%	22
answered question			161
skipped question			38




**4. Advanced Placement (AP) Chemistry: This year-long course would be open to students in grades 11 & 12. Description: This course builds a greater understanding of the concepts and processes of chemistry through meaningful laboratory experiences, improves analytical skills, and prepares student for the AP Chemistry examination.**

		Response Percent	Response Count
Yes, I would take this course		45.6%	73
Maybe		32.5%	52
No, I am not interested in this course		21.9%	35
answered question			160
skipped question			39




**5. Advanced Placement (AP) Psychology: This course would be open to students in grades 11 & 12. Description: This course is designed to introduce students to the science and study of the behavior and processes of the human mind.**

		Response Percent	Response Count
Yes, I would take this course		51.6%	81
Maybe		25.5%	40
No, I am not interested in this course		22.9%	36
answered question			157
skipped question			42

**6. Honors Algebra II: This course would be open to students with an A in Geometry or a B (with a teacher recommendation). Description: This course is an accelerated course in Algebra II for the student with greater aptitude and interest in math. Topics of Algebra II are studied in much greater depth and intensity using a variety of mathematical methods. These topics include: systems of equations, matrices, linear and quadratic functions, polynomials, conics, logarithms, sequences and series, and probability. Further development of critical thinking skills is stressed. This course prepares the student for Honors Pre-Calculus.**

		Response Percent	Response Count
Yes, I would take this course		57.5%	92
Maybe		20.6%	33
No, I am not interested in this course		21.9%	35
answered question			160
skipped question			39

**7. Landscaping and Turf Management: Open to any student who has taken Intro to Agriculture. Description: This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of student learning include: identifying landscape plants, designing landscape plans, hardscape construction techniques, and installing landscape plants. Also included are nursery production, turfgrass production, small engine repair, and maintenance of existing landscapes. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising, and sales. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience projects are in integral course component for leadership development, career exploration and reinforcement of academic concepts.**

		Response Percent	Response Count
Yes, I would take this course		34.4%	55
Maybe		26.3%	42
No, I am not interested in this course		39.4%	63
		answered question	160
		skipped question	39

**8. What course or courses would you like to see offered at NBHS, that are not currently offered or proposed above?**

	Response Count
	77
answered question	77
skipped question	122

Question 8 - Course Requests

Comments	Classes we have	Business Classes	Agriculture	Science Classes	Electives	ARTS	Language	Social Studies	Math	Clubs	Sports
More Honors and AP Classes No high school prep class Motivational speaker and team building for all Blue Collar classes Keep French	AP Music Theory Honors Chem. II AP Classes (AB/BC) Physics Accounting II Consumer Ed Journalism Grammar classes Biology Accounting House hold budget/checkbook Classes to prepare for college Able to take college courses while in HS Statistics Honors Chem. II Child Care Entrepreneurship	More computer classes (3) Advanced computers no AP Managing money Business courses Business communication More classes related to Bus Law classes	Conservation Forestry	Marine Biology Anatomy (3) Veterinarian Physiology (2) More health classes/nurses Health II Medical terminology	Metal shop Wood working (8) Shop Class (9) Automotive (18) Mechanics (4) Welding (2) Aviation Tech oriented/ projects Construction CDL class Construction/blue print Vocational classes Electrical engineering Pre-engineering Drafting Manufacturing Electronics Life skills	Photography (2) Fashion design (5) Sewing Graphic design Animation Course Music editing Culinary arts/cooking Beautician More art classes Cosmetics fine arts	German (5) Spanish Native Speakers (2) Chinese Latin Russian More foreign language Sign language	Psychology (3) Honors Geometry Separate FR from lower learners	Honors Geometry Separate FR from lower learners	Boating Non-credit school work club Mentoring club/ Structured ROTC Program	Tennis Swimming

Question 8 Answers (77 Responses)

drafting

11/17/2012 9:11 PM [View Responses](#)

Continue to increase the Honors and AP Selections. Not necessary to have a required class devoted to preparing a student for high school. This should be incorporated in middle school not required to take away from other academically challenging classes that are available in high school.

11/17/2012 1:50 PM [View Responses](#)

sign language automotive managing money veterinarian classroom part for getting your CDL  
accounting beautician tennis and swimming

11/16/2012 2:30 PM [View Responses](#)

something do do with manufacturing/automotive. woodshop or metal shop - we had these in junior high in belvidere years ago not sure if they still have

11/16/2012 10:03 AM [View Responses](#)

Ap music theory

11/16/2012 9:19 AM [View Responses](#)

Marine Biology

11/16/2012 8:18 AM [View Responses](#)

more computer classes

11/16/2012 8:16 AM [View Responses](#)

A conservation or Forestry class would be a nice addition to Ag i think. Also possibly bringing back honors Chem 2?

11/16/2012 7:53 AM [View Responses](#)

Anatomy and Physiology

11/15/2012 7:43 PM [View Responses](#)



Anatomy and Physiology

11/15/2012 7:42 PM [View Responses](#)

Pre-engineering & Shop

11/15/2012 6:35 PM [View Responses](#)

Psychology

11/15/2012 5:42 PM [View Responses](#)

This may already exist and I am just unaware as my child is in 8th grade. I would like to see a partnership between north boone and possibly rock valley that 11-12 grade students with enough credits who are not likely to attend a 4yr college can go to trade school while in high school for a fee of course, yet have a skill leaving high school to ensure some type of employment

11/15/2012 4:20 PM [View Responses](#)

Automotive

11/15/2012 3:45 PM [View Responses](#)

German.

11/15/2012 10:24 AM [View Responses](#)

coarses that have to do with entrpneuership, managing a business, etc.

11/15/2012 9:28 AM [View Responses](#)

AUTO/SHOP/MECHANICS CLASS?

11/15/2012 9:26 AM [View Responses](#)

An ROTC program

11/15/2012 9:14 AM [View Responses](#)

honors world languages Spanish for Native Speakers

11/15/2012 9:05 AM [View Responses](#)

Law classes

11/15/2012 8:06 AM [View Responses](#)

What about courses in Electrical Engineering, Automotive, Welding, Child Care. I feel our students need more of the Blue Collar interests. Also, How about some team building courses and motivational speakers for the students and staff..... also targeting our coaches (team building)

11/15/2012 7:20 AM [View Responses](#)

Mechanics and/or shop class

11/15/2012 6:29 AM [View Responses](#)

Statistics for sure. Something to do with construction like say blueprint reading, and something to do with maybe electronics. North Boone does not offer much in the way of life skills outside of cooking.

11/15/2012 5:05 AM [View Responses](#)

prepare for college, able to take college courses while in high school.

11/14/2012 11:22 PM [View Responses](#)

Auto shop

11/14/2012 10:49 PM [View Responses](#)

I think some vocational classes would be a big help to the students

11/14/2012 8:39 PM [View Responses](#)

automotive

11/14/2012 8:35 PM [View Responses](#)

More choices for electives such as woodshop, automotive, fashion, sewing.

11/14/2012 8:32 PM [View Responses](#)

More art classes. The ones offered now are of no value. More foreign language classes other than just French and Spanish.

11/14/2012 8:18 PM [View Responses](#)

More courses related to business, home economics (cooking), advanced (not AP) computer & technology courses. There should also be non-credit after school homework clubs and mentoring that are structured.

11/14/2012 7:40 PM [View Responses](#)

Business communication

11/14/2012 7:24 PM [View Responses](#)

aviation classes

11/14/2012 7:21 PM [View Responses](#)

Biology, Medical Terminology

11/14/2012 7:08 PM [View Responses](#)

Continue to offer French as a foreign language. Not all of us want to learn or have our children learn Spanish.

11/14/2012 6:56 PM [View Responses](#)

More technology-oriented courses. Sections that are project based.

11/14/2012 6:34 PM [View Responses](#)

auto, or shop classes

11/14/2012 6:32 PM [View Responses](#)

How to actually do a household budget should also be required. There are so many that don't even know how to write a check or put it into a checkbook because of all the technology.

11/14/2012 6:30 PM [View Responses](#)

German language, Anatomy,

11/14/2012 6:28 PM [View Responses](#)

Mechanical Classes such as but not limited to wood working, car repair (shop class), and basic construction (trade classes)

11/14/2012 6:13 PM [View Responses](#)

Wood shop, auto machanics, welding,

11/14/2012 6:10 PM [View Responses](#)

Accounting II

11/14/2012 5:36 PM [View Responses](#)

Fashion design

11/14/2012 5:20 PM [View Responses](#)

designing

11/14/2012 4:42 PM [View Responses](#)

photography culinary arts/Cooking music editing

11/14/2012 3:32 PM [View Responses](#)

Cosmetics Fine arts

11/14/2012 3:31 PM [View Responses](#)

Consumer Ed/Business course

11/14/2012 11:29 AM [View Responses](#)

Journalism

11/14/2012 11:02 AM [View Responses](#)

German language,chinese language

11/14/2012 10:07 AM [View Responses](#)

I would like to see more health classes at NBHS. I would like to go into the medical field and be a Heart surgeon so I would love a little more classes about the human body and certain parts of it.

11/14/2012 9:56 AM [View Responses](#)

I would have liked to take the course of a grammer class.

11/14/2012 9:40 AM [View Responses](#)

shop and mechanics

11/14/2012 9:39 AM [View Responses](#)

shop/autos and psychology and fashion and alot of interesting courses?

11/14/2012 9:39 AM [View Responses](#)

autotech

11/14/2012 9:37 AM [View Responses](#)

Automotive Class

11/14/2012 9:37 AM [View Responses](#)

automotive in house

11/14/2012 9:35 AM [View Responses](#)

auto

11/14/2012 9:35 AM [View Responses](#)

Shop class! Wood and Car

11/14/2012 9:34 AM [View Responses](#)

German Language Courses Latin Language Courses Russian Language Courses Graphic Design Courses Animation Courses

11/14/2012 9:34 AM [View Responses](#)

Shop Class

11/14/2012 9:34 AM [View Responses](#)

shop class

11/14/2012 9:33 AM [View Responses](#)

Wood Shop

11/14/2012 9:33 AM [View Responses](#)

physics

11/14/2012 9:31 AM [View Responses](#)

shopclass

11/14/2012 9:30 AM [View Responses](#)

German language class

11/14/2012 9:28 AM [View Responses](#)

Shop

11/14/2012 9:27 AM [View Responses](#)

Photography Fashion Auto

11/14/2012 9:27 AM [View Responses](#)

Boxing club

11/14/2012 9:26 AM [View Responses](#)

Psychology

11/14/2012 9:26 AM [View Responses](#)

more computer

11/14/2012 9:25 AM [View Responses](#)

shop

11/14/2012 9:25 AM [View Responses](#)

More computer classes.

11/14/2012 9:24 AM [View Responses](#)

Spanish for native speakers

11/13/2012 3:52 PM [View Responses](#)

Honors Geometry separate freshman from lower level learners

11/13/2012 3:31 PM [View Responses](#)

AP CALCULUS (AB/BC)

11/13/2012 2:43 PM [View Responses](#)

Woodworking/Shop

11/13/2012 2:06 PM [View Responses](#)

Health 2

11/13/2012 12:10 AM [View Responses](#)

Honors Chemistry II

11/13/2012 12:05 AM [View Responses](#)

# HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME      ACT Reading

OLD COURSE NAME (if applicable)

SUBMITTED BY      Cari Weiffenbach and Kathleen Prohaska

Underline the Appropriate Item:      New Course / Major revision to an existing course

Implementation Date: 2013/2014 School Year

Person(s) who will write the Curriculum: Cari Weiffenbach, Kathleen Prohaska, and Lori Graciana

Respond to the following:

Duration:      Semester Long

Open to:      Students who are within three points of meeting standards on their spring PLAN scores

Prerequisites:      None

Pass/Fail Option:      Students will be given a grade.

Credit:      Elective Credit

**If the course meets a graduation requirement, which one does meet?**

Elective

**Where does this course fit into department sequence?**

This course will *not* take the place of any English class offerings. It will be used to provide extra enrichment to students that are preparing to take their PSAE in the spring of grade 11.

**What is the potential impact of this course on the other department offerings?**

This course will not impact any required courses.

## **Course Description**

The purpose of ACT Reading is to assist students in preparing to take the ACT portion of their PSAE test in the areas of English and reading. This program will provide instruction in reading techniques, a review of grammar rules, practical test-taking strategies, and multiple opportunities to take practice English and reading ACT tests. After each test, students will have an opportunity to conference with the teacher and receive immediate feedback on their scores. Students will also have access to prepare online via [www.actonlineprep.com](http://www.actonlineprep.com) and [www.keytrain.com](http://www.keytrain.com) (an online

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# HIGH SCHOOL CURRICULUM PROPOSAL

program to help students raise their Work Keys scores. The Work Keys section is the second day of PSAE testing.)

**Special Notes (i.e., extended periods, team teaching, etc.)**

## RATIONALE, OBJECTIVES, STRATEGIES

### 1. Course Rationale

The evidence of student need for this course is revealed in students' past scores on the ACT and PLAN test.

This course will meet the following department goals:

Students will improve their ACT test scores in English and reading.

This course would meet the following instruction goals:

Students will improve their ACT scores in the areas of English and reading.

Students will improve their grammar mechanics and usage through a variety of instruction and assessment.

Students will improve their reading fluency in nonfiction literature.

Students will improve their reading fluency in fictional literature.

This class would be aligned to the following ELA Common Core standards:

RL. 11-12. 1.

RL. 11-12. 2.

RL.11-12.3.

RL.11-12.4.

RL. 11-12.5.

RL. 11-12. 6

RL. 11-12. 10.

RI. 11-12. 1

RI. 11-12.2.

RI. 11-12. 6

RI. 11-12. 10.

L. 11-12.1.

L. 11-12.2.

L. 11-12.5.

L. 11-12.6.

### 2. Course Objectives: What will each student learn and know?

At the completion of this course, students will:

- Be better prepared to handle the reading portion of the ACT
- Have improved their test-taking skills – with an emphasis on the reading and English portions of the test
- Be aware of various techniques useful in test-taking situations

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# HIGH SCHOOL CURRICULUM PROPOSAL

### **3. What types of instructional strategies will be used in the class?**

The following instructional methods will be used:

- Direct Instruction
- Guided Study
- Independent Learning
- Group Work

### **4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?**

Students will be assessed on participation and tests. There will be no homework given to students who take ACT Reading. Students will be given a number of practice tests which will be scored and handed back to the student for conferencing and goal setting. Students will also work on in-class assignments and timed readings. These assignments will have a participation grade.

### **5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.**

Kathleen Prohaska has offered to instruct the course. She currently works at Sylvan as a test prep instructor, so she is knowledgeable in ACT preparation. The only resources that the class would need are access to computers, licensing for KeyTrain, ACT online test preparation licensing (which the school already has), and ACT Test preparation books (which the school already has through Cambridge).

### **Include any additional information pertinent to your course.**

A student who raises his or her ACT score does a valuable service for himself or herself and for the school. A student will find that achieving a high ACT score will open the door to new opportunities such as college admission and scholarships.

## HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME                      AP Chemistry

OLD COURSE NAME (if applicable)

SUBMITTED BY     Matt Sbertoli

Underline the Appropriate Item:     New Course / Major revision to an existing course

Implementation Date: August 2013

Person(s) who will write the Curriculum: Matthew Sbertoli

Respond to the following:

Duration:     Fall/Spring – Year long course

Open to: Students who exceed the requirements of Honors Chemistry

Prerequisites: A or B in Honors Chemistry, as well as exceed the requirements given by Math class to be discussed with Mrs. Peed

Pass/Fail Option:     No

Credit:            Honors/AP Credit for Science will be given

**If the course meets a graduation requirement, which one does meet?**

This meets 1 year of the 3 year Science requirement at NBHS.

**Where does this course fit into department sequence?**

This course must come after Honors Chemistry.

**What is the potential impact of this course on the other department offerings?**

This may impact the current Honors Physics enrollment.

### **Course Description**

This course builds a greater understanding of the concepts and processes of chemistry through a meaningful laboratory experience; improves analytical skills, and prepares students for the Advanced Placement exam given in the Spring.

**Special Notes (i.e., extended periods, team teaching, etc.)**

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# HIGH SCHOOL CURRICULUM PROPOSAL

## RATIONALE, OBJECTIVES, STRATEGIES

### 1. Course Rationale

#### A) What is the evidence of student need for this course?

The idea is that AP Biology and AP Chemistry will be alternated, giving the higher achieving students a course option.

#### B) What departmental needs/goals would this course meet?

This gives our department an offering for the highest achieving students a course option.

#### C) What institutional needs/goals would this course meet?

Same as our departmental needs.

### 2. Course Objectives: What will each student learn and know?

Students will learn about Atoms, Stoichiometry, Types of Reactions, Gases, Thermochemistry, Atomic Structure, Bonding, Covalent Bonds, Liquids and Solids, Properties of Solutions, Kinetics, Chemical Equilibrium, Acids and Bases, and Applications of Aqueous Equilibria.

### 3. What types of instructional strategies will be used in the class?

Lecture, Laboratory, Testing practice, independent practice, activities, graph interpretation, data interpretation.

### 4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?

Students will be tested informally through questioning and daily work through their homework. Students will be formally tested through exams to prepare them for the AP Test. A great deal of the time will also be laboratory assignments.

### 5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.

Textbooks will need to be ordered, as well as lab equipment as recommended by the AP Chemistry textbook and AP curriculum guidelines.

**Include any additional information pertinent to your course.**

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## HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME      **AP Psychology**

SUBMITTED BY                      **Brian Arenz**

Underline the Appropriate Item:      New Course / Major revision to an existing course

Implementation Date:                      **Fall of 2013**

Person(s) who will write the Curriculum: **Brian Arenz**

Duration:                              **Full Year Course**

Open to:                                **Juniors and Seniors**

Prerequisites:                        **None**

Pass/Fail Option:                      **No**

Credit:                                 **1 Credit**

If the course meets a graduation requirement, which one does meet?  
**This course would meet the Social Studies requirements to graduate, as well as preparing the students for college with the rigors of an AP course.**

Where does this course fit into department sequence?  
**This course would be an elective that students would take after completing AP Human Geography, AP US History, and other challenging courses.**

What is the potential impact of this course on the other department offerings?  
**This may have to take the place of a Diversity class. Diversity is an excellent class that is shaped around the ideals of a sociology course. However, the addition of an AP Psychology course would greatly enhance the preparedness of students for college, as well as enhance the reputation of the school by adding an AP course that 65.5% of all students get a 3 or better.**

### Course Description

**“The AP Psychology Course is designed to introduce students to the systematic study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about ethics and methods psychologists use in their science and practice.” From the Advanced Placement Course Handbook.**

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# HIGH SCHOOL CURRICULUM PROPOSAL

## RATIONALE, OBJECTIVES, STRATEGIES

### 1. Course Rationale

#### A) What is the evidence of student need for this course?

The study of psychology is one of the most fascinating fields today. In the AP course, they will gain a better understanding of why their mind works the way it does, and why people do the things they do. While this is a rigorous course, students often enjoy Psychology more than any other AP offering simply because it is one that translates to their everyday lives most apparently.

#### B) What departmental needs/goals would this course meet?

This course satisfies the Psychology aspect of Social Studies and would further the department's AP offerings.

#### C) What institutional needs/goals would this course meet?

As a school, it is the goal to prepare students by helping them master content, and further prepare them for education beyond just high school. AP courses are designed as college level courses, thus giving them credit but also a chance to understand the demands that need to be met at the next level in order to succeed.

### 2. Course Objectives: What will each student learn and know?

Attached to this proposal is the AP Course Curriculum outline. It specifies exactly what types of psychologies, study standards, sciences, and methods that are used in the Psychology field.

### 3. What types of instructional strategies will be used in the class?

There will be many different styles of instructional strategies used in the classroom. Most frequently will be there will be lecturing, as this is the main strategy used in a college-level class. However, activities will also be instilled in the class curriculum as a means of enriching the materials being covered in a particular unit. It is also important to keep in mind these students are still in high school, and despite their prior academic achievements, stimulating and enriching activities are still required.

### 4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?

The most important assessment in this class is the AP Exam. Scoring a "3" or better on the exam will ensure some college credit for the students at the next level. There will also be exams given along the way in order to check on preparedness for said AP Exam.

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## HIGH SCHOOL CURRICULUM PROPOSAL

**5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.**

There would require some training, as a new AP teacher there is some training required. Also, a classroom set of textbooks would also be required. There would be no new equipment or technology resources required. Everything already in the classroom would be sufficient for maximum efficiency.

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# AP Psychology

## Topic Outline

These are the major content areas covered by the AP Psychology Exam, as well as the approximate percentages of the multiple-choice section that are devoted to each area.

- I. History and Approaches (2–4%)
- II. Research Methods (6–8%)
- III. Biological Bases of Behavior (8–10%)
- IV. Sensation and Perception (7–9%)
- V. States of Consciousness (2–4%)
- VI. Learning (7–9%)
- VII. Cognition (8–10%)
- VIII. Motivation and Emotion (7–9%)
- IX. Developmental Psychology (7–9%)
- X. Personality (6–8%)
- XI. Testing and Individual Differences (5–7%)
- XII. Abnormal Psychology (7–9%)
- XIII. Treatment of Psychological Disorders (5–7%)
- XIV. Social Psychology (7–9%)

### **I. History and Approaches (2–4%)**

1. Logic, Philosophy, and History of Science
2. Approaches:
  1. Biological
  2. Behavioral
  3. Cognitive
  4. Humanistic
  5. Psychodynamic
  6. Sociocultural
  7. Evolutionary/Sociobiological

### **II. Research Methods (6–8%)**

1. Experimental, Correlational, and Clinical Research:
  1. Correlational (e.g., observational, survey, clinical)
  2. Experimental
2. Statistics:
  1. Descriptive
  2. Inferential
3. Ethics in Research

### **III. Biological Bases of Behavior (8–10%)**

1. Physiological Techniques (e.g., imaging, surgical)
2. Neuroanatomy
3. Functional Organization of Nervous System
4. Neural Transmission
5. Endocrine System
6. Genetics

### **IV. Sensation and Perception (7–9%)**

1. Thresholds
2. Sensory Mechanisms
3. Sensory Adaptation
4. Attention
5. Perceptual Processes

### **V. States of Consciousness (2–4%)**

1. Sleep and Dreaming
2. Hypnosis
3. Psychoactive Drug Effects

### **VI. Learning (7–9%)**

1. Classical Conditioning
2. Operant Conditioning
3. Cognitive Processes in Learning
4. Biological Factors
5. Social Learning

### **VII. Cognition (8–10%)**

1. Memory
2. Language
3. Thinking
4. Problem Solving and Creativity

### **VIII. Motivation and Emotion (7–9%)**

1. Biological Bases
2. Theories of Motivation
3. Hunger, Thirst, Sex, and Pain
4. Social Motives
5. Theories of Emotion
6. Stress



**IX. Developmental Psychology (7–9%)**

1. Life-Span Approach
2. Research Methods (e.g., longitudinal, cross-sectional)
3. Heredity-Environment Issues
4. Developmental Theories
5. Dimensions of Development:
  1. Physical
  2. Cognitive
  3. Social
  4. Moral
6. Sex Roles, Sex Differences

**X. Personality (6–8%)**

1. Personality Theories and Approaches
2. Assessment Techniques
3. Self-concept, Self-esteem
4. Growth and Adjustment

**XI. Testing and Individual Differences (5–7%)**

1. Standardization and Norms
2. Reliability and Validity
3. Types of Tests
4. Ethics and Standards in Testing
5. Intelligence
6. Heredity/Environment and Intelligence
7. Human Diversity

**XII. Abnormal Psychology (7–9%)**

1. Definitions of Abnormality
2. Theories of Psychopathology
3. Diagnosis of Psychopathology
4. Anxiety Disorders
5. Somatoform Disorders
6. Mood Disorders
7. Schizophrenic Disorders
8. Organic Disorders
9. Personality Disorders
10. Dissociative Disorders

**XIII. Treatment of Psychological Disorders (5–7%)**

1. Treatment Approaches:
  1. Insight Therapies:  
Psychodynamic/Humanistic Approaches
  2. Behavioral Approaches
  3. Cognitive Approaches
  4. Biological Approaches  
(psychopharmacology/psychosurgery)
2. Modes of Therapy (e.g., individual, group)
3. Community and Preventive Approaches

**XIV. Social Psychology (7–9%)**

1. Group Dynamics
2. Attribution Processes
3. Interpersonal Perception
4. Conformity, Compliance, Obedience
5. Attitudes and Attitude Change
6. Organizational Behavior
7. Aggression/Antisocial Behavior

**The Exam****About the Exam**

The two-hour exam includes a 70-minute multiple-choice section and a 50-minute free-response section.

**Section I: Multiple-Choice**

This section is designed to assess the breadth of your knowledge of the subject. The questions cover the 14 areas of scientific psychology covered in the course and described in the [Topic Outline](#). In some questions, you are asked to demonstrate your understanding of a psychological term (e.g., genotype, echoic memory, mania, phonemes). In others you are asked to apply concepts from a particular psychological theory (e.g., Kohlberg's theory of moral judgment, attribution theory) or to identify the theoretical framework with which a given explanation is associated (e.g., an explanation of depression in terms of norepinephrine levels). Other questions are designed to assess general understanding of the scientific method as well as knowledge of findings from major research studies or areas of study.

Unlike other multiple-choice tests, random guessing can hurt your final score. While you don't lose anything for leaving a question blank, one quarter of a point is subtracted for each incorrect answer on the test. But if you have some knowledge of the question and can eliminate one or more answers, it's usually to your advantage to choose what you believe is the best answer from the remaining choices.

**Section II: Free-Response**

The free-response section tests your ability to make connections among constructs from a number of the 14 content domains covered in the course. There are two questions in the free-response section. Each question incorporates concepts from a number of domains. The questions often involve application, analysis, synthesis, or a critique of psychological principles.

## Scoring the Exam

The multiple-choice section counts for two-thirds of your grade; the free-response section counts for one-third.

## Sample Questions & Scoring Guidelines

The AP Psychology Exam is two hours long. In Section I, students are given one hour and 10 minutes to answer 100 multiple-choice questions; in Section II, they must answer two free-response questions in 50 minutes.

## Multiple-Choice Questions

For sample multiple-choice questions, refer to the Course Description  
[AP Psychology Course Description \(.pdf/667K\)](#)

## Free-Response Questions

- [2008 Free-Response Questions \(.pdf/122K\)](#)
- [2007 Free-Response Questions \(.pdf/139K\)](#)
- [2006 Free-Response Questions \(.pdf/63K\)](#)
- [2005 Free-Response Questions \(.pdf/143K\)](#)
- [2004 Free-Response Questions \(.pdf/72K\)](#)
- [2003 Free-Response Questions \(.pdf/90K\)](#)
- [2002 Free-Response Questions \(.pdf/105K\)](#)

## Scoring Guidelines

- [2008 Scoring Guidelines \(.pdf/104K\)](#)
- [2007 Scoring Guidelines \(.pdf/186K\)](#)
- [2006 Scoring Guidelines \(.pdf/143K\)](#)
- [2005 Scoring Guidelines \(.pdf/124K\)](#)
- [2004 Scoring Guidelines \(.pdf/103K\)](#)

## 2007 Psychology Grade Distribution

Examination Grade	% of Students Earning Grade
5 - Extremely Well Qualified	18.8
4 - Well Qualified	26.2
3 - Qualified	20.5
2 - Possibly Qualified	13.7
1 - No Recommendation	20.8

### Additional Statistics

Mean Grade	3.09
Standard Deviation	1.41
Total Number of Students	116,128
Number of Schools Administering this AP Exam	4,257
Number of Colleges Receiving AP Grades in this Subject	2,357

## HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME: Career Exploration & Post-Secondary Planning

OLD COURSE NAME (if applicable): NA

SUBMITTED BY: Tracy Peed – Professional School Counselor

Underline the Appropriate Item: New Course / Major revision to an existing course

Implementation Date: 2013-2014 School Year

Person(s) who will write the Curriculum: Tracy Peed

Respond to the following:

Duration: Semester – I would like to teach a section each semester if there is enough student demand

Open to: Sophomores-Seniors

Prerequisites: None

Pass/Fail Option: NA

Credit: Elective

**If the course meets a graduation requirement, which one does meet?**

NA

**Where does this course fit into department sequence?**

NA

**What is the potential impact of this course on the other department offerings?**

We are in need of additional elective courses.

### **Course Description**

Making the connection between high school curriculum and career/post-secondary options is vital and necessary for our students' future success. The Career Exploration and Post-Secondary Planning Course will offer students the opportunity to explore who they are, and their related interests, attitudes, values, and beliefs regarding the world of work. It will help to foster connections between high school pathways of study and career outcomes. Finally, the students will be able to decide on a plan of action to pursue their career(s) of choice. Experiential learning, guest presenters, use of technology and relevant topical information will allow students to maximize their career potential and decision-making.

**Special Notes (i.e., extended periods, team teaching, etc.)**

None

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# HIGH SCHOOL CURRICULUM PROPOSAL

## RATIONALE, OBJECTIVES, STRATEGIES

### 1. Course Rationale

#### A) What is the evidence of student need for this course?

In the spring of 2010 and the spring of 2012 the counseling department assessed the needs of North Boone high school students through a counseling needs assessment. Both assessments demonstrated the needs for career and post-secondary planning assistance, support, and resources at all grade levels.

#### B) What departmental needs/goals would this course meet?

##### Needs

As a school counselor who strives to practice career development in a comprehensive fashion, the following departmental needs (taken from the counseling needs assessments) will be addressed in this course:

**Grade 9** students indicated that they needed assistance with the following career and post-secondary planning tasks within their top 10 overall counseling needs:

- 1) Obtaining information on colleges and technical schools
- 2) Knowing the education requirements for a particular occupation
- 3) Learning how different occupations can affect my future way of life
- 4) Relating my interests and abilities to my future career

**Grade 10** students indicated that they needed assistance with the following career and post-secondary planning tasks within their top 10 overall counseling needs:

- 1) Setting academic goals based on strengths and weaknesses
- 2) Obtaining information on college and technical schools
- 3) Obtaining information on financial aid and scholarships

**Grade 11** students indicated that they needed assistance with the following career and post-secondary planning tasks within their top 10 overall counseling needs:

- 1) Obtaining information on colleges and technical schools
- 2) Having easy access to counselors
- 3) Obtaining information about financial aid and scholarship
- 4) Relating my interests and abilities to my future career
- 5) Knowing the requirements for a particular occupation
- 6) Identify my interests and abilities
- 7) Setting academic goals based on my strengths and weaknesses

**Grade 12** students indicated that they needed assistance with the following career and post-secondary planning tasks within their top 10 overall needs:

- 1) Obtaining information on colleges and technical schools
- 2) Having easy access to counselors

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# HIGH SCHOOL CURRICULUM PROPOSAL

- 3) Obtaining information about financial aid and scholarship
- 4) Relating my interests and abilities to my future career
- 5) Knowing the requirements for a particular occupation
- 6) Identify my interests and abilities
- 7) Setting academic goals based on my strengths and weaknesses

## Goals

The following departmental goals will be met through this course:

- 1) **Who Am I?** Students will foster increased self-awareness, specifically in the areas of interests, skills, abilities, and values.
- 2) **Where Am I Going?** Students will understand the vast array of career options available and the pathways through which to attain them.
- 3) **How Do I Get There?** Students will develop personal goals related to their high school plan of study and their future career plans drawing on the many resources provided in class.

### **C) What institutional needs/goals would this course meet?**

I am aware that at North Boone High School and district-wide we would like to increase the number of NBHS students pursuing meaningful work and post-secondary educational opportunities. Personally and professionally, I would like to see less students, who upon graduation, are undecided or list their post high school plans as unknown. I firmly believe this undetermined plan of action sends them into a world riddled with harsh economic realities without the tools or knowledge to be successful.

## **2. Course Objectives: What will each student learn and know?**

After taking this course, students will have increased self-awareness regarding their own personal career development. Students will develop a comprehensive plan of study and career portfolio to assist them in planning for their remaining time in high school. Lastly, students will demonstrate a clear understanding of the necessary steps to take after high school in preparation for their desired career outcome.

The American School Counselor Association National Standards for career development guide school counseling programs to provide the foundation for the acquisition of skills, attitudes and knowledge that enable students to make a successful transition from school to the world of work, and from job to job across the life span. As a school counselor who subscribes to this model, the standards and objectives for this course are as follows:

**Standard A: Students will acquire the skills to investigate the world of work in relation to knowledge of self and to make informed career decisions.**

### **Objective: Students Will Develop Career Awareness**

- Develop skills to locate, evaluate and interpret career information
- Learn about the variety of traditional and nontraditional occupations

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## HIGH SCHOOL CURRICULUM PROPOSAL

- Develop an awareness of personal abilities, skills, interests and motivations
- Learn how to interact and work cooperatively in teams
- Learn to make decisions
- Learn how to set goals
- Understand the importance of planning
- Pursue and develop competency in areas of interest
- Develop hobbies and vocational interests
- Balance between work and leisure time

### **Objective: Students Will Develop Employment Readiness**

- Acquire employability skills such as working on a team, problem-solving and organizational skills
- Apply job readiness skills to seek employment opportunities
- Demonstrate knowledge about the changing workplace
- Learn about the rights and responsibilities of employers and employees
- Learn to respect individual uniqueness in the workplace
- Learn how to write a résumé
- Develop a positive attitude toward work and learning
- Understand the importance of responsibility, dependability, punctuality, integrity and effort in the workplace
- Utilize time- and task-management skills

### **Standard B: Students will employ strategies to achieve future career goals with success and satisfaction.**

#### **Objective: Students Will Acquire Career Information**

- Apply decision-making skills to career planning, course selection and career transition
- Identify personal skills, interests and abilities and relate them to current career choice
- Demonstrate knowledge of the career-planning process
- Know the various ways in which occupations can be classified
- Use research and information resources to obtain career information
- Learn to use the Internet to access career-planning information
- Describe traditional and nontraditional career choices and how they relate to career choice
- Understand how changing economic and societal needs influence employment trends and future training

#### **Objective: Students Will Identify Career Goals**

- Demonstrate awareness of the education and training needed to achieve career goals
- Assess and modify their educational plan to support career
- Use employability and job readiness skills in internship, mentoring, shadowing and/or other work experience
- Select course work that is related to career interests
- Maintain a career-planning portfolio

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# HIGH SCHOOL CURRICULUM PROPOSAL

**Standard C: Students will understand the relationship between personal qualities, education, training and the world of work.**

**Objective: Students Will Acquire Knowledge to Achieve Career Goals**

- Understand the relationship between educational achievement and career success
- Explain how work can help to achieve personal success and satisfaction
- Identify personal preferences and interests influencing career choice and success
- Understand that the changing workplace requires lifelong learning and acquiring new skills
- Describe the effect of work on lifestyle
- Understand the importance of equity and access in career choice
- Understand that work is an important and satisfying means of personal expression

**Objective: Students Will Apply Skills to Achieve Career Goals**

- Demonstrate how interests, abilities and achievement relate to achieving personal, social, educational and career goals
- Learn how to use conflict management skills with peers and adults
- Learn to work cooperatively with others as a team member
- Apply academic and employment readiness skills in work based learning situations such as internships, shadowing and/or mentoring experiences

**3. What types of instructional strategies will be used in the class?**

- 1) Direct instruction
- 2) Independent learning and research
- 3) Technology
- 4) Small and large group activities and discussion
- 5) Experiential learning through hands-on activities and projects, guest speakers, field trips, and student presentations

**4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?**

The students in this course will be given letter grades on a points based system. The main graded components of the course will be participation/attendance, career portfolio progress/completion, short self-reflective papers (to assess increased self-awareness as related to career), a career journal, and several projects. I do not anticipate that this will be a course with multiple choice or scantron exams, although there may be a quiz or two on career-related terminology. The bulk of the course is self-reflection which is best measured through writing and projects that incorporate the course objectives.

As the instructor, assessment will serve as a check-in point. With any new course it is important to gauge what is working and where more exploration/coverage is needed. Additionally, I am looking for overall individual growth throughout the class, and that growth will look different for each student depending on where they began the process.

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## HIGH SCHOOL CURRICULUM PROPOSAL

**5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.**

In order to utilize technology and the latest information available for this course, I will need to teach in a room with a Smart board or computer and projector. I will also need weekly access to a computer lab for the portfolio software accessed through Career Cruising. Career Cruising will be an integral element for student exploration, assessment, research, and reflection. I will also utilize curricular elements from the Illinois Career and Technical Education website, College Summit and materials that I have from several career education classes that I have co-taught or taken at Northern Illinois University. I may also use a publication put together by the College of Dupage and co-authored by my advisor at NIU called *Who Am I, Where Am I Going, and How Do I Get There?* That particular publication may have a nominal cost associated with its use/replication; all of the other items are free.

**Include any additional information pertinent to your course.**

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## HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME Honors Algebra II

OLD COURSE NAME (if applicable)

SUBMITTED BY Dustin Berthold

Underline the Appropriate Item: New Course / Major revision to an existing course

Implementation Date: Fall 2013

Person(s) who will write the Curriculum: Dustin Berthold

Respond to the following: Jacob Hubert (NBHS Principal)

Duration: 1 academic year

Open to:

Prerequisites: A in Geometry, B in Geometry & teacher recommendation

Pass/Fail Option: NO

Credit: Yes

**If the course meets a graduation requirement, which one does meet?**

This is counted as one of the three years of math required to graduate

**Where does this course fit into department sequence?**

After Geometry, before Pre-Calculus/Honors, Pre-Calculus, AP/General Statistics.

**What is the potential impact of this course on the other department offerings?**

This class will greatly increase critical thinking at the Algebra II level. Questions are posed that should also challenge and have students reflect their thoughts and previous materials covered.

**Course Description**

This course is an accelerated course in Algebra II for the student with greater aptitude and interest in math. Topics of Algebra II are studied in much greater depth and intensity using a variety of mathematical methods. These topics include: systems of equations, matrices, linear and quadratic functions, polynomials, conics, logarithms, sequences and series, and probability. Further development of critical thinking skills is stressed. This course prepares the student for Pre-Calculus. Students are required to bring a TI-83 or TI-84 graphing calculator to class on a daily basis.

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# HIGH SCHOOL CURRICULUM PROPOSAL

## **Special Notes (i.e., extended periods, team teaching, etc.)**

In addition, Mr. Berthold has the entire curriculum/quizzes/tests and finals already prepared. There are also Targets with clear objects that greatly assist in student learning.

## **RATIONALE, OBJECTIVES, STRATEGIES**

### **1. Course Rationale**

#### **A) What is the evidence of student need for this course?**

To push and challenge our higher thinking students. Though a majority of students in Algebra II find the material appropriate, there are some gifted who do exceptionally well and with ease. It is our hope to challenge these students to a higher order. In addition, this will better prepare for Honors Pre-Calculus or AP Statistics.

#### **B) What departmental needs/goals would this course meet?**

If we implement an Honors Geometry, this would greatly assist the Honors Geometry, Honors Algebra II and Honors Pre-Calculus route for gifted students. In turn, this should increase our ACT and SAT scores.

#### **C) What institutional needs/goals would this course meet?**

This should increase a higher average on ACT and SAT scores in Math.

### **2. Course Objectives: What will each student learn and know?**

How to critically use mathematics and develop their own learning process. As a result, they are discovering the mathematical concepts through an intense and in depth approach.

### **3. What types of instructional strategies will be used in the class?**

We will use a variety of strategies to have mastery of concepts. Visual, auditory and kinesthetic learning will all be applied. Think pair-shares, group-work, assorted ways of movement while learning. deriving own problems. In-depth analysis & strategies and lecture (college).

### **4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?**

Exit Slips, Quizzes, Exams, and Homework. They are used to assist in how we continue future learning. A prime example is when students do well on an exit slip, we can move on to the next topic. If students are not grasping the material, we can spend additional time needed.

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## HIGH SCHOOL CURRICULUM PROPOSAL

**5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.**

NA

**Include any additional information pertinent to your course.**

Mr. Berthold already has taught this while student teaching and has lessons, quizzes, exams, projects and finals for the entire academic year. In addition, he has timeline calendars showing exactly what to cover when. The final item is a target-based packet for students to use as a review guide for every chapter.

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# HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME      **Honors Geometry**

OLD COURSE NAME (if applicable)      **N/A**

SUBMITTED BY      **Jeff Corn**

Underline the Appropriate Item:      New Course Major revision to an existing course

Implementation Date:      **2013-2014 School Year**

Person(s) who will write the Curriculum: **Math Department**

Respond to the following:      **Jacob Hubert (NBHS Principal)**

Duration:      **1 Academic Year**

Open to:      **Middle school, 9<sup>th</sup> and 10<sup>th</sup> graders who excel in mathematics**

Prerequisites:      **A in Algebra 1 or equivalent, or teacher recommendation**

Pass/Fail Option:      **No**

Credit:      **Yes**

If the course meets a graduation requirement, which one does meet?

**The course gives 1 math credit and the geometry requirement for graduation.**

Where does this course fit into department sequence?

**This course follows Algebra 1 and is taken before or with Algebra II.**

What is the potential impact of this course on the other department offerings?

**We would lose one class of regular geometry by having one honors class.**

Course Description

**This is an accelerated course in Euclidean Geometry for students with greater aptitude and interest in math. This course begins with points, lines, planes and polygons. Students will learn about translations, congruency and similarity with 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 discovered and applied. Properties and theories involving triangles are studied. Inductive and deductive reasoning skills are developed and used in proofs.**

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# HIGH SCHOOL CURRICULUM PROPOSAL

Special Notes (i.e., extended periods, team teaching, etc.)

N/A

## RATIONALE, OBJECTIVES, STRATEGIES

### 1. Course Rationale

A) What is the evidence of student need for this course?

**There are many students that would flourish in an environment that aims for excellence with higher expectations and more critical thinking. Some students need a course that offers more enrichment and acceleration than our current geometry class offers.**

B) What departmental needs/goals would this course meet?

**This course would begin an honors program where students would develop abstract thinking quicker through enrichment and the discovery of concepts. It would assist students and staff in the subsequent math classes that follow.**

C) What institutional needs/goals would this course meet?

**Honors Geometry should increase these students' averages on standardized testing, as well as create a desire to want to learn mathematics.**

### 2. Course Objectives: What will each student learn and know?

**Students will learn the concepts of geometry, as well as how to critically think using mathematics and developing their own learning process. As a result, they will discover the mathematical concepts through an intense and in depth approach. Students will apply the concepts they discover through real world applications and enrichment.**

### 3. What types of instructional strategies will be used in the class?

**This class will offer multiple instructional strategies, such as visual, auditory, and kinesthetic. Students will do many hands on activities and projects to discover new topics, as well as solidify their pre-existing knowledge.**

### 4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?

**Student assessment will be in the form of quizzes, tests, and projects. Constant observations, frequent questionnaires, exit slips, and small group discussions will be used to help determine the speed at which we move and guide instruction. Homework in this class will be used as merely practice and not a participation or accuracy grade. Tests will be all target based which will allow the teacher and students to know where they are in regards to the mastery of concepts.**

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## HIGH SCHOOL CURRICULUM PROPOSAL

5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.

**The same book as regular geometry would be used, so additional textbooks wouldn't be needed.**

Include any additional information pertinent to your course.

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## HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME: Landscaping and Turf Management

OLD COURSE NAME (if applicable): N/A

SUBMITTED BY: Sarah Timmons

Underline the Appropriate Item: New Course / Major Revision to an existing course

Implementation Date: Fall 2013

Person(s) who will write the Curriculum: Miss Timmons

Respond to the following:

Duration: 1 year

Open to: Junior and Seniors

Prerequisites: Introduction to Agriculture Education

Pass/Fail Option: No, traditional grading scale

Credit: 1

**If the course meets a graduation requirement, which one does meet?**

N/A

**Where does this course fit into department sequence?**

This course could be taken after Introduction to Agriculture at any point and time.

**What is the potential impact of this course on the other department offerings?**

This course may take students from other agriculture classes, but that is the case with all courses we currently offer.

### **Course Description**

This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of student include: identifying landscape plants, designing landscape plans, hardscape construction techniques, and installing landscape plants. Also included are nursery production, turfgrass production, small engine repair, and maintenance of existing landscapes. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising, and sales. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

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# HIGH SCHOOL CURRICULUM PROPOSAL

Special Notes (i.e., extended periods, team teaching, etc.): N/A

## RATIONALE, OBJECTIVES, STRATEGIES

### 1. Course Rationale

#### A) What is the evidence of student need for this course?

This class would provide basic hands on experience. No matter what a student does with their future, knowing how to take care of plants and a lawn is important.

#### B) What departmental needs/goals would this course meet?

This class would increase enrollment in the department, giving students another option. Eventually this class may strengthen the community support to fund a greenhouse, which could become a fundraiser for North Boone FFA.

#### C) What institutional needs/goals would this course meet?

This course would be great publicity for our schools and campus. Students would be learning while giving back to their school by beautifying the area.

### 2. Course Objectives: What will each student learn and know?

Please see the attached state approved course outline.

### 3. What types of instructional strategies will be used in the class?

Students will have visual, audio, and hands on learning in this classroom.

### 4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?

Assessment methods will include worksheets, tests, quizzes, and lab practicums.

### 5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.

Resources needed would be the following tools: hoes, shovels, wheel barrel, steaks, flags, etc. Also various plants and soils will need to be purchased throughout the year. Lowes Home Improvement Stores have a grant which the Agriculture Department will be applying for to help cover these initial costs.

**Include any additional information pertinent to your course.**

*Submit the Completed form to the Building Principal who will forward to the Superintendent*



## Suggested Outline Landscaping and Turf Management

**Grade Level: 11 & 12**

**Length of Course: Year**

**Credit: 1 Unit**

Course Description: This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of student instruction include: identifying landscape plants, designing landscape plans, hardscape construction techniques, and installing landscape plants. Also included are nursery production, turfgrass production, small engine repair, and maintenance of existing landscapes. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising, and sales. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Lesson	Suggested Hours/ Problem Area
<small>AS- AgriScience (Central Core Revised)      HO- Horticulture Cluster      AB- Agricultural Business Management AM- Agricultural Mechanics &amp; Technology      APS- Animal, Plant, &amp; Soil Science      ER- Environmental Resources</small>	
<p><b><i>Instruction in the FFA Organization is to take place at appropriate times throughout the year.</i></b></p> <p><b>Unit: B – Developing Leadership and Communication Skills</b></p> <p><b>Problem Area: 1 – Opportunities in FFA and Youth Organizations</b></p> <p>Lesson: AS B1-2 – Opportunities in the FFA</p> <p>Lesson: AS B1-3 – Achievement in FFA</p> <p>Lesson: AS B1-4 – Leading the FFA Chapter</p> <p><b>Problem Area: 3 – Developing Communication Skills</b></p> <p>Lesson: AS B3-4 – Effective Speaking Techniques</p> <p>Lesson: AS B3-8 – Written Communication</p>	<b>10</b>
<p><b><i>Instruction in SAE programs is to take place at appropriate times throughout the year.</i></b></p> <p><b>Unit: B – Developing Leadership and Communication Skills</b></p> <p><b>Problem Area: 1 – Understanding SAE's</b></p> <p>Lesson: AS B5-3 - Possible SAE Programs</p> <p>Lesson: AS B5-4 - Planning Your SAE Program</p> <p>Lesson: AS B5-5 - Implementing SAE Programs</p> <p>Lesson: AS B5-6 - Keeping and Using SAE Records</p> <p>Lesson: AS B5-7 - Long Range Plans for Expanding SAE Programs</p>	<b>10</b>
<p><b>Note – Content in lessons from the Horticulture Cluster Unit A Problem Areas 1 through 5 should be reviewed (or taught for the first time) prior to teaching the following lessons.</b></p>	<b>20</b>
<p><b>Unit: C - Nursery, Landscaping and Gardening</b></p> <p><b>Problem Area: 1 – Nursery Production</b></p> <p>Lesson: HO C1-1 - Understanding Nursery Production Facilities</p> <p>Lesson: HO C1-2 - Producing Nursery Crops</p> <p>Lesson: HO C1-3 - Packaging Nursery Crops</p> <p>Lesson: HO C1-4 - Managing the Nursery Business</p>	<b>12</b>

<p><b>Unit: C - Nursery, Landscaping and Gardening</b>  <b>Problem Area: 2 - Residential Landscape Design</b>  Lesson: HO C2-1 - Analyzing the Residential Landscape  Lesson: HO C2-2 - Designing the Landscape Areas  Lesson: HO C2-3 - Beginning the Design Process  Lesson: HO C2-4 - Applying the Principles of Art to the Landscape  Lesson: HO C2-5 - Using Annuals and Perennials in the Landscape  Lesson: HO C2-6 - Choosing Plants for the Landscape  Lesson: HO C2-7 - Putting the Plan on Paper  Lesson: HO C2-8 - Pricing the Landscape Plan  Lesson: HO C2-9 - Managing the Landscape Business</p>	<p><b>25</b></p>
<p><b>Unit: C - Nursery, Landscaping and Gardening</b>  <b>Problem Area: 7 - Using and Maintaining Tools and Equipment</b>  Lesson: HO C7-1 - Using Hand Tools  Lesson: HO C7-2 - Using Power Tools and Small Landscape Maintenance Equipment  Lesson: HO C7-3 - Identifying Large Landscape Maintenance Equipment  Lesson: HO C7-4 - Maintaining Small Engines</p>	<p><b>18</b></p>
<p><b>Unit: C - Nursery, Landscaping and Gardening</b>  <b>Problem Area: 3 - Landscape Installation</b>  Lesson: HO C3-1 - Preparing the Landscape Site  Lesson: HO C3-2 - Installing and Maintaining Irrigation Systems  Lesson: HO C3-3 - Installing Woody Landscape Plants, Ground Covers, Perennials, and Annuals  Lesson: HO C3-4 - Installing Patios, Walks, and Decks  Lesson: HO C3-5 - Installing Fences and Walls  Lesson: HO C3-6 - Incorporating Lights in the Landscape  Lesson: HO C3-7 - Incorporating Water Features in the Landscape</p>	<p><b>30</b></p>
<p><b>Unit: C - Nursery, Landscaping and Gardening</b>  <b>Problem Area: 4 - Turfgrass Management</b>  Lesson: HO C4-1 - Identifying, Classifying, and Selecting Turfgrass  Lesson: HO C4-2 - Establishing and Growing Turfgrass  Lesson: HO C4-3 - Managing Turfgrass  Lesson: HO C4-4 - Managing Pests in Turfgrass  Lesson: HO C4-5 - Identifying Tools and Equipment Associated with Turfgrass  Lesson: HO C4-6 - Managing Athletic Fields and Golf Courses</p>	<p><b>20</b></p>
<p><b>Unit: C - Nursery, Landscaping and Gardening</b>  <b>Problem Area: 5 - Landscape Maintenance</b>  Lesson: HO C5-1 - Watering, Fertilizing, and Mulching Landscape Plants  Lesson: HO C5-2 - Pruning Landscape Plants  Lesson: HO C5-3 - Pricing Landscape Maintenance Work</p>	<p><b>10</b></p>
<p><b>Unit: E - Horticultural Business Management</b>  <b>Problem Area: 1 - Entrepreneurship in Horticulture</b>  Lesson: HO E1-1 - Establishing the Horticulture Business  Lesson: HO E1-2 - Financial Management in the Horticulture Business</p>	<p><b>5</b></p>

<b>Unit: E - Horticultural Business Management</b> <b>Problem Area: 2 - Marketing Horticulture Products</b> Lesson: HO E2-1 - Selecting a Marketing Approach Lesson: HO E2-2 - Developing a Marketing Plan Lesson: HO E2-5 - Marketing the Landscape Business Lesson: HO E2-7 - Selling Landscape Design and Construction Work	<b>10</b>
Total	<b>180</b>

**\* This is a suggested outline of instruction. Teachers should use it as a guide in developing a course outline for their local situation. It is advised that a minimum of 60-70% of the lessons found in this outline appear in the outline developed for the local situation.**

**\*\*Although there are no Core lessons on plant identification, a significant amount of time, perhaps a minimum of 10 days, should be devoted to the correct identification of plant materials.**