NOTICE
BOONE COUNTY BOARD OF EDUCATION
NON-DISCRIMINATION POLICY STATEMENT

Students, their parents, and employees of the Boone County School System are hereby notified that this school district does not discriminate on the basis of race, color, national origin, age, religion, marital status, sex, or disability in employment programs, vocational programs, or activities as set forth in compliance with the Office of Civil Rights, Title VI, Title VII, Title IX, ADA and Section 504.


Related Student Organizations Include:
Future Business Leaders of America (FBLA), Family, Career and Community Leaders of America (FCCLA), the FFA, DECA, and HOSA – Future Health Professionals.

Vocational Rehabilitation Counselor – School to Work Transition Program. Vocational education programs, services, and activities may vary between schools. The programs are available to any student enrolled in the school providing that program, service or activity.

Adult Education classes are offered to individuals pursuing a GED diploma or academic basic skill improvement. Adult programs are offered periodically based upon the demand for specific classes.

Any person having inquiries concerning Boone County Schools compliance with the Office of Civil Rights Law, Title VI, Title VII, Title IX, ADA, and Section 504 is directed to contact Kathleen G. Reutman Boone County Schools, 8330 U.S. 42, Florence, KY, Telephone (859) 283-1003 who has been designated by the Boone County Schools to coordinate the District’s efforts to comply with Title IX, Title VI, Title VII and the Americans With Disabilities Act and Section 504.

EQUAL EDUCATIONAL AND EMPLOYMENT OPPORTUNITIES
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Dear Ryle Students,

Our goal is to prepare all Ryle students for success upon their graduation – whether that is college, the military, or the workforce. So quite simply, you must become ACADEMIC-READY or CAREER-READY or BOTH! The first few pages of this booklet explain what is required to be academic-ready or career-ready and why it is crucial that you make smart decisions in how you schedule your classes in high school.

Be sure that you map out all four years of your high school career right now. Selecting your classes now will force you to make some tough choices about your future. When it is time to schedule for your sophomore year, look at your 4-year plan again and make any changes or adjustments that you feel is necessary. Your plan doesn’t have to be perfect, but if you don’t plan ahead then it is much more difficult to reach your goals.

Take as many challenging classes each year as you possibly can. Our experience and educational research is clear in that a student’s success AFTER high school is based largely on the rigor or level of challenge of their high school classes. Investing your time and effort in challenging classes now will pay you big dividends later. Research from the ACT Corporation, the Southern Regional Education Board, the U.S. Department of Education, and the College Board all recommend that students take as challenging a high school course load as they can handle.

The decisions that you make during high school will have a great impact on your future. From formulating your class schedule to selecting school activities, to managing your time, to deciding on a career, you need to seek out assistance in order to make informed choices. I strongly encourage you to involve your parents, teachers, and counselors in this process.

Since Ryle High School builds its master schedule based on student needs and requests, I must emphasize that once you make your course selections for 2019-2020 very few if any schedule changes will be made. Along with the knowledge base we give our students while at Ryle, we also are teaching life skills. One of the most important is making informed, mindful decisions and then accepting the resulting responsibilities and consequences. This applies to the scheduling process. You are given the opportunity to request the classes you wish to take for the following year with the realization that you are charting your course for a full year with little chance of any changes. We are providing this curriculum guide for you to utilize in your decision-making process.

As you make your choices, challenge yourself to explore new areas, select courses at the highest level you can manage, develop your talents, and above all, take full advantage of the opportunities offered at Larry A. Ryle High School. Remember that success lies not in being the best but in doing your best. Let’s strive to make the 2019-2020 school year the most successful ever!

Sincerely,

Matthew L. Turner
Principal
Career & Technical Education
Career Pathways Offered

Agriculture
- Animal Science Systems
- Horticulture & Plant Science Systems

Business & Marketing Education
- Accounting
- Administrative Support
- Marketing
- E-Commerce
- Management & Entrepreneurship
- Financial Services
- Retail Services

Information Technology
- Computer Science

Family & Consumer Sciences
- Culinary & Food Services
- Early Childhood Education
- Fashion & Interior Design
- Teaching & Learning

PLTW Biomedical (Science Department)

PLTW Engineering (Math Department)

Information about each career pathway, including available industry certifications and KOSSA Assessments, can be found starting on page 44.
Academic Ready

Vision: All graduates are ready for Grade 13

How can you become Academic Ready?

✓ Meet the ACT College Readiness Benchmarks
✓ B or higher in 6 or more hours of KDE-approved dual credit
✓ A score of 3+ on exams in 2 or more AP Courses

What are the benefits of being Academic Ready?

✓ Knowledge and skills necessary for college level classes
✓ Avoid taking remedial classes in college
✓ Wear an honorary orange cord at your graduation

Career Ready

Vision: Graduates have knowledge & skills needed to succeed in postsecondary job training and/or education necessary for their chosen career.

How can you become Career Ready?

✓ Complete a pathway and pass an Industry Certification Test
✓ Complete a pathway and pass a Career and Technical Education End-of-Program Assessment

What are the benefits of being Career Ready?

✓ Industry Certification
✓ Wear an honorary silver cord at your graduation
✓ Articulated credit available for some pathways at KY Colleges

In addition to:

✓ Technical skills
✓ Soft skills
✓ Employability skills
✓ Leadership development
✓ Personal management
## Larry A. Ryle High School Graduation Requirements

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Graduation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 credits: English 1-4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 credits: Including Algebra I, Algebra II, Geometry; with at least one math class taken each year</td>
</tr>
<tr>
<td>Science</td>
<td>3 credits: Intro. to Chem/Phys, Biology, elective</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3 credits: Human and Physical Geography, World History, US History</td>
</tr>
<tr>
<td>Visual/Performing Arts</td>
<td>1 credit</td>
</tr>
<tr>
<td>Health</td>
<td>½ credit</td>
</tr>
<tr>
<td>Physical Education</td>
<td>½ credit</td>
</tr>
<tr>
<td>Career and Technical</td>
<td>1 credit</td>
</tr>
<tr>
<td>Electives</td>
<td>5 credits</td>
</tr>
<tr>
<td>Senior Exit Project</td>
<td>April/May of Senior Year</td>
</tr>
<tr>
<td>Service Hours</td>
<td>5 per year</td>
</tr>
<tr>
<td>Total Credits</td>
<td>22</td>
</tr>
</tbody>
</table>

### Pre-College Requirements

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Pre-College Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 credits: English 1-4 (or AP English)</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 credits: Including Algebra I, Algebra II, Geometry; with at least one math class taken each year</td>
</tr>
<tr>
<td>Science</td>
<td>3 credits: Intro. to Chem/Phys, Biology, Chemistry and/or Physics</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3 credits: Human and Physical Geography or AP Human, World History or AP European, US History or AP US History</td>
</tr>
<tr>
<td>Visual/Performing Arts</td>
<td>1 credit</td>
</tr>
<tr>
<td>Health</td>
<td>½ credit</td>
</tr>
<tr>
<td>Physical Education</td>
<td>½ credit</td>
</tr>
<tr>
<td>Career and Technical</td>
<td>1 credit</td>
</tr>
<tr>
<td>Electives</td>
<td>3 credits</td>
</tr>
<tr>
<td>World Language</td>
<td>2 credits</td>
</tr>
<tr>
<td>Senior Exit Project</td>
<td>April/May of Senior Year</td>
</tr>
<tr>
<td>Service Hours</td>
<td>5 per year</td>
</tr>
<tr>
<td>Total Credits</td>
<td>22</td>
</tr>
</tbody>
</table>
# Credit Check List

**Graduation Year:** ________  **Credits Required for Graduation:** 22

## English  (4 Required)

- English 9____
- English 10____
- English 11____
- English 12____

## Math  (4 Required)

- Algebra 1____
- Geometry____
- Algebra 2____
- 4th Math _____

*Other____  Other____

*(must take Algebra 1 & Algebra 2 unless completed in Middle School)*

## Science  (3 Required)

- ICP/Elective_____  Biology_____  3rd Science____

## Social Studies  (3 Required)

- Human Geography_____  World History_____  US History_____  

## PE/Health  (1/2 credit each required)

- Health____  PE 1____

## Vocational Career  (1 Credit required)

- 1 credit____

## Fine Arts  (1 Credit Required)

- 1 credit____*(World Lang Level III, AP Euro count)*

## Electives

<table>
<thead>
<tr>
<th>1._____________</th>
<th>4._____________</th>
</tr>
</thead>
<tbody>
<tr>
<td>2._____________</td>
<td>5._____________</td>
</tr>
<tr>
<td>3._____________</td>
<td>6._____________</td>
</tr>
</tbody>
</table>

## World Language

*(College prep requirement only-same language)*

| 1st year______ |
| 2nd year______ |
GRADUATION HONORS

At the graduation ceremony, Larry A. Ryle High School will recognize three categories of outstanding academic achievement:

**Summa Cum Laude**

1. Successful completion of the Kentucky pre-college curriculum.
2. Successful completion of twenty-two credits (22) credits
3. Successful completion of one (1) Advanced Placement or comparable College Level courses* from five (5) of the following seven (7) areas:
   a. English, (English Language, English Literature)
   b. Career & Technical, (Computer Science, Advanced Accounting)
   c. Fine Arts, (Studio Art, Music Theory)
   d. Foreign Language, (French, German, Spanish)
   e. Mathematics, (Calculus, Statistics)
   f. Science, (Biology, Chemistry, Physics)
4. Completion of A.P. examination in three (3) of the five (5) A.P. courses
5. A cumulative GPA of 3.7 or higher

**Magna Cum Laude**

1. Successful completion of the Kentucky pre-college curriculum
2. Successful completion of twenty-two (22) credits
3. Successful completion of one (1) Advanced Placement or comparable College Level courses* from four (4) of the following seven (7) areas:
4. Completion of A.P. examination in three (3) of the four (4) A.P. courses
5. A cumulative GPA of 3.5 or higher

**Cum Laude**

1. Successful completion of the Kentucky pre-college curriculum
2. Successful completion of twenty-two (22) credits
3. Successful completion of one (1) Advanced Placement or comparable College level courses* from three (3) of the following seven (7) areas:
4. Completion of A.P. examination in two (2) of the three (3) A.P. courses
5. A cumulative GPA of 3.3 or higher

*College Level courses are determined by each university/college based on their A.P. equivalency chart which describes what classes a student is granted credit for passing the A.P. exam in that particular content area. The final determination of acceptability if necessary will be made by the Principal.
Students seeking admission to a Kentucky university will be required to meet the minimum pre-college curriculum requirements. Please note: The following requirements exceed those established by the Kentucky Council on Higher Education for public universities and the standards approved by the Kentucky Department of Education.

**Required Courses**
- **English:** 4 credits - English 1, English 2, English 3, English 4
- **Mathematics:** 4 credits - Algebra 1, Geometry 1, Algebra 2 & Elective
- **Science:** 3 credits selected from Intro to Chemistry/Physics, Biology 1, plus one science elective.
- **Social Studies:** 3 credits - U.S. History, World History, Human and Physical Geography
- **Visual and Performing Arts:** 1 credit
- **Health:** ½ credit
- **Physical Education:** ½ credit
- **Career & Technical:** 1 credit
- **Foreign Language:** 2 credits (same language)

**Recommended Courses**
Electives should be rigorous and have academic content at least as challenging as the courses required in the minimum diploma requirements. Electives should be in social studies, science, math, language arts, arts and humanities, foreign language, and above the introductory level in agriculture, industrial technology, business, marketing, family and consumer sciences, health sciences, and technology education and career pathways.

**College Admission Criteria (www.kheaa.com)**
The most important factor in getting admitted to the college of your choice is your high school grades. But colleges also look at the courses you took. If you got all A’s during high school but avoided challenging courses, it counts against you. For example, it’s better to get a B in AP calculus than an A in consumer math so you can pad your GPA.

**Schools may also consider:**
- **Standardized test scores:** In Kentucky, the most often used standardized test is the ACT. The SAT is also widely used. Your scores may also be important when it comes to financial aid.
- **Essay:** Most often used by nonprofit private schools, essays let admissions counselors learn more about you as an individual and get a feel for your writing ability.
- **Letters of recommendation:** Letters from teachers, counselors and other adults will give the admissions staff a more-rounded picture of you as a student and person.
- **Interview:** Like essays, interviews are most often associated with nonprofit private colleges. It gives someone representing the school — a staff member or a graduate — a chance to talk with you one-on-one, either in person or on the phone. It also gives you a chance to ask questions about the school.
- **Extracurricular activities and volunteer work:** The clubs, teams and community work you’re involved in tell the school a lot about you as a person. Generally, it’s better to do a few things in—depth than so many things you can’t give any of them the time they deserve.

**Grade Level Classification and Graduation Requirements**
*22 credits are required for graduation.
*The basic Carnegie unit of credit is given for the completion of a full year course. One-half unit is awarded for a semester course. A total of 22 units of credit is required for graduation. The following credit requirements have been established for the placement of students in a grade level:

**Number of Credits:**
- Grade 10 = 5
- Grade 11 = 11
- Grade 12 = 16

**Promotion:**
*To be promoted to grade 10, you must earn at least 5 credits.
*To be promoted to grade 11, you must earn at least 11 credits.
*To be promoted to grade 12, you must earn at least 16 credits.
Option 1: **Early Graduation** is available to any student who wishes to graduate from high school in 3 years or less. Students must meet CPE benchmarks on the ACT in Math, Reading, and English. They must also complete all required EOC courses and meet benchmark on each of the exams. Please consult with your counselor to explore these options. Applications must be submitted by October 1st of the school year in which you plan to graduate.

Option 2: **Dual Credit** through Early Admission (NKU, Gateway, and Thomas More)—Eligible high school students are admitted to a post-secondary institution and take college classes for college credit. This course may also count for high school credit. There is an additional application process for students to enter as college freshman. Please consult with your counselor if you wish to explore your options. Students will need to complete an application to participate and meet all of the admission requirements of the university.

Option 3: **Articulated Dual Credit** (ATC Schools only) in conjunction with Gateway. ATC students are taught by an ATC instructor at an ATC in a course approved by the Gateway Provost. Students can earn Gateway credit if grade requirements are met for the equivalent Gateway course.

Option 4: **Advanced Placement**—Students can enroll in AP courses, designed by College Board. Post-secondary institutions **MAY** award college credit if students receive a 3 or higher (out of a possible 5) on AP exams.
The Raider Achievement Program

The Raider Achievement Program (RAP) is a 35 minute period during the school day where every student in the building can get assistance for their specific needs.

RAP will provide:

1. Students, who are meeting academic requirements, the ability to select Workshops to attend during RAP time on Tuesday-Friday by using Raider SOS, a real-time online selection system on the Ryle website.
2. Teachers, the flexibility to assign a student who may need specific interventions to specific workshops to address these needs.
3. Administrators, the ability to assign students who are not meeting academic expectations in multiple areas to more restrictive and intensive Modules.

The purpose of RAP is to provide an opportunity for ALL students to receive help in every content area of their academic studies. If we want our students to be successful in rigorous classes, which research states a rigorous class schedule is the best preparation for life after high school, then we must find additional opportunities to give support to our students. RAP is designed for just that, a chance for students to GET HELP. RAP is scheduled between 3rd and 4th period according to the following school schedule.

<table>
<thead>
<tr>
<th>MON, TUE, WED, THUR, FRI</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>RAP</th>
<th>4th + lunch</th>
<th>5th</th>
<th>6th</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:40 – 8:40 am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:45 – 9:35</td>
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<td></td>
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<tr>
<td>9:40 – 10:30</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10:35 – 11:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:15 – 12:35 pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4th + lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:40 – 1:30</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1:35 – 2:25</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Here are some tips to make RAP successful for you:

- Schedule your RAP workshops early using SOS program
- Find the right RAP for your individual needs
- Bring proper materials to the workshop
- Ask questions to your teacher, seek out the assistance
- Communicate with your teachers.
ONE OPPORTUNITY. LIMITLESS POSSIBILITIES.

If you want to play sports at an NCAA Division I or II school, start by registering for a Certification Account with the NCAA Eligibility Center at eligibilitycenter.org. If you want to play Division III sports or you aren’t sure where you want to compete, start by creating a Profile Page at eligibilitycenter.org.

ACADEMIC REQUIREMENTS
To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA and earn an ACT or SAT score that matches your core-course GPA.

CORE COURSES
Visit eligibilitycenter.org/courselist for a full list of your high school’s approved core courses.
Complete 16 core courses in the following areas:

DIVISION I
Complete 10 NCAA core courses, including seven in English, math or natural/physical science, before your seventh semester.

- ENGLISH
  - 4 years

- MATH (Algebra I or Higher)
  - 3 years

- NATURAL/PHYSICAL SCIENCE
  - 2 years

- ADDITIONAL
  - 1 year

- SOCIAL SCIENCE
  - 2 years

- ADDITIONAL COURSES
  - 4 years
  - (Any area listed to the left: foreign language or comparable religions/philosophy)

DIVISION II

- ENGLISH
  - 3 years

- MATH (Algebra I or Higher)
  - 2 years

- NATURAL/PHYSICAL SCIENCE
  - 2 years

- ADDITIONAL
  - 2 years

- SOCIAL SCIENCE
  - 2 years

- ADDITIONAL COURSES
  - 4 years
  - (Any area listed to the left: foreign language or comparable religions/philosophy)

GRADE-POINT AVERAGE
The NCAA Eligibility Center calculates your grade-point average (GPA) based on the grades you earn in NCAA-approved core courses.
• DI requires a minimum 2.3 GPA.
• DII requires a minimum 2.2 GPA.

SLIDING SCALE
Divisions I and II use sliding scales to match test scores and GPAs to determine eligibility. The sliding scale balances your test score with your GPA. If you have a low test score, you need a higher GPA to be eligible. Find more information about sliding scales at ncaa.org/student-athletes/future/test-scores.

TEST SCORES
Take the ACT or SAT as many times as you want before you enroll full time in college, but remember to list the NCAA Eligibility Center (code 9999) as a score recipient whenever you register to take a test. If you take a test more than once, send us all your scores and we will use the best scores from each test section to create your sum score. We accept official scores only from the ACT or SAT, and won’t use scores shown on your high school transcript.
HIGH SCHOOL TIMELINE

GRADE 9
Plan
- Start planning now! Take the right courses and earn the best grades you can.
- Ask your counselor for a list of your high school’s NCAA core courses to make sure you take the right classes. Or, find your high school’s list of NCAA core courses at eligibilitycenter.org/courselist.

GRADE 10
Register
- Register for a Certification Account or Profile Page with the NCAA Eligibility Center at eligibilitycenter.org.
- If you fall behind on courses, don’t take shortcuts to catch up. Ask your counselor for help with finding approved courses or programs you can take.

GRADE 11
Study
- Check with your counselor to make sure you are on track to graduate on time.
- Take the ACT or SAT, and make sure we get your scores by using code 9999.
- At the end of the year, ask your counselor to upload your official transcript.

GRADE 12
Graduate
- Take the ACT or SAT again, if necessary, and make sure we get your scores by using code 9999.
- Request your final amateurism certification after April 1.
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation.

Core Courses
This simple formula will help you meet Divisions I and II core-course requirements.

\[ 4 \times 4 = 16 \]

- 4 English courses (one per year)
- 4 math courses (one per year)
- 4 science courses (one per year)
- 4 social science courses (one per year)

\[ \text{16 NCAA CORE COURSES} \]

For more information:
ncaa.org/playcollegesports
eligibilitycenter.org

Search Frequently Asked Questions
ncaa.org/studentfaq

Follow us:
@NCAAECA
@playcollegesports

NCAA is a trademark of the National Collegiate Athletic Association.
July 2016
Larry A. Ryle High School

COURSE CURRICULUM

English - Language Arts
Mathematics
Science
Social Studies
Arts & Humanities
  • Drama & Dance
  • Instrumental Music
  • Visual Arts
  • Vocal Music
World Language
Health / Physical Education
Career & Technical Education
  • Agriculture
  • Business/Marketing
  • Family & Consumer Science
  • Information Technology
Area Technical Center
District Programs
ACADEMIC OFFERINGS

COURSES AND FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE

ACADEMIC
English I, II, III, IV
Creative Writing
Oral Communications
Pub./Annual/Journalism
Film Studies
Reading
LEP 1, 2, 3, 4
Algebra I
Algebra II
Algebra III
Geometry
College Career Readiness
Math for Bus & Industry
Intro to Engin Design (AP index)
Princ of Engineering (AP index)
Civil Eng & Architect (AP index)
Biology
Chemistry
Introduction to Chemistry & Physics (ICP)
Environmental Science
Forensic Science
Princ of Biomed Sci (AP index)
Human Body Systems (AP index)
Medical Interventions (AP index)
Biomed Innovations (AP index)
Human and Physical Geography
World History
US History
Psychology
Global Issues/American Pop Culture
HAVPA-Humanities
Music Appreciation
Theatre 1, 2
Fundamentals of Dance
Visual Art I, II, III, IV
Peer Tutoring-Art
Symphonic Band II, III
Percussion Ensemble
A Cappella
Concert Choir
French I, II
German I, II
Spanish I, II
Health Education
Physical Education I:
  Team Sports
  Recreational Sports
  Fitness Activities
Physical Education II, III, IV
Strength and Conditioning
Gross Motor Dev I, II
Princ of Ag Sci & Technology
AgriScience
Animal Science
Animal Technology
Vet Science
Equine Science
Floriculture/Floral Design
Greenhouse Technology
Landscaping and Turf Management
Ag Internship
Digital Literacy
Multi-Media Publishing
Advanced Multi-Media
Web Page Design
Accounting & Finance Foundations
Advanced Accounting (AP index)
Financial Services I, II (Bank)
Princ of Entrepreneurship
Intro to Management
Business Education Intern
Computer Literacy
Computational Thinking
Project Based Programming
Information Technology Intern
Marketing Principles
Advertising & Promotions
Travel & Tourism Marketing
Marketing Applications
Sports & Event Marketing
Fashion Marketing
Retail Marketing (Bookstore)
Marketing Education Intern
FACS Essentials
Fash & Int Design I, II, III
Fashion/Interior Design intern
Foods & Nutrition
Culinary I, II
Culinary Arts Internship
Early Lifespan Development
Child Dev Services I,II
Early Childhood Intern
The Learning Community
The Learner-Centered Class
The Professional Educator
Collaborative Clinical Experience
Peer Tutoring I, II

HONORS
Algebra II Honors
Anatomy & Physiology
Chemistry Honors
C++ Programming Honors
English I, II, III, Honors
French II & III Honors
German II & III Honors
Geometry Honors
Microsoft MOS
Pre-Calculus Honors
Probability/Statistics Honors
Spanish II & III Honors
Symphonic Band Honors
Trigonometry Honors

ADVANCED PLACEMENT
AP Biology
AP Calculus AB
AP Calculus BC
AP Chemistry
AP Computer Science
AP English Language
AP English Literature
AP European History
AP French Language & Culture
AP German Language
AP Human Geography
AP Music Theory
AP Physics I, II, C
AP Psychology
AP Spanish Language & Culture
AP Statistics
AP Studio Art
AP US Government & Politics
AP US History

ADDITIONAL PROGRAMS
Area Technology Center (ATC)
Construction-Homebuilders
Early College/Dual Enrollment
## GPA Scale

<table>
<thead>
<tr>
<th>Index</th>
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*English Electives include:  Creative Writing, Oral Communications, Publication/Annual Journalism, and Film Studies
COURSE CURRICULUM

ENGLISH DEPARTMENT

English I – IV courses strive to prepare students to be college and career ready in reading, writing, speaking, listening, and language. Students will comprehend and evaluate complex texts across a range of genres, and they will construct effective arguments and convey complex information. Students will write in a variety of forms, both formally and informally, including narrative, argument, and analysis.

All students enrolled in English I – IV are required to complete a summer reading assignment.

Honors and advanced placement courses require a teacher’s recommendation for placement. These classes require more independent in-depth study of works at a faster pace. In addition, the summer reading assignments for honors and advanced placement courses are more detailed than the regular summer reading assignments.

Before advancing to the next level, students must earn the prerequisite credit in English.

ENGLISH COURSES

ENGLISH I - 1 credit Grade 9
English I continues to develop students' language arts abilities gained at the middle school levels in reading, writing, listening, and speaking. Emphasis is placed upon the development of writing through the writing process and portfolio guidelines. Writing portfolios will be developed according to these guidelines. Students will read and analyze various types of literature. Grammar, punctuation, and spelling will be integrated within the contexts of writing and reading. A summer reading assignment is required.

ENGLISH I - HONORS - 1 credit (index 1.02) Grade 9
The English I Honors curriculum is designed to prepare those students wishing to take AP English courses for college credit their junior and senior year. In English I Honors, students will cover the same standards from English I but more in depth and at a faster pace. An emphasis will be placed on writing as well as on analyzing literature. Additional topics will also be discussed at the discretion of the teacher.
PREREQUISITES:
1. A STAR reading score in the upper percentiles is HIGHLY recommended
2. A strong independent work ethic as students will be expected to read novels independently
3. An “A” or “B” in Language Arts
4. Teacher recommendation is required for placement in this class.
5. An Honors summer reading/writing project is required.
These prerequisites are meant to help ensure student success and to prevent students from feeling overwhelmed by the amount of coursework; they are in no way meant to deter any student who wants to take the class from enrolling.

ENGLISH II - 1 credit Grade 10
In this course the student will be taught to analyze poetry, short stories, plays and novels as major types of literature. Using the writing process approach, instruction will be given in descriptive, expository and narrative writing to help the students develop their writing skills, with practical application of grammar. Continuous vocabulary study will be a part of all assignments. A summer reading assignment is required.
PREREQUISITES: English I credit
ENGLISH II HONORS - 1 credit  (index 1.02)  
Grade 10 
The honors program on the sophomore level is designed to expose the students to various types of world literature and to introduce them to various writing experiences using the writing process approach. Students will delve deeper into literary analysis, including how symbols and themes reveal complex meanings. This class offers a balance of reading and writing activities through close reading (explication, interpretation, analysis), survey reading (background material on literary time periods, trends, authors, etc.), in-class writing (impromptu, planned, and personal response), and out-of-class writing (expressive, explicative, literary--narrative, analytical, persuasive). Vocabulary study and portfolio development will be incorporated into the composition and literature. This class requires more independent in-depth study of works at a faster pace.  
PREREQUISITES: Teacher recommendation is required for placement in this course.  
A summer reading/writing assignment is required.

ENGLISH III - 1 credit  
Grade 11 
English III continues to develop competencies in the skill areas of language arts. Content includes instruction in oral communication and written composition; study skills and reference and research techniques; improvement of speaking and writing skills; exploration of literary genres and cultural heritage; and literary appreciation focusing on American literature.  
A summer reading assignment is required.  
PREREQUISITES: English I and English II credits

AP ENGLISH LANGUAGE – 1 credit  (index 1.04)  
Grade 11 
Advanced Placement English Language is a course designed to give students the opportunity to pursue college-level studies in language, composition, rhetoric and oral communication, while still in high school and to possibly receive college credit. AP English Language is primarily a course in both effective writing and critical reading. The course emphasizes the study of a variety of texts, mainly prose, and a variety of writing tasks including the planning, writing, and revising of sustained essays. Reading focus will include the application of reading strategies in all content areas. The writing skills the students develop through attentive and continued analysis of a variety of prose texts can serve them in their own writing as they become increasingly aware of these skills and their pertinent uses.  
PREREQUISITES: Teacher recommendation in required for placement in this course.  
A summer reading/writing assignment is required.

ENGLISH IV - 1 credit  
Grade 12 
English IV will continue the development of the literature and writing skills of English II and III. Course work will include the study of English literature with emphasis on vocabulary development, theme writing, critical analysis, and research, utilizing the writing process approach and portfolio guidelines.  
A summer reading assignment is required.  
PREREQUISITES: Students must have earned credit in English I, English II, and English III before enrolling in this course.

AP ENGLISH LITERATURE - 1 credit  (index 1.04)  
Grade 12 
Advanced Placement English Literature is a course designed to give students the opportunity to pursue college-level studies in literature and composition while still in high school and to possibly receive college credit. Students are involved in both the study and practice of writing and the study of literature.  
Through speaking, listening, reading, and writing, the students should become more aware of the resources of language, the effective use of language, and the organization of ideas in a clear, coherent, and persuasive way. Emphasis is placed on the intensive study of representative works from various genres and periods, with
emphasis placed on English literature. It is a challenging course and requires more effort and homework on the part of the student than regular or honors English courses.

PREREQUISITES: Teacher recommendation is required for placement in this course. A summer reading/writing assignment is required.

**ORAL COMMUNICATIONS - 1 credit**

Grades 11-12

This course develops the individual's ability to communicate effectively as a speaker and a listener. Emphasis will be placed on organization and presentation. Public Speaking will include a variety of speeches including: Speech of Self-Introduction, Special Occasion Speech, Speaking for a Purpose (The Interview), Impromptu Speaking, Informative Speaking, Speech of Persuasion, Presentation Speaking, Oral Poetry Readings and Debate. This course also includes two performance-speaking venues – Fall Coffee House (humorous skit performances) and the Spring Coffee House Series (Music and Poetry and Short Story performance readings). This course will also include classroom studies, vocabulary, chapter tests. Peer critiques and video speech critiques are also required for this course.

**READING - 1 credit**

Grades 9-12

Students who struggle with reading will have difficulty achieving success in school and in life. In combination with the regular English course, this class is designed to enhance students' reading skills by focusing on those skills and strategies most critical for students to become good readers. The course presents a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes.

**PUBLICATION-ANNUAL-JOURNALISM - 1 credit**

Grades 10-12

This course is designed for those persons who wish to work on the yearbook. Students will report daily to a classroom and be under the guidance and supervision of the yearbook sponsor who will also grade the students on work completed in the course. Because of the requirements of this class, STUDENTS MUST RETURN TO SCHOOL IN JUNE TO FINISH THE YEARBOOK. Length of stay depends on the number of pages left to complete. Students selecting this course must fill out an application and receive a yearbook evaluation form from each current teacher. It is suggested that students have a background in Photoshop and Illustrator, or are simultaneously enrolled in Multi-Media Publishing.

**CREATIVE WRITING – 1 credit**

Grades 11-12

Creative writing introduces students to the philosophy, standards, history, and process of writing. A seminar format will assure a free exchange of ideas and sharing of work. Students will read from their own works and from the canon. Class includes a portfolio to include: poetry, short fiction, epistolary, essay, and drama. Selections from the portfolio will be submitted for publication in national, state, and local publications.

PREREQUISITES: Students must have completed English II with a 90 or above. Teacher recommendation is required for placement in this course.

**FILM STUDIES – 1 credit**

Grades 9-12

This is a survey class of the history of cinema in America and elsewhere with special emphasis on the earliest examples of the art form. This class would be more than merely watching movies, but would in fact require substantial reading of history and criticism of film as well as writing to more completely understand and share that understanding of the nature of film. The class would touch on the technical details of film, its sociological implications, its aesthetic aspects, as well as its fundamental role in the development of culture in the last century or more since its invention. Students from 9th-12th grades would be welcome to participate in a study of movies and certain ancillary aspects of the industry as well as critically thinking about the form as proper art.
MATHEMATICS DEPARTMENT

Students must successfully complete FOUR CREDITS of mathematics for graduation. The Kentucky State Department of Education requires ONE credit in Algebra 1, ONE credit in Geometry, ONE credit in Algebra 2, and ONE credit in an elective math course.

We live in a technologically rich society with a global economy, which has drastically increased the need for mathematical thinking and problem-solving skills. Coupled with the development of higher-order and abstract thinking skills inherent in math courses, it makes sense for students to take challenging yet appropriate math classes in high school.

Students planning to attend college should strive to prepare for and complete the PreCalculus course by the time they graduate from high school. PreCalculus is basically equivalent to a College Algebra course, which is the typical entry-level math class at most colleges or post-secondary schools. The successful completion of PreCalculus will not only better prepare students for college readiness on the ACT or other exams, but it will give students an idea of the entry level work required at most colleges.

MATH COURSES

PRE-COLLEGE CURRICULUM REQUIREMENTS

ALGEBRA I - 1 credit

This course is designed to give students an understanding of algebra, where concepts, skills, structure, and applications are emphasized. Topics may include number theory, linear equations with one and two variables, systems of linear equations, polynomials, quadratic equations, and rational and radical equations. All properties of algebraic concepts will be studied. This course is designed to build a mathematical foundation that will make connections among mathematical concepts, across disciplines, and into everyday experiences.

GEOMETRY - 1 credit

This course is designed to provide students with a study of plane and solid geometric figures, line and angle relationships, congruent and similar figures, circles and spheres, locus of points, constructions, methods of proof, areas and volumes, all basic formulas, along with right triangle relationships and special ratios. Many realistic applications will be emphasized.

PREREQUISITES:
- Credits in Algebra I, or Algebra I and Algebra II
- May be doubled with Algebra II, but MUST have 96% in Algebra 1 along with teacher approval
- Freshman may not double math courses

GEOMETRY HONORS - 1 credit (index 1.02)

This course is designed for freshman who have taken Algebra I or Algebra II in the eighth grade and sophomores that completed Algebra I showing exceptional promise in mathematical thinking. It covers the material listed in the Geometry course, but in more depth. Additional topics may be covered at the discretion of the teacher.

PREREQUISITES:
- Student with credit in Algebra I with 96% or better final average
- Approval of Algebra I teacher
- ACT of at least 24 or a CERT score with anticipated ACT of 24
ALGEBRA II - 1 credit
Grades 10-12
This course is designed to provide students with an in-depth knowledge of Algebra. Content may include an extension of material covered in Algebra I. Additional topics may include: math and science problem-solving, number systems, polynomials, algebraic translations, inequalities, exponents, radicals, Pythagorean Theorem, solving quadratic equations, matrices, and the Binomial Theorem.
PREREQUISITES:
- Credit in Algebra I
- A student can double-up with Geometry if he/she has a "96%" average in Algebra I; and with teacher approval. Freshmen may not double-up.

ALGEBRA II HONORS – 1 Credit (index 1.02)
Grade 9-12
This course is designed for students that have excelled in Algebra I. It covers all of the material listed in Algebra II, but in more depth. Additional topics may be covered at the discretion of the teacher.
PREREQUISITES:
- Students with credit in Algebra I and Geometry with a 96% or better final average.
- Approval of Algebra I and Geometry teacher
- ACT of at least 24 or a CERT score with anticipated ACT of 24

ELECTIVE COURSES

ALGEBRA III - Preparation for College Algebra- 1 credit
Grade 11-12
This course is designed for students who are intending to attend college and are in need of additional preparation in order to be successful in a credit-bearing College Algebra course.

Its purpose is to bridge the gap to college math by providing a comprehensive review of Algebra I, Algebra II, and Geometry during the first semester as well as providing the opportunity to prepare for fall assessment/college placement tests. During the second semester, an introduction to basic probability/statistics and consumer math will be provided.

This class is not open to students who have successfully completed Pre-calculus.
PREREQUISITES:
- Credits in Algebra 1, Geometry, and Algebra 2 with a C average
- ACT math score of 17-21 for grade 12 or CERT score with anticipated ACT of 18-21 (Although 19 is KY college benchmark, many out of state schools require 22 for admittance to College Algebra AND many KY post-secondary schools require ACT of 22 to enter CREDIT_BEARING math classes. Therefore, students scoring 20 & 21 may also benefit from completing this course.)
- Approval of current math teacher

PRE-CALCULUS HONORS - 1 credit (index 1.02)
Grades 10-12
This course covers functions and graphs, linear equations, exponential, logarithmic, and rational functions as well as other pre-calculus topics. These may be relationships and functions, conic sections, and word problems. Introduction and use of graphing calculators will be included in this course. The TI-84 plus or TI-84 plus silver calculator is recommended. TI-89 and higher calculators as well as the TI-Inspire are not permitted.
PREREQUISITES:
- Student with credit in Algebra II with 88% or better final average
- May be doubled with Geometry, but with A 94% average in math, along with teacher approval

ACT of at least 24 or a CERT score with anticipated ACT of 24
- Approval of Algebra II teacher and Geometry teacher
- May also be doubled with Trigonometry, but not recommended for students with lower than a cumulative 94%" average in math.
TRIGONOMETRY HONORS - 1 credit (index 1.02)  Grades 11-12
This course covers trigonometric functions, identities, addition formulas, inverse trig functions, and trigonometric equations.
**NOTE:** In order to function and be proficient in trigonometry students must be proficient in ALL GEOMETRIC CONCEPTS: congruence, similarity, formulas for plane and solid figures, ratios and proportions, properties of the quadrilaterals, right triangle theorems, as well as the special right triangle ratios, and triangle relationships.
THIS COURSE CANNOT BE DOUBLED WITH GEOMETRY.
PREREQUISITES:
- Credits in Algebra I, Algebra II, and Geometry with a B or better average in Algebra II and Geometry
- May be doubled with PRE-CALCULUS (ALGEBRA III), but **doubling is not recommended** for students with lower than a “96%” average in math
  - **ACT score of at least 22 or CERT score with anticipated ACT of at least 22**
- Approval of Algebra II and Geometry teacher

COLLEGE & CAREER READINESS MATHEMATICS -- 1 credit  Grade 12
This course is for students who have completed the 3 pre-college curriculum math courses required for graduation but are not ready to move on to trig, precalculus or prob/stats. Its purpose is to bridge the gap to college math by providing a comprehensive review of Algebra I, Algebra II, and Geometry during the first 3 quarters. During the last quarter, consumer math and additional topics will be covered as time allows. This class is **NOT** offered to students who have had advanced math classes such as Pre-calculus or Trigonometry or students with an ACT greater than 17.
PREREQUISITES:
- Successful completion of Algebra I, Algebra II, & Geometry
- Approval of last math teacher
- Designed for students with a math ACT score of **15-17**

MATH FOR BUSINESS AND INDUSTRY -- 1 credit  Grade 12
This course will cover basic skills, budgets, job searches, managing a checkbook, savings plans and other banking matters, income tax, the cost of credit, investing and portfolio management, with other topics as time permits.
PREREQUISITES:
- Approval of previous math teacher
- Designed for students with an ACT math score less than or equal to 15

AP CALCULUS AB / BC - 1 ½ credits (index 1.04)  Grade 12
This is an Advanced Placement course and **MUST** follow the AP Course Description as determined by the College Board. The outline is very detailed as to the topics, which must be covered in order for a student to be successful on the Advanced Placement exam for Calculus. A summer assignment is required. **Students are expected to take the AP exam in May.** Successful completion of this exam will earn the student college credit in Calculus that is accepted at most colleges and universities in the United States. Students who successfully complete this course will be thoroughly prepared for any further study of mathematics.
PREREQUISITES:
- Credits in Trigonometry (Advanced Topics) and Pre-calculus (Algebra III) (94% average or better recommended)
- Approval of Trigonometry and Pre-calculus teachers
- Students must sign up for AB and those having the requirements of 30 or better Math ACT score and 100 or better combined PreCal/Trig average will be given the option to enroll in the BC class.
PROBABILITY AND STATISTICS HONORS - 1 credit  (index 1.02)  Grade 12
This is a senior (only) elective course that is designed for the college-bound student. Content items will include mean, median, and mode—measures of central tendency; histograms; measures of variability; normal curve distributions; charts and graphs; range and standard deviation; probability of simple events; other probability topics and calculator exercises. It will also include a review of math basics in preparation for the ACT/SAT. This course may not be a substitution for required core courses (Algebra I, Algebra II, and Geometry).
PREREQUISITES:
- Completion of Algebra I, Algebra II, and Geometry
- ACT score of at least 19 or CERT score with anticipated ACT of at least 19
- Approval of math teacher from junior year.

ADVANCED PLACEMENT STATISTICS – 1 credit  (index 1.04)  Grade 12
This course follows the AP Course Description and is designed to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, Statistical Inference.
Specific curriculum topics include but are not limited to: exploring various types of data, sampling and experimentation, anticipating patterns with a variety of topics in statistics (probability, independent random variables, the normal distribution, and various sampling distributions), and estimating population parameters and testing hypotheses. Students who successfully complete the course and exam may receive credit, advanced placement or both for a one-semester introductory college statistics course. A summer assignment is required. Students are expected to take the AP exam in May. AP Statistics is also designed for students who excel in reading comprehension and can write analytically.
PREREQUISITES:
- Credits in Algebra 1, Algebra 2, and Geometry.
- ACT score of at least 24 or CERT score with anticipated ACT of at least 24.
- Approval from your Algebra 2 teacher. Students must have 94% or better in Algebra 2.
- If student is currently taking Pre-Calculus or Trigonometry, a signature from that teacher instead of the Algebra 2 teacher is sufficient. Students must have 87% or better in the course.

ENGINEERING
Engineering and Technology at the high school level is a broad based program addressing many aspects of our technologically dependent society through various contexts. Instructional activities provide students with knowledge and skills concerning the function and operation of various technological devices. The High School Engineering and Technology program also immerses the student in decisions concerning technology, analyzing the impacts and assessing various technological issues. These educational goals can be accomplished through a variety of means, including, but not limited to research and presentations, discussions, and field experiences. The design, construction, and testing of various projects using a variety of contexts is imperative for success in an engineering and technology program.

Project Lead the Way provides a comprehensive approach to STEM Education. Through activity-, project-, and problem-based curriculum, PLTW gives students in high school a chance to apply what they know, identify problems, find unique solutions, and lead their own learning.
PLTW Engineering is more than just another high school engineering program. It is about applying engineering, science, math, and technology to solve complex, open-ended problems in a real-world context. Students focus on the process of defining and solving a problem, not on getting the "right" answer. They learn how to apply STEM knowledge, skills, and habits of mind to make the world a better place through innovation.

**PLTW Engineering Pathway**

**Recommended Courses**

- Introduction to Engineering Design
- Principles of Engineering
- Civil Engineering and Architecture

**PLTW-INTRODUCTION TO ENGINEERING DESIGN**– 1 Credit (index 1.04)  
Grades 9-10

This course is designed for the student interested in an engineering related field of study. It is a fast-paced, challenging course that focuses on learning how to take an idea through an engineering design process. Students will be exposed to various communication methods, teamwork, research and analysis and applications of math & science. Through activity- and problem-based projects, students learn about applying engineering standards, sketching to communicate ideas and technical documentation. They work both individually and in teams to design solutions to a variety of problems using industry standard 3D modeling software.

**PLTW-PRINCIPLES OF ENGINEERING**– 1 Credit (index 1.04)  
Grades 10-12

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

PREREQUISITES: Students must have completed Introduction to Engineering Design

**PLTW-CIVIL ENGINEERING & ARCHITECTURE**– 1 Credit (index 1.04)  
Grades 11-12

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

PREREQUISITES: Students must have completed Introduction to Engineering Design and Principles of Engineering.
*Required 3rd Science Credit includes: Anatomy & Physiology, Forensic Science, AP Biology, AP Chemistry, and AP Physics.

*Project Lead the Way courses are considered elective courses, must be taken in sequence and do not count towards the third science course: Principles of BioMed, Human Body Systems, Medical Interventions, Biomedical Innovation.
It is required that students successfully complete three credits in Science. A comprehensive entry exam may be required for enrollment into all honors/advanced placement courses.

**Student’s credits must include:**
- Biology
- Physical Science
- One or more electives to equal the 3rd science credit

**SCIENCE COURSES**

**INTRO TO CHEMISTRY / PHYSICS – 1 credit**
Grades 9-10
This course is designed for the college bound student and provides an introduction to physical science with a component of earth and space science. Students develop a conceptual understanding of chemistry, and physics and physical science, as outlined in Kentucky’s Program of Studies, through the use of scientific inquiry. They experience physical science concepts such as motions and forces, conservation of energy, interactions of energy and matter. A scientific inquiry approach uses concrete hands on experiences that require students to apply critical thinking skills.

**BIOLOGY I - 1 credit**
Grades 9-10
Biology I is an introductory course in the biological sciences. Content includes basic biochemistry, cell biology, ecology, genetics, & evolution. This course includes lecture, discussion, laboratory work, research and individual and group projects.

**CHEMISTRY HONORS - 1 credit (index 1.02)**
Grades 10-12
This course is designed to provide students with a fundamental knowledge of the composition of matter and the chemical changes it undergoes. Laboratory, quantitative, communication and independent thinking skills are stressed. There is a significant math component in this course. 
RECOMMENDATION: Students should have successfully passed Algebra II with 85% or better. Previous science teacher recommendation and Algebra II teacher's signature are required.

**CHEMISTRY - 1 credit**
Grade 11-12
This course is aimed towards students who are not planning to go into the engineering, science, or medical fields. This course will fulfill college entrance requirements and can be used as the prerequisite for Anatomy and Physiology (it will NOT meet the prerequisite for AP Biology and AP Chemistry). Emphasis is placed on chemistry applications in everyday life and society. The course is designed to teach the concepts of chemistry without a significant math component.

**ADVANCED PLACEMENT BIOLOGY - 1½ credits(index 1.04)**
Grades 9-12
AP (Advanced Placement) Biology is an accelerated course in Biology that is the equivalent of a first year college course. The course includes intensive study of Biochemistry, cytology, genetics, evolution, and fundamental life processes. A summer assignment is required.
RECOMMENDATION: Students should have a 90% or higher in Biology and Honors Chemistry and be strongly motivated and able to work independently. (An ACT score of 23 or above is highly recommended.)
ADVANCED PLACEMENT CHEMISTRY – 1½ Credits (index 1.04) Grades 11-12
AP (Advanced Placement) Chemistry is an accelerated course in chemistry. (Students are expected to take the AP exam in May for possible college credit). This course includes individualized instruction in analytical chemistry, stoichiometry, physical chemistry, and some organic chemistry. A summer assignment is required.
RECOMMENDATION: Students should have taken Honors General Chemistry with a grade of 88 or better and successful completion of second-year Algebra is required. (An ACT score of 23 or above is highly recommended).

AP PHYSICS C: Mechanics – 1½ Credit (index 1.04) Grades 12
This is a calculus-based physics course that covers kinematics, dynamics, energy, momentum, rotation, gravitation and oscillation. This course is the first of a two-course sequence that is equivalent to the introductory physics sequence taken by science and engineering students at most colleges and universities.
PREREQUISITE: Successful completion, or simultaneous completion of a calculus course. An ACT score of 25 or above in Science and Math is highly recommended.

ADVANCED PLACEMENT PHYSICS I- 1½ Credit (index 1.04) Grades 10-12
AP Physics 1 is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. This course replaces Honors Physics.
Passing the AP Physics 1 exam may earn college credit that can be applied to programs that do not require a calculus based physics such as a pre-med program. Passing the AP Physics 1 exam will not count for a college program which requires a calculus based physics such as an engineering program. Students wanting to earn college credit for an engineering degree should take AP Physics C.
While there is no pre-requisite for this course, students should have completed geometry and be concurrently taking Algebra II. Although the Physics 1 course include basic use of trigonometric function this understanding can be gained either in the concurrent math course or in the AP Physics 1 course itself.

ADVANCED PLACEMENT PHYSICS 2- 1½ Credit (index 1.04) Grades 12
This course is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics.
Passing the AP Physics 2 exam may earn college credit that can be applied to programs that do not require a calculus based physics such as a pre-med program. Passing the AP Physics 2 exam will not count for a college program which requires a calculus based physics such as an engineering program. Students wanting to earn college credit for an engineering degree should take AP Physics C.
PREREQUISITE: AP Physics 1

ANATOMY AND PHYSIOLOGY HONORS- 1 credit (index 1.02) Grades 11-12
This is an introductory course in human anatomy and physiology dealing with fundamental principles and major body systems. It is planned primarily for those interested in careers in the health and physical education fields. A research paper will be required and a summer assignment may be required.
PREREQUISITE: Honors Chemistry or may take concurrently. Biology I should be completed with an 85% or better and previous science teacher’s recommendation.

FORENSIC SCIENCE – 1 credit Grades 11-12
This course is for students who wish to learn more about forensic science. Topics covered include, but are not limited to, fingerprinting, hair, fabric and fiber analysis, handwriting analysis, and blood and blood analysis.
RECOMMENDATION: Students should have successfully passed Biology I and Honors or General Chemistry with an 80% or better.

ENVIRONMENTAL SCIENCE – 1 credit

This course is aimed towards students who are not planning to go to a four-year college and need a third science. Prerequisite is a passing grade in Biology. The course is designed for students who have difficulty in math, as there is not a significant math component to the course. Topics covered are Energy Conservation, Green Technologies, Waste Management, and Pollution. The course is project-based – meaning for each unit there will be a major project done in a group setting using the Kentucky Green and Healthy School’s initiative as a model.

BIOMEDICAL

The rigorous and relevant four-course PLTW Biomedical Science sequence allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health. Students engage in activities like investigating the death of a fictional person to learn content in the context of real-world cases. They examine the structures and interactions of human body systems and explore the prevention, diagnosis, and treatment of disease; all while working collaboratively to understand and design solutions to the most pressing health challenges of today and the future.

Each course in the Biomedical Science sequence builds on the skills and knowledge students gain in the preceding courses and the complete four class sequence qualifies as a career pathway in Kentucky. Due to limited availability, students are expected to take all four classes in the sequence. By completing this pathway, students that complete this career pathway may earn industry certifications and be classified as career ready and therefore be well-prepared for a variety of majors and/or careers in the medical and allied health fields.

Each course in the sequence has a college-level curriculum with rigorous STEM concepts and applications; the course will be indexed at 1.08 and can count as a student’s career & technical course for the graduation requirements. The independent nature of scientific research requires mature students, so if you are a hardworking and motivated student with an interest in medical science then you should consider this career pathway.

PLTW – PRINCIPLES OF BIOMEDICAL SCIENCE – 1 Credit (index 1.04)

This course investigates biomedical sciences through problem-based learning and hands-on projects. Designed to develop students’ collaborative, critical-thinking and problem-solving skills, students investigate health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases while determining factors that lead to the death of a fictional person. Students also research lifestyle choices and medical treatments that might have prolonged the person's life. Activities and projects introduce students to human physiology, medicine and research processes, laying the foundation for subsequent courses in the Biomedical Sciences program. Students participating in PLTW - Principles of Biomedical Science may be eligible for dual credit.

PLTW - HUMAN BODY SYSTEMS – 1 Credit (index 1.04)

This course is the second in the nationally recognized Project Lead the Way series designed to investigate biomedical sciences through exciting hands-on projects and problems which encourage the students to
develop innovative, collaborative, critical-thinking and problem-solving skills. Students will examine the interactions of human body systems as they explore identity, communication, power, movement, protection, and homoeostasis. Students will design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflexes, voluntary action and respiration. Exploring science in action, students build organs and tissues on a mannequin, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries. Students participating in PLTW - Human Body Systems may be eligible for dual credit. PREREQUISITES: Students must have successfully completed PLTW - Principles of Biomedical Science.

PLTW -MEDICAL INTERVENTIONS -1 Credit (index 1.04) Grades 10-11

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. PREREQUISITES: Successful completion of Human Body Systems or may be taken concurrently with Human Body Systems per teacher approval.

PLTW-BIOMEDICAL INNOVATION -1 Credit (index 1.04) Grades 11-12

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution. PREREQUISITES: Successful completion of Medical Interventions or may be taken concurrently with Medical Interventions per teacher approval.
*AP US History does NOT require AP European or AP Human Geography as pre-requisites.

*AP European (10th grade) does NOT require AP Human Geography as a pre-requisite.

*AP European if taken in 12th grade can be taken as a Social Studies Elective or to satisfy the Humanities credit requirement

*AP Psychology does NOT require Psychology as a pre-requisite.
SOCIAL STUDIES DEPARTMENT

Three sequential credits in Social Studies must successfully be completed in order to fulfill the new state graduation requirements.

**Those credits include:**

9th grade: Human and Physical Geography OR AP Human Geography

10th grade: World History OR AP European History

11th grade: US History OR AP US History

In addition to the three required courses, students are encouraged to take an elective, which would broaden their perspectives and enhance their knowledge in the Social Studies area. A goal for all Social Studies students is the development of responsibility in order to become a positive, contributing member of society.

**SOCIAL STUDIES COURSES**

**HUMAN AND PHYSICAL GEOGRAPHY – 1 Credit**

The Human and Physical Geography course familiarizes students with the world using the five geographic themes and essential elements. Students will develop skills and knowledge about location, place, human/environmental interaction, movement and regions. Human and physical geography will enable students to use higher level thinking and encourage problem solving. This course will integrate thinking skills, historical processes, and content making it relevant to all students. Human and physical geography provides a strong foundation for our current pathway which includes the integration of concepts and principles from history, economics, geography, civics, and the humanities.

**ADVANCED PLACEMENT (AP) HUMAN GEOGRAPHY – 1 Credit (index 1.04)**

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They will also learn about the methods and tools geographers use in their science and practice. Requirements for admission to the course include an interest in social studies, aptitude, and past grade performance. This course follows the Advanced Placement curriculum and is a college-level course taught in a high school setting. Students are expected to complete the AP exam which may result in earning college credit. This course provides a solid foundation for other Advanced Placement social studies classes.

**PREREQUISITES:** Students must have 85% or higher in their current social studies class and a recommendation from their 8th grade social studies teacher.

**RECOMMENDED:** STAR winter reading score range 1000 or higher.

**WORLD HISTORY – 1 Credit**

This course is designed to study modern civilizations. The course will review civilization before 1500 and concentrate on the world since 1500. Students will look at the past and present with the emphasis on unity of ideas developed among all civilizations. World geography will be integrated into this class.
UNITED STATES HISTORY – 1 Credit  
Grade 11  
After a brief review of United States history from 1492 – 1865, this course is a survey of United States history from 1865 (Reconstruction) to the present. Students will analyze historical events, primary and secondary sources, and individual perspectives to gain an understanding of the development of the United States. U.S. Geography will be integrated into this course. This credit must be completed the junior year.

AP UNITED STATES HISTORY – 1 Credit (index 1.04)  
Grade 11  
Requirements for admission to the course include interest in history, aptitude, and past grade performance. Students will be prepared and expected to take the Advanced Placement United States History Test given by the College Board in May. Most students earning a passing grade on the exam can earn up to six college credit hours. The program is equivalent to a full-year introductory college history class. Due to these requirements by the College Board, the course must cover from Early Americans to the present. This credit must be completed the junior year. **A summer assignment is required.**  
PREREQUISITES: Students must have an 87% or higher in their current social studies class. A reading test score of 22 or above on the CERT/ACT test is highly recommended.

PSYCHOLOGY - 1 credit  
Grades 10 - 12  
This course introduces Psychology as the study of human behavior and mental processes. The topics discussed include the following: psychology's philosophical origins, application and principles of learning, personality, psychological disorders along with causes and therapeutic techniques. The course will focus on the understanding of human motives and the causes of behavior, helping students to obtain a better understanding of themselves and their problems.

AP PSYCHOLOGY - 1 credit  
Grade 11- 12  
The purpose of the A.P. Psychology course is to introduce students to a more in-depth systematic and scientific study of the behavior and mental processes of human beings. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the methods psychologists use in their science and practice. The aim of the A.P. course is to provide the student with a learning experience equivalent to that obtained in most college introductory courses. **Students are expected to take the AP exam.** Students will be required to complete assignments on Canvas.  
PREREQUISITES: Students must have an 87% or higher in their current social studies class and a recommendation from the current social studies teacher. A reading test score of 22 or above on the ACT/CERT is highly recommended.

AP EUROPEAN HISTORY – 1 Humanities credit  
Grade 10 or 12  
This course follows the Advanced Placement curriculum and is designed as a college level introductory course in European History. As such, reading comprehension level and writing ability of students should be exceptional. While the emphasis of the course is on traditional political history, considerable time will also be spent on the evolving relationships between European and the world. **Students are expected to take the AP exam.** Most students earning a passing grade on the exam can earn up to six college credit hours. **A summer assignment is required.**  
PREREQUISITES: Twelfth grade students must have 87% or higher in current social studies course. A reading test score of 22 or above on the CERT TEST is **REQUIRED.** Tenth grade students must have a CERT TEST SCORE of 22 or above and also have an 87% or higher in their current social studies class. A minimum grade of 87% in English Honors and AP Human Geography is highly recommended.
AP UNITED STATES GOVERNMENT AND POLITICS - 1 credit  (index 1.04)  Grade 12

This course introduces students to a more in-depth study of the political processes and institutions of the United States government. Students will investigate fundamental principles at the foundation of our Constitution, political beliefs, and how public policy is formed through the three branches of government. Students will also learn about political parties and elections, the role that mass media and interests groups play on our political system, and the evolution of civil rights and liberties throughout American History. This class is a blended learning class which means that students will have a schedule of class three days a week with assignments to complete on scheduled off days. The goal of this course is to provide students with a learning experience equivalent to most college introductory political science courses while providing the support to teach skills like time management and technology use to prepare them for college. Students are expected to take the AP exam. Most students earning a passing grade on the exam can earn up to three college credit hours. PREREQUISITES: Recommendation from a current social studies teacher and an 87% or higher in their current social studies class. It is also highly recommended that students have a 22 or above on Reading portion of the ACT.

GLOBAL ISSUES – ½ credit  Grade 12

Global Issues is the study of persistent global issues relating to social, political, and economic facets of human behavior. This is an opportunity for the mature pupil to learn the concepts, skills, and tools of the social scientist in some decision-making and problem-solving skills on both the national and international level. This is more than a survey course in current events. Independently, pupils will pursue an issue in considerable depth through comprehensive research and analysis. Students will learn to face the ramifications of mass human behavior and learn to formulate their own ideas and opinions regarding how to deal with such complex issues. The themes that will be covered are political, economic, religious, military, diplomatic, and aesthetic. PREREQUISITE: Must be taken with American Pop Culture.

AMERICAN POP CULTURE - ½ credit  Grade 12

This course examines American culture by the decade, from the 1940’s to modern times through some of its most popular cultural forms: film, music, magazines, television, and sports. This class will make history come alive as students explore the pop culture that defines each decade. PREREQUISITE: Must be taken with Global Issues.
ARTS AND HUMANITIES DEPARTMENT

The courses in the Fine Arts Department provide the student with a variety of elective and required courses. These courses instruct in the areas of the visual and performing arts, which include visual arts, instrumental and vocal music, dramatic arts, and dance. Visual and performing arts courses are designed for student enrichment in the liberal arts tradition with some honor and AP classes offered to meet student needs.

Each student at Ryle High School must take at least one class with a visual or performing arts component or a historical review of the arts as a state graduation requirement. Each student must complete one of the following in order to fulfill the Arts and Humanities graduation requirement. Each student must complete:

1. The full-credit year-long Humanities course.
2. A full-credit, year-long course in one of the fine arts areas. (music, choir, art, drama)
3. World Language (Level III)

HAVPA/HUMANITIES – 1 Humanities credit  
Grade 12
An interdisciplinary survey of the beliefs, thoughts, values, traditions, and customs of humankind as reflected in history, art, literature, language, folklore, dance, and music. Emphasis is placed on humankind's attempts to establish a meaningful relationship between the individual and the world. This course satisfies the arts & humanities requirement.

MUSIC APPRECIATION – 1 Humanities credit  
Grade 9-12
This course surveys different musical styles with the intent of increasing the enjoyment of different musical styles and/or developing artistic or technical judgment. Focus will be on developing an understanding of a particular style or historical period. Course covers the elements, structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music.

INTRODUCTION TO THEATRE 1 & 2 – 1 Visual - Performing Arts credit  
Grade 9-12
This course for the dramatic arts is designed to help students develop acting skills by participating in theatre games, improvisation, scenes, monologues, and productions. We will also learn about the origins of drama, study significant plays and playwrights, write original scenes, and practice voice, movement, and characterization. Note: Students must have designated drama as an area of interest in their online Individual Learning Plan. This course satisfies the arts & humanities requirement.

FUNDAMENTALS OF DANCE – 1 Visual - Performing Arts credit  
Grade 9-12
Students will focus on the purpose, humanity, structure, and processes of dance while learning and performing various styles of dance which may include ballroom, folk, modern dance, African, dance composition, improvisation, and others. This course also instructs students in basic dance movement skills to increase body awareness, enhance self-image, improve physical fitness, and develop personal expression potential. Students should expect to challenge themselves physically every class. Students are graded on dress code for dance, class participation and performance. Note: Students must have designated dance as an area of interest in their online Individual Learning Plan. This course fulfills the required arts & humanities credit for graduation. This course satisfies the arts & humanities requirement.
VISUAL ARTS DEPARTMENT

VISUAL ART I - GENERAL ART – 1 Visual - Performing Arts credit Grade 9-12
The course provides instruction in a variety of art media including drawing, painting, printmaking, sculpture, and ceramics. The elements of art, principles of design, art criticism and art history are included. Survey must be completed to request this course.

VISUAL ART II - SPECIALIZED ART – 1 Visual - Performing Arts credit Grade 10-12
The course provides in-depth experimentation in some of the more popular art mediums including but not limited to pencil, charcoal, coloring pencil, watercolor, acrylic, printmaking, collage, ceramic and other sculpture mediums, fiber arts, and others. We will explore different subject matters, meaning making and self-reflection within visual art. Principals of design and art appreciation are included. PREREQUISITES: Art I and teacher recommendation.

VISUAL ART III - ADVANCED ART – 1 Visual - Performing Arts credit Grade 10-12
Comprised of both studio experiences, and modern art history, this course will permit advanced students to develop in areas of design, drawing, painting, photography, ceramics, sculpture, silkscreen, and digital art. PREREQUISITES: Art I and teacher recommendation.

VISUAL ART IV – 1 Visual - Performing Arts credit Grade 10-12
This class will be an extension of ART III with an emphasis on student’s specialized area in any of the art medias. Students will be required to exhibit assimilated pieces in an individualized art show. PREREQUISITES: ART I and teacher recommendation.

AP STUDIO ART DRAWING PORTFOLIO – 1 Visual - Performing Arts Credit Grade 10-12
This course is designed for the serious art student who intends on studying art in college or has a passion for art. This course must be completed in one year and requires dedication to complete. Students must complete a required portfolio to pass the course. PREREQUISITES: Complete the summer assignments and get approval through the art teacher.

PEER TUTORING-ART- 1 credit Grade 11-12
This elective course collaborates with the special education department. The mission of this course is to establish a relationship between regular education students and students with multiple disabilities (cognitive and physical), while working alongside a visual arts teachers, a special education teacher and paraprofessionals to improve and enhance their fine motor skills and independent accomplishments. Art Skill development may include drawing and painting, sculptural work in clay and paper mache, weaving and mixed media work as appropriate. Students who may be interested in art education, art therapy, education, early childhood education, special education, physical therapy, occupational therapy and any mentoring professions may benefit from this course. Application Required.
INSTRUMENTAL & VOCAL MUSIC COURSES

SYMPHONIC BAND HONORS – 1 Performing Arts credit (index 1.02)  
Grades 9-12
The Honors Wind Symphony is designed to promote advanced students’ playing technique for brass and woodwind instruments and cover a variety of music styles primarily for concert performances. Literature for the HWS course is more advanced and incorporates orchestral literature transcribed for band. Course covers the structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music. This course satisfies the arts & humanities requirement.
PREREQUISITES: AUDITION ONLY held annually in the Spring Semester with Middle or High School Band experience.

SYMPHONIC BAND II – 1 Performing Arts credit  
Grades 9-12
Symphonic Band II is designed to promote students’ playing technique for brass and woodwind instruments and cover a variety of music styles primarily for concert performances. Emphasis will be on developing instrumental music technique through approved method books and Grade 3 and 4 Concert Band literature. (National band Association Grading Scale) Course covers the structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music. This course satisfies the arts & humanities requirement.
PREREQUISITES: AUDITION ONLY held annually in the Spring Semester with Middle or High School Band experience.

SYMPHONIC BAND III – 1 Performing Arts credit  
Grades 9-12
Symphonic Band II is designed to promote students’ playing technique for brass and woodwind instruments and cover a variety of music styles primarily for concert performances. Emphasis will be on developing basic instrumental music technique through approved method books and Grade 2 and 3 Concert Band literature. (National band Association Grading Scale) Course covers the structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music. This course satisfies the arts & humanities requirement.

PERCUSSION ENSEMBLE – 1 Performing Arts credit  
Grades 9-12
This course develops technique for percussion instruments and covers a variety of non-specified band literature styles (concert, marching, symphonic, and modern styles.) The class is a separate homogeneous class of only percussion instrumentalists. Course covers the structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music. All percussionists should enroll in this course.

A CAPPELLA – 1 Performing Arts credit   
Grades 10-12
A Cappella is an advanced performance-oriented class geared to expose students to a wide variety of choral literature, ranging from the various historical styles through rehearsal and performance. Students will be given the opportunity to refine proper vocal/choral techniques, breathing skills, sight-reading skills, and basic musicianship. Performances and competitions will take place throughout the school year and students will be given opportunities to participate individually as well as in the larger choral ensemble. PREREQUISITES: Teacher approval required and is contingent upon audition. A Cappella members are selected by audition in January, before scheduling requests are submitted. This course satisfies the arts & humanities requirement.

CONCERT CHOIR – 1 Performing Arts credit   
Grades 9-12
Concert Choir is our largest performance ensemble designed primarily for beginning and intermediate choral instruction. Daily rehearsals will focus on the fundamentals of musicianship, vocal technique, and applied music theory, as well as a focus on the study of the repertoire itself. Instruction and assessment focuses around interpretation of musical language, developing music literacy skills, and multi-cultural study. Concert Choir participates in all three department-wide choral concerts each year as well as in district and state choral festivals.
Advanced Placement Music theory is an in-depth study of the mechanics of music. It is expected that students already have experience in music and can read staff notation as well as basic rhythm notation. Students will develop written, aural, and sight-singing skills as pertaining to music of various styles, focusing on the Common Practice Period. Students who perform well in this class will be adequately prepared to take the Advanced Placement Music Theory Exam in May. Students are expected to take the AP exam and depending on the exam score and the college attended, students may earn upwards of four college credit hours. This course satisfies the arts & humanities requirement.

PREREQUISITES: Teacher Approval required. Summer work is required from MusicTheory.net.
WORLD LANGUAGE DEPARTMENT

The World Language Department offers French, German, and Spanish languages. While Ryle High School does not require a world language as a requirement for graduation, the pre-college curriculum states that a student should take two years of the same language to meet the college entrance requirements. Students have the advantage of taking four years of a language and can possibly earn college credit through dual-enrollment or Advanced Placement. Students may also choose to distinguish themselves from others by graduating with the Boone County Public Schools’ Seal of Biliteracy! for which our 3rd year language courses prepare them. The benefits of Biliteracy Frequently asked questions.

FRENCH I - 1 credit Grades 9-12
This is a beginning course, which introduces the student to basic French expressions and grammatical constructions of everyday life. Listening comprehension, speaking, reading, and writing skills at the beginning level are developed, with an introduction and an exploration to the culture and history of the French-speaking countries. PREREQUISITE: STAR winter reading score range 865 or higher. In addition, an English teacher recommendation may be accepted in place of the STAR reading score.

FRENCH II - 1 credit Grades 10-12
The emphasis continues the development of the language skills in basic French, with increased emphasis being placed on grammatical patterns, vocabulary enrichment and reading skills. PREREQUISITES: Successful completion of the previous year with at least a 70% average.

FRENCH II HONORS - 1 credit (index 1.02) Grades 10-12
Same basic content design as French II; however, students will be required to master the lessons at a faster pace and textbook material will be supplemented with readings in French. Listening skills will be emphasized. French II - Honors is designed to accommodate students who intend to continue French beyond the second year. PREREQUISITES: Successful completion of the previous year with at least an 85% or higher average. Must have the current instructor approval.

FRENCH III HONORS – 1 Humanities credit (index 1.02) Grades 10-12
Level III continues the development in the basic language skills, while providing an introduction to literary readings in French. Reading proficiency and listening/speaking skills are emphasized. Vocabulary variety is increased; geography and history of France are introduced, and speaking and writing skills are refined. This course satisfies the arts & humanities requirement. PREREQUISITES: Successful completion of the previous year with at least an 85% or higher average. Must have the current instructor approval.

AP FRENCH LANGUAGE & CULTURE - 1 credit (index 1.04) Grades 11-12
This class prepares students for the Advanced Placement French Exam, which is given each May. Those students who successfully pass this exam may earn college credit. The course provides intensified practice in skill areas, so as to prepare students for spontaneous response. Students will also read selections of French literature, adding to their knowledge of French history and culture. PREREQUISITES: Successful completion of the previous year with at least an 85% or higher average. Must have the current instructor approval.

GERMAN I - 1 credit Grades 9-12
This is an introductory course to the German language in the 3 modes of communication (speaking, listening and writing) and culture. Conversational expressions, vocabulary, and grammatical structures used in everyday life and travel will be presented to the students. The primary goal is to help students develop proficiency in the four basic skills of language acquisition: listening comprehension, reading, writing, and speaking, while at the same time increasing the students’ knowledge and appreciation of the German culture. PREREQUISITE: STAR winter reading score range 865 or higher. In addition, an English teacher recommendation may be accepted in place of the STAR reading score.
GERMAN II - 1 credit
Grades 10-12
A continuation of German I in which the emphasis shifts from basic conversational skills to more complicated structures and grammatical patterns. Vocabulary, speaking, listening, writing, and reading skills are expected to increase. Course is designed to accommodate students who will not continue to German III Honors.
PREREQUISITES: Successful completion of German 1 with at least a 70% average.

GERMAN II HONORS – 1 credit (index 1.02)
Grades 10-12
This course is a continuation of German I at an accelerated pace. Students learn more complicated tenses, grammatical patterns and structures to prepare for the 3rd year Seal of Biliteracy opportunity and/or the 4th year Advanced Placement program.
PREREQUISITES: Successful completion of German 1 with at least an 85% or higher average. Must have the current instructor approval.

GERMAN III HONORS – 1 Humanities credit (index 1.02)
Grades 10-12
A course designed as a review and extension of basic language skills acquired in German I and II Honors and to prepare for the 3rd year Seal of Biliteracy. Emphasis is on reading and discussion of topics of interest to high school students. In addition students continue to learn complicated tenses and grammatical structures at an accelerated pace. This course satisfies the arts & humanities requirement.
PREREQUISITES: Successful completion of the previous year with at least 85% or higher average. Must have the current instructor approval.

AP GERMAN LANGUAGE & CULTURE - 1 credit (index 1.04)
Grades 11-12
This class provides intensified practice in speaking, advanced grammar structures, listening and writing skills, and especially in preparing for spontaneous responses. The students will also read works from and about German literature and society. This course is also designed to prepare students for the Advanced Placement German Exam, given each May.
PREREQUISITES: Successful completion of the previous year with at least an 85% or higher average. Must have the current instructor approval.

SPANISH I - 1 credit
Grades 9-12
An introduction to the language and culture of the Spanish-speaking people, this course utilizes a variety of techniques within the classroom. Basic conversational expressions, grammatical structures, and vocabulary are introduced to the beginning-level student. Emphasis is placed on the acquisition of the four basic language skills: listening comprehension, speaking, reading, and writing in the Spanish language. Cultural diversities are also explored.
PREREQUISITE: STAR winter reading score range 865 or higher. In addition, an English teacher recommendation may be accepted in place of the STAR reading score.

SPANISH II - 1 credit
Grades 9-12
The second year student advances in his knowledge of the Spanish language. More oral work is stressed, and vocabulary and grammar studies are expanded. Continued development of language skills is emphasized.
PREREQUISITES: Successful completion of the previous year with at least a 70% average.

SPANISH II HONORS - 1 credit (index 1.02)
Grades 9-12
Same basic content as Spanish II. Students will be expected, however, to master the lessons at a faster pace. Listening and speaking proficiency will be emphasized. This class is strongly recommended for those planning to take Advanced Placement Spanish.
PREREQUISITES: Successful completion of the previous year with at least an 85% or higher average. Must have the current instructor approval.
SPANISH III HONORS w/Dual-credit option - 1 Humanities credit (index 1.02)  Grades 10-12
Students continue to practice reading, writing, speaking, and listening skills. Hispanic history and culture are explored. Advanced grammar is presented and verb tenses are reviewed. Most grammar needed for the AP Spanish language will be covered. This course satisfies the arts & humanities requirement.
PREREQUISITES: Successful completion of the previous year with at least an 85% or higher average. Must have the current instructor approval.

AP SPANISH LANGUAGE & CULTURE – 1 Credit (index 1.04)  Grades 11-12
Students will use college-level materials to demonstrate an understanding of the cultures, incorporate interdisciplinary topics (connections), make comparisons between the native language and the Spanish and between cultures (comparisons), and use the target language in real-life settings (communities). Students will also review grammar, expand vocabulary in preparation for the AP Spanish Language exam which is given in May.
PREREQUISITES: Successful completion of the previous year with at least an 85% or higher average. Must have the current instructor approval.
HEALTH / PHYSICAL EDUCATION DEPARTMENT

In Health and Physical Education, the following courses are required to graduate and may be taken any semester of the student’s high school career:

- Contemporary Health—½ credit
- Physical Education I (Pick One)—½ credit
  - Team Sports
  - Recreational Sports
  - Fitness Activities
- Elective Courses of PE II, III, and IV can only be taken in a PREREQUISITES order and each class is ½ credit per semester. One or both semesters of PE II, III, or IV may be taken for credit, with a maximum of one credit per year.

HEALTH / PHYSICAL EDUCATION COURSES

HEALTH EDUCATION—½ credit Grades 9-12
Required for graduation this course will include the study of nutrition, fitness and exercise, family and social health, mental health, drugs, safety, body systems, CPR, first aid, alcohol, tobacco, and more. Class is designed to assist students with healthful living.

PHYSICAL EDUCATION I—½ credit Grades 9-12
Required for graduation this course will be earned by choosing and completing one of the following 3 content areas:

TEAM SPORTS- This course allows students the opportunity to improve their mental, emotional, social, and physical health through daily participation in a variety of team oriented coed sports. Sports covered throughout this course will include Volleyball, Soccer, Flag Football, Softball, Basketball, Racquet sports, Ultimate Frisbee, Floor Hockey, and a variety of other modified non-traditional games.

RECREATIONAL SPORTS- This course allows students the opportunity to improve their mental, emotional, social, and physical health through daily participation in a variety of recreational coed sports. Sports covered throughout the year will include Badminton, Pickle ball, Bowling, Archery, Tennis, Matball, Kickball, Cornhole, and a variety of other modified non-traditional games.

FITNESS ACTIVITIES- This fitness activities class gives students the opportunity to begin or continue healthy habits throughout high school and their lifetime. This course will allow students to develop and maintain a personal fitness plan utilizing a variety of fitness activities throughout the school year such as Weight Lifting, Circuit Training, Yoga, Pilates, Zumba, Dance type games, recorded fitness programs, and other non-traditional aerobic activities.

PHYSICAL EDUCATION II—½ credit per semester Grades 10-12
This program is structured for students who are interested in the fundamentals of team and individual/dual sports. Physical Fitness will be stressed each semester through warm-up exercises, physical and written testing, strength training (free weights), and aerobics.
PREREQUISITES: Physical Education I with a score of 85% or above and a participation rate of 95% or above.

PHYSICAL EDUCATION III—½ credit per semester Grades 11-12
The emphasis is on the progression of skill level and knowledge of rules, terms, strategies of games, and participant sports. Instruction is given in organized competition in team, individual and dual sports. Physical fitness work and physical and written testing are included.
PREREQUISITES: Physical Education II with a score of 85% or above and a participation rate of 95% or above.
PHYSICAL EDUCATION IV—½ credit per semester Grade 12
A continuum of skills, knowledge, competitiveness, and fitness learned in levels II, III. Physical and written tests are included.
PREREQUISITES: Physical Education III with a score of 85% or above and a participation rate of 95% or above.

STRENGTH AND CONDITIONING—½ credit per semester Grades 10-12
Elective course designed for the student who is interested in improving and maintaining physical health for life. Students will participate in strength exercises 2-3 days a week utilizing free weights and nautilus machines. Aerobic fitness activities will be incorporated 2-3 days a week. Team games will not be played. Athletes please take note: All students in Strength and Conditioning will be required to participate fully on a daily basis. “Game Day”, team conditioning, or weight training will not excuse students from class time activities. May earn maximum of one (1) credit.
PREREQUISITES: Physical Education II, III, or IV with a score of 85% or above and a participation rate of 95% or above.

GROSS MOTOR DEVELOPMENT—1 credit Grades 10-12
This elective course collaborates with the special education department. The mission of this course is to establish a relationship between regular education students and students with multiple disabilities (cognitive or physical), while working alongside a physical education teacher, special education teacher, and para-professionals, to improve and enhance their motor skills. These skills include; running, catching, kicking, throwing, jumping, etc...Students who may be interested in education, special education, physical therapy, occupational therapy, and any mentoring profession may be interested in this course.

GROSS MOTOR DEVELOPMENT II—1 credit Grades 11-12
This elective course collaborates with the special education department. The mission of this course is to establish a relationship between regular education students and students with multiple disabilities (cognitive or physical). Students will have a greater responsibility in creating and designing meaningful and purposeful activities for the special needs student.
PREREQUISITES: Students who wish to take Gross Motor Development II must take Gross Motor Development
CAREER AND TECHNICAL EDUCATION

The Career and Technical Education (CTE) Department is comprised of the following:

- Agricultural Science
- Family and Consumer Science
- Business & Marketing Education
- Information Technology
- PLTW Engineering (Math Dept)
- PLTW Biomedical (Science Dept)

Ryle High School graduates are required to have a minimum of one career and technical credit. Students will learn marketable skills enabling them to bridge the gap from high school to college AND from high school to their future careers. Articulated college credit maybe available at various Kentucky universities for completion of a career pathway and dedicated End-Of-Program exam.

To earn this credit, the following entry-level courses are recommended. Each of these courses leads to career interest pathways that will build your skills and knowledge in a more specific in-demand area, and these pathways are listed below and detailed on the following pages.

- **Agricultural Science:** Principals of Agricultural Science and Technology
  - Leads to the following career pathways:
    - Animal Science Systems
    - Horticulture and Plant Science Systems

- **Business & Marketing Education:** Digital Literacy And/Or Principles of Marketing
  - Leads to the following career pathways:
    - Accounting
    - Administrative Support
    - Marketing
    - E-Commerce
    - Management & Entrepreneurship
    - Financial Services
    - Retail Services

- **Information Technology (IT):** Digital Literacy or Computer Literacy
  - Leads to the following career pathways:
    - Computer Science

- **Family and Consumer Science:** FACS Essentials
  - Leads to the following career pathways:
    - Culinary and Food Service
    - Early Childhood Education
    - Fashion and Interior Design
    - Teaching & Learning

- **Health Sciences:** Principles of Biomedical Science
  - Leads to the following career pathways:
    - Biomedical Sciences

- **Engineering:** Introduction to Engineering Design
  - Leads to the following career pathways:
    - Civil Engineering
AGRICULTURAL SCIENCE EDUCATION

Agricultural Science Education is designed to provide career exploration, orientation, and preparation for any student who has an interest in any aspect of agriculture, horticulture, or the environment. The program is open to all students regardless of background or prior experience in the field. The only requirement for enrollment is an interest in the subject area.

The program has been updated to reflect the changing agricultural industry. Currently, over 22% of all occupations are agricultural related. This program allows students to explore various career areas in agriculture.

All courses will consist of classroom instruction, laboratory experience, and student projects. A greenhouse, a landscape plant nursery, and on-campus landscape areas offer a wide range of practical laboratory experiences.

The co-curricular student organization, National FFA Organization, offers all students the opportunity to develop leadership skills and self-confidence. FFA also offers competitions on the local, regional, state, and national levels, many field trips, leadership camps, conferences, as well as organized recreational activities. **Students must be enrolled in an Agriculture class in order to be a member of FFA.**

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**PRINCIPLES OF AGRICULTURAL SCIENCE & TECHNOLOGY - 1 credit**

This course introduces students to the various segments of the agricultural industry. Basic animal science, plant science, and horticulture will be introduced. The many career areas available in agriculture will be explored. The student organization FFA will provide leadership development. Record keeping will be taught through student Supervised Agriculture Experience Program (SAEP), which takes place outside of the regular classroom and will be required of all students enrolled in the course. This course is intended for 9th or 10th grade students who have never been enrolled in an Agriculture Course. This course is recommended for completion of the following Career Pathways: Animal Science Systems and Horticulture and Plant Science Systems.
AGRICIENCE – 1 credit Grades 10
This course introduces the scientific agricultural approach to animal science and selection, and plant and land science. Agricultural career opportunities will be emphasized in each class. Laboratory experiences relating to basic and current technology will be part of the program. Content may be enhanced by utilizing appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a Supervised Agriculture Experience Program (SAEP) and keep records on the program that takes place outside the regular classroom. This course is recommended for completion of the following Career Pathways: Animal Science Systems and Horticulture and Plant Science Systems.

ANIMAL SCIENCE – 1 credit Grades 10-12
Animal Science develops basic knowledge and skills pertaining to animal identification, selection, nutrition, reproduction and genetics, health management, and marketing of farm and companion animals commonly produced in Kentucky. The latest production technologies, as well as biotechnological applications, will be included. Leadership development will be provided through FFA (Future Farmers of America). Each student will be expected to have a supervised agricultural experience program.
PREREQUISITE: Principles of Agricultural Science & Technology OR Agriscience AND teacher approval.

ANIMAL TECHNOLOGY-1 credit Grades 10-12
(NOT OFFERED 2019-2020)
Animal Technology instruction concentrates on the advanced production practices and current biotechnological applications of one or more species of farm animals, based on the local community needs. Laboratory experience will be used to emphasize concepts. Content may be enhanced by utilizing current industry accepted technology. Leadership development will be provided through FFA (Future Farmers of America). Each student will be expected to have a supervised agricultural experience program.

VETERINARY SCIENCE – 1 credit Grades 10-12
This course introduces students to the field of veterinary science. Major topics include veterinary terminology, safety/sanitation, anatomy/physiology, clinical exam, hospital procedures, parasitology, posology, laboratory techniques, nutrition, disease, office management & animal management. Careers are also explored. Leadership development will be provided through FFA. Each student will be expected to have a Supervised Agriculture Experience Program (SAEP) and keep records on the program that takes place outside the regular classroom. This course is recommended for completion of the Animal Science Systems Career Pathway.
PREREQUISITE: Principles of Agricultural Science & Technology OR Agriscience AND teacher approval.

EQUINE SCIENCE – 1 credit Grades 10-12
A course that describes the theories, principles and science of horse production and management. This class will cover the anatomy, physiology, nutrition, wellness, care, and breed identification of the horse. We will see many aspects of owning a horse for enjoyment to the multibillion dollar horse racing industry here in Kentucky. We will take a look at the careers and other opportunities for students interested in the equine science field of study. Leadership development will be provided through FFA. Each student will be expected to have a Supervised Agriculture Experience Program (SAEP) and keep records on the program that takes place outside the regular classroom. This course is recommended for completion of the Animal Science Systems Career Pathway.
PREREQUISITE: Principles of Agricultural Science & Technology OR Agriscience AND teacher approval.

FLORICULTURE/ FLORAL DESIGN – 1 credit Grades 10-12
This course describes theories, principles and the science of floral production, design and distribution. This class will be working hands on to design, construct and sell many different floral ideas. Students will learn the biological and physical science as well as the elements of design, with colors, balance, distance, texture and line. These
will all be put together in creating student’s works of art in the form of flowers and other floriculture materials. Leadership development will be provided through FFA. Each student will be expected to have a Supervised Agriculture Experience Program (SAEP) and keep records on the program that takes place outside the regular classroom. This course is recommended for completion of the Horticulture and Plant Science Systems Career Pathway.

PREREQUISITE: Principles of Agricultural Science & Technology OR Agriscience AND teacher approval.

**GREENHOUSE TECHNOLOGY** – 1 credit

Grades 10-12

Topics include the identification and function of a plant's leaves, roots and stems; as well as identifying major plant processes and sexual reproduction parts. The 16 essential elements and how they affect plant growth are discussed. Identification of diseases, insects and plant disorders in the greenhouse are included. Development of growing schedules for the following crops are completed: poinsettias, chrysanthemums, Easter lilies, bedding plants and hanging baskets. Injectors are calibrated using various fertilizer and chemical ratios. Leadership development will be provided through FFA. Each student will be expected to have a Supervised Agriculture Experience Program (SAEP) and keep records on the program that takes place outside the regular classroom. This course is recommended for completion of the Horticulture and Plant Science Systems Career Pathway.

PREREQUISITE: Principles of Agricultural Science & Technology OR Agriscience AND teacher approval.

**LANDSCAPING & TURF MANAGEMENT** – 1 credit (NOT OFFERED 2019-2020)

Grades 10-12

Use of plant material in residential and commercial landscapes will be introduced. Analysis of site, client needs, layout, and principles of design will be included. Heavy concentration will be placed on design of public, private, and service area, as well as selection and arrangement of plant material. Class will participate in landscape installation as well as design a landscape plan. Landscape maintenance will be done on existing landscape. Each student will be expected to have a Supervised Agriculture Experience Program (SAEP) and keep records on the program that takes place outside the regular classroom. This course is recommended for completion of the Horticulture and Plant Science Systems Career Pathway.

PREREQUISITES: Principles of Agricultural Science & Technology OR Agriscience AND teacher approval.

**AGRICULTURAL EDUCATION INTERNSHIP** – 2 credits

Grade 12

This non-paid internship provides a supervised work-site experience for high school students who are enrolled in an agricultural career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students who qualify for this program must display exemplary citizenship at all times as a representative of Larry A. Ryle High School and its community.

PREREQUISITES:

- **Must complete application process**- Must have pre-approval
- Excellent attendance
- Excellent discipline records required
- Must have transportation to/from work with a valid driver’s license
- Must be eligible to receive a Ryle High School Parking Pass
BUSINESS EDUCATION, INFORMATION TECHNOLOGY & MARKETING EDUCATION

With technology advancing so rapidly, it is very important that Ryle students know and understand the many software programs which they will use in college and/or their future careers. With our comprehensive curriculum, students are offered the opportunity to have hands-on experience in word processing, database, spreadsheets, graphics, accounting, web page, desktop publishing, digital video production, and presentation software as well as learning to create their own programs and applications.

In business, marketing and information technology, students learn many valuable skills which will increase their marketability as they enter college or the business world. We believe technology & business skills are a necessity. In addition, many colleges/universities accept Microsoft Certified Office Specialist Certifications (MOS) for college credit or admission to specific college programs of study. We offer MOS preparation and testing through our Business curriculum.

Any student who enrolls in a business, marketing or information technology class has the opportunity to join FBLA–Future Business Leaders of America–a co-curricular organization that provides students with an opportunity to develop leadership skills. Our chapter actively participates in several community service activities, social activities, and competitions. FBLA offers students travel, friends, and fun! Plus, it looks great on a resume. We encourage all students to get involved!!

BUSINESS EDUCATION COURSES

DIGITAL LITERACY - 1 credit
Grades 9-10
Highly recommended. Students will reinforce proper keyboarding techniques as they develop speed and accuracy in using the computer and learn proper formatting as they prepare business and personal documents. Students will develop competency operating popular software programs currently used in the business world such as Microsoft 2013 Word, PowerPoint, Excel, and Access as they complete units of study in word processing, presentation, database, and spreadsheets. Internet research is incorporated into the course as well as basic business concepts with an emphasis on computer terminology/functions and career/employment opportunities. Students should enter this course with basic keyboarding skills. This course is recommended for completion of any of the Business, Marketing or Information Technology Career Pathways.

MICROSOFT OFFICE (MOS) HONORS - 1 credit (1.02 index)
Grades 10-12
Blended Option: Meets M-W-F
As an extension of Digital Literacy, students will have the opportunity to increase their computer skills and become Microsoft Certified. Advanced functions and integration of Microsoft Word, Excel, Access, and PowerPoint will be taught. Students will work toward MOS Certification in three or more of these Microsoft areas. In addition, Ryle High School is partnered with Microsoft Imagine Academy and students will have the benefit of using licensed Microsoft online curriculum and free certification testing on our campus. The course will be a blended class in which students will attend class 1st or 6th period 3 days a week and be required to complete work online the other 2 days. Students will have the opportunity to meet every day in order to address any technology needs. In today’s work and education environment, it is a necessity that students acquire strong computer skills. With the in-depth knowledge learned in this course, students will possess very marketable and beneficial employment and post-secondary education skills. Students earning MOS certification(s) may be eligible for college credits at many colleges/universities. This course is recommended for students seeking
Transition Ready status (formerly College and Career Ready) and completion of the following Career Pathways: Administrative Support, Accounting, and Financial Services. Special Note: Ryle is one of the few high schools in Kentucky which offers MOS certification at the high school level. We encourage our students to take advantage of this opportunity! Many colleges/universities are accepting MOS Certifications for college credit and/or requiring them for admittance into collegiate programs.

PREREQUISITE: Digital Literacy

MICROSOFT OFFICE (MOS) HONORS - 1 credit (1.02 index) Grades 10-12
Regular Course Option: Meets M-F
This course encompasses the same curriculum, pre-requisites and benefits as the Blended MOS Option but will meet Monday-Friday and involve daily teacher-supervised instruction.

MULTIMEDIA PUBLISHING (PHOTOSHOP) – 1 credit Grade 10-12
Students learn the skills of publishing and presentation concepts through the development of sophisticated business documents and projects. These documents may include brochures, programs, flyers, catalogs, newsletters, on-screen presentations, and video/audio productions. Equipment utilized may include: scanners, digital cameras, video cameras, colored printers, multimedia projectors, and digital imaging equipment. This is an excellent course to prepare students for the technical world. Projects in this course may be used for the senior exit interview and writing portfolios. This course is recommended for completion of the E-Commerce Career Pathway. PREREQUISITE: Digital Literacy OR Computer Literacy

ADVANCED MULTIMEDIA PUBLISHING – 1 credit Grade 11-12
This hands-on course applies advanced multi-media concepts through the development of sophisticated documents and projects which includes, but not limited to: web sites, web databases, web movies, video production, and video editing. Students will complete advanced projects agreed upon with the instructor utilizing hardware and software available. Distribution ready publication standards are applied to all projects. This course is recommended for completion of the E-Commerce Career Pathway.
PREREQUISITE: Multi-Media Publishing

WEB PAGE DESIGN – 1 credit Grades 10-12
Students will analyze the structure of the worldwide web, apply basic principles of web documents and HTML, and develop multi-media web pages. Students will create web documents using a simple text editor, and how to use a simple web editor. Features such as layout, tables, images, forms, frames and the incorporation of sound and video will be explored. Developing site specifications and methods to increase the appeal and effectiveness of web sites are included. How to prepare web documents appropriate for use in business and professional web sites will be covered. This course will introduce CSS and emphasizes W3C web design and accessibility standards. This course is recommended for completion of the E-Commerce Career Pathway.
PREREQUISITE: Computer Literacy or Digital Literacy

ACCOUNTING & FINANCE FOUNDATIONS – 1 credit Grades 10-12
This course is a study of accepted principles, procedures, and forms used in accounting. Students study the theory and practice of recording business transactions using both a manual and automated process. Automated accounting is introduced and emphasized to gain experience in practices used by small businesses today. The class also includes preparing and analyzing financial statements, banking, business careers, and a study of credit & investments. Students should be proficient in Microsoft Excel. This course is recommended
for completion of the following Career Pathways: Accounting, Administrative Support, Marketing, Management & Entrepreneurship and Financial Services.

PREREQUISITE:
- Digital Literacy, Marketing Principles, OR Computer Literacy
- Successful completion of Algebra I and Geometry

ADVANCED ACCOUNTING - 1 credit (index 1.04) Grades 11-12
This advanced business course includes an in-depth study of accounting principles and procedures used in maintaining financial records for all legal forms of business. It is a rigorous course that emphasizes analytical and decision-making skills, and includes financial, managerial and financial statement analysis concepts. Students make business decisions and analyze the impact of those decisions on financial statements. As a result, students learn the critical role that accountants play in business. This course is recommended for college-bound students planning business and/or legal careers. Students should be proficient in Microsoft Excel. **This course will be offered for dual credit with Western Kentucky University.** This course is recommended for completion of the following Career Pathways: Accounting, Administrative Support, Management & Entrepreneurship and Financial Services.

PREREQUISITE:
- Digital Literacy, Marketing Principles, OR Computer Literacy
- Accounting & Finance Foundations
- Successful completion of Algebra I, Geometry and Algebra II

FINANCIAL SERVICES I – 1 credit Grades 11 - 12
*The Raider Bank*, a student-banking center, will provide students with the application of banking and financial concepts. It will include an intensive study of economic and financial procedures/concepts. Banking students will develop and manage the student bank through a local sponsoring bank, whose employees will serve as consultants with students on site. An application is required. This course is recommended for completion of the Financial Services Career Pathway.

PREREQUISITE:
- Required: Digital Literacy, Marketing Principles, or Computer Literacy AND Accounting & Finance Foundations
- Excellent attendance
- Teacher recommendation
- **Students must apply for this course.**
- Pre-approval is required

FINANCIAL SERVICES II – 1 credit Grade 12
*The Raider Bank*, this course is a continuation of Financial Services I. Students continue to learn and practice financial activities associated with the operation of a bank and other finance-related institutions in addition to assuming management and supervisory responsibilities. This course is recommended for completion of the Financial Services Career Pathway.

PREREQUISITE:
- Credit in Financial Services I AND Accounting & Finance Foundations
- Excellent attendance
- Teacher recommendation
- **Students must apply for this course**
- Pre-approval is required
PRINCIPLES OF ENTREPRENEURSHIP – 1 credit

If you have ever considered opening your own business, then the Principles of Entrepreneurship class is for you! This class provides students with the knowledge of how to write a business plan, including the brainstorming of business ideas, recognition of Kentucky entrepreneurs, discussion of current business events, etc. It is an interactive class atmosphere where you are encouraged to voice your opinion about business topics as you gain knowledge about various facets of business. This course is recommended for completion of the Management & Entrepreneurship, Marketing and Financial Services Career Pathways.

PREREQUISITE: Marketing Principles, Digital Literacy OR Computer Literacy

INTRODUCTION TO MANAGEMENT – 1 credit

This course emphasizes the skills needed for managing a business that involves the selection and supervision of employees including efficient use of time, personnel, facilities, and financial resources. Students will explore forms of business ownership; typical business organizational structure; product or service promotion in business; effective communications; human relations skills required in dealing with employees; and effective management strategies used in personnel, finance, production, marketing, and information processing. This course is recommended for completion of the following Career Pathways: Accounting, Administrative Support, and Management & Entrepreneurship.

PREREQUISITE: Marketing Principles, Digital Literacy OR Computer Literacy

BUSINESS EDUCATION INTERNSHIP – 2 credits

This non-paid internship provides a supervised work-site experience for high school students who are enrolled in a business career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students who qualify for this program must display exemplary citizenship at all times as a representative of Larry A. Ryle High School and its community.

PREREQUISITES:
• Must complete application process
• Pre-approval is required
• Excellent attendance
• Excellent discipline records required
• Must have transportation to/from work with a valid driver’s license
• Must be eligible to receive a Ryle High School Parking Pass

INFORMATION TECHNOLOGY COURSES

COMPUTER LITERACY – 1 credit

Students will be exposed to the main components of computer literacy including Computer Fundamentals, Key Applications and Living Online. Provides an introduction to the computer and the convergence of technology as used in today's global environment. Introduces topics including computer hardware and software, file management, the Internet, e-mail, the social web, green computing, security and computer ethics. Presents basic use of application, programming, systems and utility software. Students will have an opportunity to earn Internet and Core Computing Certification (IC3). Basic keyboarding skills are strongly recommended. This course is recommended for completion of the Computer Science Career Pathway.

COMPUTATIONAL THINKING – 1 credit

Students will analyze the structure of the worldwide web, apply basic principles of web documents and HTML, and develop multi-media web pages. Course content will include the understanding of hypertext and web
structures. Students will gain an understanding of computer programming and logic by learning to “think like a computer” and will develop and design language-independent solutions to solve computer related problems. Developmental and design basics including use of variables, control and data structures, and principles of command-line and object-oriented languages will be covered. This course is the prerequisite for the upper-level information technology courses. This course is recommended for completion of the Computer Science Career Pathway.

PREREQUISITE: Computer Literacy or Digital Literacy

**C++ PROGRAMMING HONORS - 1 credit** (1.02 index)  
**Grades 11-12**

This is an introductory programming course designed for students who plan to pursue computer science, mathematics or engineering studies after high school. The main emphasis will be on structured, object-oriented programming in the C++ language. Students who plan to take this course should have a strong background in mathematics and logical problem solving. Prior programming experience is not necessary, but would be helpful. **This is an honors course and a summer assignment may be required.** This course is recommended for completion of the Computer Science Career Pathway.

PREREQUISITE:
- Computational Thinking
- Successful Completion of Algebra I, Algebra II and Geometry

**PROJECT-BASED PROGRAMMING - 1 credit**  
**Grades 11-12**

This project-based learning course engages those students with an entrepreneurial spirit that are interested in programming and in finding solutions to existing problems through the creation of applications. In this capstone course, students will create projects that require computer science fundamentals and extensive research to successful complete. Students will work either solo or in a team to execute a project decided upon by the student(s). Students must learn and demonstrate proficiency in time management, scope, research, computer science, and teamwork to be successful in this course. Finally, students will engage in leadership skills by being held accountable for completion of their tasks or project. The teacher will act more as facilitator in this course and is highly encouraged to create his/her own project to demonstrate teacher “buy in” to students. This course is recommended for completion of the Computer Science Career Pathway.

PREREQUISITE:
- C++ Programming Honors

**AP COMPUTER SCIENCE - 1 credit (index 1.04)**  
**Grade 12**

This Advanced Placement course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and is meant to be the equivalent of a first-semester college-level course in computer science. It also includes the study of data structures, design, and abstraction. A good understanding of programming techniques, good typing skills, and an ability to work independently is suggested. **A summer assignment is required. Students are expected to take the AP exam in May.**

Students who successfully complete the AP exam may qualify for up to 6 hours of college credit.

PREREQUISITES:
- Credit in C++ Programming with 89% average or better
- Successful completion of Algebra II
- Approval of C++ programming teacher
INFORMATION TECHNOLOGY INTERNSHIP – 2 credits

This non-paid internship provides a supervised work-site experience for high school students who are enrolled in an information technology career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students who qualify for this program must display exemplary citizenship at all times as a representative of Larry A. Ryle High School and its community.

PREREQUISITES:

- Must complete application process
- Pre-approval is required
- Excellent attendance
- Excellent discipline records required
- Must have transportation to/from work with a valid driver’s license
- Must be eligible to receive a Ryle High School Parking Pass

MARKETING EDUCATION COURSES

MARKETING PRINCIPLES – 1 credit

This course is designed to provide a basic foundation for further study in marketing. Course content provides an overview of the marketing responsibilities of individuals employed in the retail industry. This course is based on the business and marketing core that includes communication skills, operations, distribution, marketing-information management, pricing, product/service management, promotion and selling. This course is recommended for completion of the following Career Pathways: Marketing, Accounting, Administrative Support, E-Commerce, Financial Services and Management & Entrepreneurship.

ADVERTISING & PROMOTION – 1 credit

This course is designed to provide students with a realistic "hands-on" applications of techniques used in the advertising and promotion of goods and services. Students use typical media software, media equipment, while being exposed to all forms of media (print, web page, etc.), methods, budgets, and evaluations used by industry. Leadership development will be provided through DECA. This course is recommended for completion of the following Career Pathways: Marketing, E-Commerce, Financial Services and Retail Services.

PREREQUISITE: Marketing Principles

TRAVEL AND TOURISM MARKETING – 1 credit

This course introduces the student to the travel and tourism industry. This course is based on the Business and Marketing Core that includes communication skills, economics, human resource management, promotion, marketing-information management, and selling. Instruction includes domestic and international travel, sales techniques, transportation methods (road, water, air, and railway), food and beverage marketing, and destination marketing. Leadership development will be provided through DECA. This course is recommended for completion of the following Career Pathways: Marketing and Hospitality, Travel, Tourism & Recreation.

PREREQUISITE: Marketing Principles

MARKETING APPLICATIONS – 1 credit

This course is designed to enhance marketing skills developed in the marketing prerequisite courses and to learn advanced marketing skills in such areas as advertising, customer service, supervision, and employee/employer relations for a wide range of marketing careers. This course is based on the business and marketing core that includes communication skills, emotional intelligence, economics, marketing, operations, promotion, marketing-information management and financial analysis. This course is recommended for completion of the following Career Pathways: Marketing and E-Commerce.

PREREQUISITE: Marketing Principles and Advertising & Promotion
SPORTS & EVENT MARKETING – 1 credit  
Grades 11-12
Gain knowledge in one of the most rapidly expanding fields of management and marketing in today’s job market. The general principles of management and marketing will be presented in connection with the popular fields of the sports and entertainment industry. Sample topics discussed include sponsorships, licensing, endorsements, internships and promotions. This course will explore the intriguing world of sports and entertainment from the management and marketing perspective. This is a rapidly growing major offered by many universities. The class will feature several guest speakers from the sports and entertainment industry. This course is recommended for completion of the following Career Pathways: Marketing.
PREREQUISITE: Marketing Principles

FASHION MARKETING – 1 credit  
Grades 10-12
This course is a specialized course that provides instruction in marketing of apparel and accessories. This course is based up on the business and marketing core that includes communication skills, economics, operations, professional development, promotion, selling, distribution and product/service management. The instruction includes basic fashion and marketing basics, the use of design and color, promotions, visual merchandising and career opportunities. This course is recommended for completion of the Marketing Career Pathway.
PREREQUISITE: Marketing Principles

RETAIL MARKETING (BOOKSTORE) - 1 credit  
Grade 12
This course provides students with realistic experience in a retail environment. Students receive hands-on training by working in the school store, Raider Retail, during 4th period class. In addition, students may complete special assignments in the study of consumerism, supply and demand, retail markup, profit percentages, inventory management, and purchasing. Students must be willing to follow a “work schedule” which includes opening the bookstore before normal school hours. This course is recommended for completion of the following Career Pathways: Marketing and E-Commerce.
PREREQUISITE:
- Required: Marketing Principles and a 2nd Marketing course
- Excellent attendance
- Teacher recommendation
- Students must apply for this course.
- Pre-approval is required

MARKETING EDUCATION INTERNSHIP – 2 credits  
Grade 12
This non-paid internship provides a supervised work-site experience for high school students who are enrolled in a marketing career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students who qualify for this program must display exemplary citizenship at all times as a representative of Larry A. Ryle High School and its community.
PREREQUISITES:
- Must complete application process
- Pre-approval is required
- Excellent attendance
- Excellent discipline records required
- Must have transportation to/from work with a valid driver’s license
- Must be eligible to receive a Ryle High School Parking Pass
FAMILY AND CONSUMER SCIENCE EDUCATION

Family and Consumer Sciences Education prepares students for family life, careers, and community service. The purpose of our courses is to empower individuals and families throughout the lifespan to manage the challenges of living and working in a diverse, global society. Students will gain the ability to effectively collaborate, communicate and think critically and creatively to problem-solve real world issues.

The curriculum is aligned to the knowledge and skills identified within the National Standards for Family and Consumer Sciences Education. FCS Education fosters the development of 21st century and technical skills in a variety of career pathways. Opportunities are provided to develop knowledge and skills that focus on the following career pathways: Fashion and Interior Design, Culinary and Food Services, Early Childhood Education, and Teaching and Learning.

Family, Career, and Community Leaders of America (FCCLA) is the official student organization for Family and Consumer Science students and is an integral part of the instructional program. Students are encouraged to join the local chapter and fully benefit from the citizenship training, personal achievement, and leadership development at the local, regional and state levels.

FACS ESSENTIALS - 1 credit
Grades 9 Only
This course provides an opportunity for students to explore the Family and Consumer Science (FACS) career pathways while acquiring basic life skills and guiding students to explore and select specific areas for concentrated study. Emphasis is on family, employability skills, adolescent development, introduction to textiles, interiors and design, financial management, challenges of parenting, establishing healthy relationships, and creating a foundation for healthy lifestyles and nutrition. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. This course is recommended for completion of the following Career Pathways: Culinary & Food Service, Early Childhood Education, and Fashion & Interior Design.

FASHION AND INTERIOR DESIGN I -1 credit
Grades 10-11
This course provides opportunities for students to develop career competencies in the fashion and or interiors industry by applying information related to social, economic, and media influences. Students apply knowledge of design principles, and processes through skill performances activities. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. Students are responsible for the purchase of a basic sewing kit and other sewing project materials. This course is recommended for completion of the Fashion & Interior Design Career Pathway.

FASHION AND INTERIOR DESIGN II –1 credit
Grades 11-12
This course provides opportunities for students to develop career competencies in the fashion and or interiors industry. Practical problems include advanced textile construction techniques and or creation of floor plans using technological resources. Entrepreneurial opportunities will be explored. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. Students are responsible for the purchase of a basic sewing kit and other sewing project materials. This course is recommended for completion of the Fashion & Interior Design Career Pathway.
PREREQUISITE: Fashion and Interior Design I and teacher approval

FASHION AND INTERIOR DESIGN III – 1 credit
Grades 12
This course provides opportunities for students to apply career competencies and equip students with entrepreneurial skills for the fashion and interior design industry. Students will develop a business plan and
operate a student-run enterprise ("Raider Threads"). An emphasis on client-based projects through advanced textile construction, creation of floor plans, and other related fashion and interior design projects are incorporated. Individual digital portfolios will be finalized to document growth and enhancement in the career pathway. Volunteer hours will be provided in this course. Leadership development will be provided through the Family, Career, and Community Leaders of America (FCCLA) student organization. Students are responsible for the purchase of a basic sewing kit and other sewing project materials.

**PREREQUISITE:** Fashion and Interior Design I and teacher approval

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**FASHION AND INTERIOR DESIGN INTERNSHIP – 2 credits**

*Grade 12*

This non-paid internship provides a supervised work-site experience for high school students who are enrolled in either the Fashion and Interior Design II course or Special Topics in Fashion and Interior Design course. Internship experiences consist of a combination of classroom instruction and field experiences. Students who qualify for this program must display exemplary citizenship at all times as a representative of Larry A. Ryle High School and its community.

**PREREQUISITES:**

- Must complete application process
- Pre-approval is required
- Excellent attendance
- Excellent discipline records required
- Must have transportation to/from work with a valid driver's license
- Must be eligible to receive a Ryle High School Parking Pass

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**FOODS & NUTRITION - 1 credit**

*Grades 10-11*

Do you feel lost in the kitchen? Do you know which fork to use first in a restaurant? This course is designed to assist students in making critical decisions about food, which contributes to health and well-being. Laboratory instruction is included as an application process. Practical problems addressed relate to attitudes toward food, nutrition facts, special health concerns and diets, management of food resources, preparation skills, food safety, sanitation and careers in nutrition and food service. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. This course is recommended for the completion of the Culinary & Foods Services Career Pathway.

**CULINARY I – 1 credit**

*Grades 11-12*

This advanced course allows students to increase competencies in a variety of food preparation techniques. Emphasis will be placed on food presentation, garnishing, menu planning and the skills necessary to prepare for a career in the culinary arts profession. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. This course is recommended for the completion of the Culinary & Foods Services Career Pathway.

**PREREQUISITE:** Foods and Nutrition and teacher approval.

**CULINARY II - 1 credit**

*Grade 12*

In this course, students resume progress in pursuing competencies in food production and services. Orientation to the food service industry and development of food preparation skills are reinforced. Food service management functions are introduced. More in-depth information is provided and higher levels of skills are taught. Time is provided for work based learning opportunities. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. This course is recommended for the completion of the Culinary & Foods Services Career Pathway.

**PREREQUISITE:** Foods and Nutrition & Culinary I and teacher approval.
CULINARY ARTS INTERNSHIP - 2 credits  
Grade 12  
This non-paid internship provides a supervised work-site experience for high school students who are enrolled in either the Culinary I or II course. Internship experiences consist of a combination of classroom instruction and field experiences. Students who qualify for this program must display exemplary citizenship at all times as a representative of Larry A. Ryle High School and its community.  
PREQUITSITES:  
• Must complete application process  
• Pre-approval is required  
• Excellent attendance  
• Excellent discipline records required  
• Must have transportation to/from work with a valid driver’s license  
• Must be eligible to receive a Ryle High School Parking Pass

EARLY LIFESPAN DEVELOPMENT - 1 credit  
Grades 10-11  
This course addresses the concepts related to understanding the areas and stages of human growth and development, recognizing effects of heredity and environment on human growth and development, meeting the needs of exceptional children, promoting optimum growth and development in the prenatal, infancy, toddler, preschool and school-age stages. Careers in child/human development are explored. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. This course is recommended for the completion of the Early Childhood Education Career Pathway.

CHILD DEVELOPMENT SERVICES I - 1 credit  
Grade 11-12  
This course provides training for entry-level positions in daycare centers, nurseries, preschools, kindergartens, and private homes. Students study child development and guidance, children's health and well-being in group care, value of play, teaching strategies and management, curriculum development and careers in child development. The subject content is reinforced with work experience in a variety of early childhood settings. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. This course is recommended for the completion of the Early Childhood Education Career Pathway. Prerequisite: Early Lifespan Development

CHILD DEVELOPMENT SERVICES II - 1 credit  
Grade 12  
Child Development Services II is a continuation of Child Development Services I and is designed for students who wish to train for supervisory level positions or those wishing to further their education at the post-secondary level in the area of childcare and/or early childhood development. Students gain in-depth work experiences in child care establishments, preschool centers and other early childhood settings. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization. This course is recommended for the completion of the Early Childhood Education Career Pathway. Prerequisite: Child Development Services I

EARLY CHILDHOOD INTERNSHIP - 2 credits  
Grade 12  
This non-paid internship provides a supervised work-site experience for high school students who must be enrolled in the Child Development Services I or II courses. Internship experiences consist of a combination of classroom instruction and field experiences. Students who qualify for this program must display exemplary citizenship at all times as a representative of Larry A. Ryle High School and its community.  
Prerequisites:  
• Must complete application process  
• Pre-approval is required  
• Excellent attendance  
• Excellent discipline records required  
• Must have transportation to/from work with a valid driver’s license  
• Must be eligible to receive a Ryle High School Parking Pass
THE LEARNING COMMUNITY - 1 credit  
**Grade 12**
In this course students develop an understanding of the various responsibilities and systems involved in the K-12 educational system. Specifically, students will acquire the knowledge of education through the perspectives of classroom, school, district, state, and federal roles.

**Clinical Experiences:** Students are embedded in observational and small group or individual teaching settings. They engage with students, schools and stakeholders across the community to better understand how the community functions as a system, noting how elements within the system relate and interact and the impact on students.

THE LEARNER-CENTERED CLASSROOM - 1 credit  
**Grade 12**
This course will develop rising educators’ awareness of their funds of knowledge, as well as their personal biases that develop from their life experiences. Using research-based methods, rising educators will develop methods to impact student equity based on culturally competent models as well as growth mindset methods.

**Clinical Experiences:** The students will be embedded in classrooms in observing and active teaching roles (any of the 5 co-teaching models). They will experience a variety of settings in order to reflect on their developing understanding and skills across the K-12 spectrum.

**Prerequisite:** The Learning Community

THE PROFESSIONAL EDUCATOR - 1 credit  
**Grade 12**
In this course students will develop an understanding of how educators advance their profession within the classroom. Specifically, students will gain both the knowledge and skills to plan, deliver, and reflect on the process of teaching and learning.

**Clinical Experiences:** Students are deeply embedded in classroom settings, actively practicing the skills they are studying and reflecting on the results to deepen their understanding. The extended time in the classroom provides an opportunity to study at length a particular group of students and discipline.

**Prerequisite:** The Learner-Centered Classroom

COLLABORATIVE CLINICAL EXPERIENCE - 1 credit  
**Grade 12**
In this course, Collaborative Clinical Experience, students will refine the required knowledge and skills to be an effective educator while also practicing the dispositions necessary for the educational profession. Specifically, students will gain an understanding of how teachers lead through individual and collaborative growth and reflection.

**Clinical Experiences:** This is a work-based learning experience where students should spend almost all of their time in a classroom learning setting appropriate to their intended teaching discipline. The course provides the opportunity for students to reflect individually and collaboratively with peers and teachers. They bring to the classroom experience all of their study from the earlier courses, refining and developing new skills, dispositions, and understanding. A focus on growth through reflection is critical.

**Prerequisite:** The Professional Educator
- Must complete application process
- Pre-approval is required
- Excellent attendance
- Excellent discipline records required
- Must have transportation to/from work with a valid driver’s license
- Must be eligible to receive a Ryle High School Parking Pass
PEER TUTORING

PEER TUTORING I and II – 1 credit

**Grades 11-12**

**Peer Tutoring I** – This introductory course provides the perfect opportunity for juniors and seniors to exhibit the Ryle Traditions of respect, responsibility, integrity and service. Tutors are placed in classes throughout the building to provide additional support to students with disabilities and English Language Learners. Tutors will receive monthly instruction to increase their knowledge of disabilities, learning styles, instructional and motivational techniques and careers in special education. Peer Tutors are expected to be good role models as they interact with students in and out of the classroom.

**Peer Tutoring II** – Second year Peer Tutors will have a choice in their yearlong placement. They will use their previous experience to have a greater impact on the students they mentor. In addition, they will plan and teach at least one lesson to their class or a small group within the class. They will also be expected to develop and implement a project that benefits special needs students at Ryle or in the community.

These Courses are particularly beneficial for students considering education, therapies, psychology or an area of medicine. They are also valuable to those entering business, engineering or a technological career as tutors are required to increase communication skills and use their creativity / best judgement in working with a variety of student personalities and needs.

Prerequisites:

- Must complete an application process
- 2 Teacher recommendations
- Excellent attendance and discipline records
BOONE COUNTY AREA TECHNOLOGY CENTER

Students at Ryle High School may enroll in career/technical programs as juniors or seniors. Students must complete an application that can be found in the guidance office, to attend Vocational School.

Students electing to participate in a career program will attend Ryle High School for one-half day and the technical school for one-half day. Upon successful completion of work at the technical school, students will earn three high school credits. Juniors enrolled in a program will be permitted to return as seniors provided the first year of work was successfully completed.

The primary purpose of the Boone Co. Area Technology Center is to serve high school students by enhancing and expanding student career options that lead to continuation of education at the postsecondary level and/or successful employment upon graduation from high school.

Kentucky Tech Boone County Area Center, Hebron. All courses are open to juniors and seniors. Programs will be offered AM and PM. Transportation is furnished – **Students are not permitted to drive.**

**TECH PREP COURSES**

**Electrical Technology – Ron Gordon, Instructor**

Electrical Technology prepares students for entry-level electrician positions in industry and building trades. Students’ study and experience layout, assembly, installation, testing, maintenance of electrical circuits, apparatus, and residential wiring. Training involves electrical theory and electrical codes current in industry.

**Auto Technology – Brian King, Instructor**

The Automotive Technology program is a two year long course. First year students will receive instruction in all eight areas of the ASE/NATEF certifications, to include engines and engine performance, automatic and manual drive trains, steering/suspension, brakes, HVAC and electrical. Students MUST pass all first year courses to be eligible to return for the second half of the program. Second year students will receive instruction on the same eight areas with the emphasis on the diagnostics and major repair of these systems. The majority of the instruction involves actual hands on training rather than just book work. The focus and goal of the Auto Technology program is to have a second year student well prepared to get an entry level technician position at any of the many dealerships and independent repair facilities in northern Kentucky or continue their training at the post-secondary level. This is a rigorous course that is designed to strengthen a student’s mechanical skills and utilize the English, math and science skills they have acquired in their academic classes.

**Diesel Technology – Thomas Cahill, Instructor**

This program develops skills needed to analyze malfunctions and to repair, rebuild and maintain construction equipment, farm equipment, or medium and heavy trucks. Students study and apply hands-on experience in systems such as diesel engines, fuel injection, onboard computers, transmissions, steering and suspension, and brakes.
**Health Sciences – Sherri Pelcha, Instructor**

In the Health Science program, students complete orientation, exploration, and preparation into the health care industry through courses progressing toward Medicaid Nurse Aide certification. Each course integrates mathematics, science, communication and technical knowledge and culminates in a supervised practical application in the field. The program is designed for students who desire entry level training and/or plan to enroll in a post secondary program in one of many occupational areas in the health field.

**Machine Tool Technology – Bob Davis, Instructor**

The Machine Tool Technology program is designed to prepare students to enter the machine tool trade. The first year of Machine Tool Technology training is a combination of blueprint reading, precise metal layout, operating manual lathes, mills, surface grinders, reading precision measurement tools, and computing and verifying dimensions, sizes, shapes and tolerance of machined work pieces. The student is introduced to tools, materials, equipment, and trade terms and develops the skills to do the job to industry standards. Students become acquainted with a variety of metals and learn how to use the various types of cutting tools and the required metallurgy.

**Metal Fabrication - Kevin McKenney, Instructor**

Students in this program prepare for entry level work by creating three-dimensional objects from flat sheets of metal. These objects are mainly used in ventilation systems of residential, business and industrial structures. Metal fabricators are also increasingly called on to produce precision parts for high tech industries. Instruction includes design, pattern lay out, transfer, fabrication, and joining.

**Welding – Patrick Corman - Instructor**

The Welding program prepares students to weld and fabricate various types of metal including casting, aluminum, stainless, and other steels using GMAW, GTAW, SMAW, and OFW welds made to industry and AWS standards. Students train in layout, blueprint reading, equipment maintenance, work orders, job site safety, and job estimating.
Property Management (11th and 12th Grade)

Property Management Description: The Construction Technology programs will prepare students for work in new construction, remodel, and energy auditing industries. Course offerings include everything from entry level trades courses, all the way to national certification. Students will train at the career centers, high schools and at real jobsites. Current and traditional building practices are included, while updated and advanced framing techniques, energy efficiency, health and safety, and sustainability methods are emphasized. This program is for Sophomores, Juniors, and Seniors. It will take place three days a week at the Northern Kentucky Homebuilders Association near Mineola Pike. Transportation will be provided. There will be a fee for participating in the class to cover cost of materials. All students will be expected to take the KOSSA & associated Industry tests.

Classes: 1st Year

Intro to Bldg and Apt Maint
This course covers required safety practices in the shop and workplace; identification and use of hand tools used in the construction trades; identification of construction materials; interpretation of blueprints and/or drawings; and exposure to various mechanical and structural systems in a residential structure. Content: Building and Apartment Maintenance Population: General

Resid Maint Carpentry
This course covers the basic aspects of framing, roofing, window, door, and stair maintenance. The student will receive training in the proper use of ladders and in the handling and storage of building materials. Content: Residential/Commercial Carpentry Population: General

Residential Maintenance Wiring
This course covers the basic aspects of electric theory, wire and cables, fixtures and devices, and troubleshooting and maintenance wiring. Content: Electrical Technology Population: General

Residential Maintenance Plumb
This course covers the basic aspects of clearing blocked drains, repairing leaks, repair and replacement of residential plumbing fixtures, and working with copper, plastic, and steel pipes. Content: Plumbing Technology Population: General

Classes: 2nd Year

Internship
Students must have their own transportation
Boone County Early College

Through a partnership with NKU, Thomas More, and Gateway Community and Technical College (GCTC) students attend college for half a day at the GCTC Florence/Union campus. Students have the opportunity to earn 24 college credit hours or more in one year. These courses are provided at a dramatically reduced rate of $56 per credit hour ($168 per three-hour course), saving a student thousands in future college expenses.

The program provides students with college-level experiences in high school, so they are better prepared for post-secondary success after graduation. Classes count towards general education requirements, as well as, requirements for the associate’s or bachelor's degree. The courses are weighted and will transfer to any Kentucky public two-year or four-year college.

Students are encouraged to take the ACT during their sophomore year and need to be at benchmark to be eligible for the program. Please contact your College Career Coach for more information.

Eligibility for this program is a 3.0 GPA. Students must also meet benchmark on the ACT/Compass. Transportation will be provided from high schools; students may also drive.

More Information can be found on the Boone County District website under Students>Early College Program.
### Accounting

This pathway generally prepares individuals to practice the profession of accounting and to perform related business functions. Includes instruction in accounting principles and theory, financial accounting, managerial accounting, cost accounting, budget control, tax accounting, legal aspects of accounting, auditing, reporting procedures, statement analysis, planning and consulting, business information systems, accounting research methods, professional standards and ethics, and applications to specific for-profit, public, and non-profit organizations. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certification Available: Microsoft Office Specialist (MOS) (3 of 4 - Word & Excel required) and ASK for Business.

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### Administrative Support

This pathway is designed to provide students an advanced level experience that will propel them in the 21st century business world as they serve in positions such as college interns, administrative assistants, graduate assistants, assistant managers, etc. Instruction includes areas of fundamental business procedures, human resource management, time management software, workstation management, travel planning, financial reporting, payroll, mail procedures, effective communication skills, and ethical decision making skills. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certification Available: Microsoft Office Specialist (MOS) (3 of 4 - Word & Excel required) OR Adobe Certified Associate (2 exams required) and ASK for Business.

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### E-Commerce

This pathway focuses on the creation, execution, transmission, and evaluation of commercial messages in various media intended to promote and sell products, services, and brands; and that prepares individuals to function as advertising assistants, technicians, and managers. Includes instruction in advertising theory, marketing strategy, advertising design and production methods, campaign methods and techniques, media management, related principles of business management, and applicable technical and equipment skills. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certification Available: Microsoft Office Specialist (MOS) OR Adobe Certified Associate (2 exams required) and ASK for Business.

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**Financial Services**
This pathway prepares individuals to perform a wide variety of customer services in banks, insurance agencies, savings and loan companies, and related enterprises. Includes instruction in communications and public relations skills, business equipment operation, and technical skills applicable to the methods and operations of specific financial or insurance services. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certification Available: ASK for Business.

2 credits from:
- Financial Services I
- Accounting & Finance Foundations

1-2 credits from:
- Financial Services II
- Marketing Principles
- Business Education Internship
- Marketing Education Internship

**Management & Entrepreneurship**
This pathway generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in management theory, human resources management and behavior, accounting and other quantitative methods, purchasing and logistics, organization and production, marketing, and business decision-making. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certification Available: ASK for Business.

3 credits from:
- Introduction to Management
- Accounting and Finance Foundations OR Advanced Accounting
- Principles of Entrepreneurship

1 credit from:
- Digital Literacy
- Computer Literacy
- Marketing Principles
- Microsoft Office Specialist (MOS)
- Business Education Internship
- Marketing Education Internship

**Marketing**
This pathway generally prepares individuals to undertake and manage the process of developing consumer audiences and moving products from producers to consumers. Includes instruction in buyer behavior and dynamics, principle of marketing research, demand analysis, cost-volume and profit relationships, pricing theory, marketing campaign and strategic planning, market segments, advertising methods, sales operations and management, consumer relations, retailing, and applications to specific products and markets. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certification Available: ASK for Business.

2 credits from:
- Marketing Principles
- Marketing Applications

2 credits from:
- Advertising & Promotion
- Principles of Entrepreneurship
- Sports & Event Marketing
- Fashion Marketing
- Retail Marketing
- Accounting & Finance Foundations
- Travel & Tourism Marketing
- Marketing Education Internship

**Retail Services**
This pathway generally prepares individuals to perform operations associated with retail sales in a variety of settings. Includes instruction in over-the-counter and other direct sales operations in business settings, basic bookkeeping principles, customer services, team/staff leadership and supervision, floor management, and applicable technical skills. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certification Available: ASK for Business.

2-3 credits from:
- Retail Marketing
- Fashion Marketing
- Marketing Applications

1-2 credits from:
- Principles of Entrepreneurship
- Marketing Principles
- Advertising & Promotions
- Accounting & Finance Foundations
- Marketing Education Internship
INFORMATION TECHNOLOGY CAREER PATHWAY

**Computer Science**
This pathway focuses on computer theory, computer problems and solutions, and design of computer systems and user-interfaces. The course work will include instruction in the principles of computational science, computer development and programming and applications to a variety of end use situations. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit.

1 credit from:
- Computer Literacy **OR** Digital Literacy

1 credit from:
- Computational Thinking

1-2 credits from:
- C++ Programming
- Project-Based Programming
- AP Computer Science A
- Information Technology Internship

AGRICULTURAL EDUCATION CAREER PATHWAYS

**Animal Science Systems**
This pathway focuses on the scientific principles that underline the breeding, care, and management of agricultural animals, and the production, processing, and distribution of agricultural animal products. This includes developing better, more efficient ways of producing and processing meat, poultry, eggs and dairy products, as well as studying genetics, nutrition, reproduction, growth and development of animals. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit.

1-2 credits from:
- Principles of Agricultural Science and Technology
- Agriscience

2-3 credits from the following:
- Animal Science
- Animal Technology
- Equine Science
- Veterinary Science

May Substitute ONE Credit Below for Pathway Core:
- Agricultural Education Internship

**Horticulture and Plant Science Systems**
This pathway focuses on the scientific principles that underlie the breeding, cultivation, and production of agricultural plants, and the production, processing, and distribution of agricultural plant products. Includes instruction in the plant sciences, crop cultivation and production, and agricultural and food products processing. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit.

1-2 credits from:
- Principles of Agricultural Science and Technology
- Agriscience

2-3 credits from:
- Floriculture & Floral Design
- Greenhouse Technology
- Landscaping & Turf Management

May Substitute ONE Credit Below for Pathway Core:
- Agricultural Education Internship
FAMILY AND CONSUMER SCIENCE CAREER PATHWAYS

**Culinary & Food Services**
This pathway addresses a skill set necessary for success in the culinary industry. The courses in this pathway will help students develop skills in early career ladder positions and promote continuing education at the post-secondary level preparing for careers associated with restaurants, institutional food service, hospitality and catering, as well as food and beverage operations. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certifications Available:

- 2 Required - ServSafe Food Certification and ServSafe Food Manager’s Credential.
- 3 credits from:
  - Foods & Nutrition/Advanced Foods & Nutrition
  - Culinary I
  - Culinary II
- 1 credit from:
  - FACS Essentials
  - Culinary Internship

**Early Childhood Education**
This pathway addresses a skill set necessary for success in early childhood education so that individuals can teach students ranging in age from infancy through eight years (grade three), depending on the school system or state regulations. This pathway is targeted for individuals preparing for careers related to early childhood education, such as those associated with child care, teaching, community-based children’s programs, social services or counseling for children, and after-school programs. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit. Industry Certifications Available:

- 3 Required - Commonwealth Child Care Credential - Certificate of Eligibility, KY Early Care and Education Orientation, and Pediatric Abusive Head Trauma
- 3 credits from:
  - Early Lifespan Development
  - Child Development Services I
  - Child Development Services II
- 1 credit from:
  - FACS Essentials
  - Principles of Teaching
  - Early Childhood Internship

**Fashion & Interior Design**
This pathway addresses a skill set necessary for success in the fashion industry as well as a career in the residential housing and furnishings industry. This pathway targets individuals who are interested in pursuing careers in the following areas: retail and wholesale buying, apparel and textile development and production, fashion and textile design, and visual merchandising as well as public and private sector housing programs, residential property and facility management, real estate, retail home furnishings, or home decorating and staging. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit.

- 3 credits from:
  - Fashion and Interior Design I
  - Fashion and Interior Design II
  - Fashion and Interior Design III
  - FACS Essentials
- 1 credit from:
  - Fashion and Interior Design Internship

**Teaching & Learning**
This pathway focuses on the general theory and practice of learning and teaching, the basic principles of educational psychology, the art of teaching, the planning and administration of educational activities, school safety and health issues, and the social foundations of education. Opportunity to earn Career & Technical Education End-of-Program (CTE EOP) Assessment for Articulated Credit.

- 3 credits from:
  - The Learning Community
  - The Learner-Centered Classroom
  - The Professional Educator
- 1 credit from:
  - Collaborative Clinical Experience
HEALTH SCIENCES CAREER PATHWAY

**PLTW Biomedical Sciences**
A general, program that focuses on the integrative scientific study of biological issues related to health and medicine, or a program in one or more of the biomedical sciences that is undifferentiated as to title. Includes instruction in any of the basic medical sciences at the research level; biological science research in biomedical faculties; and general studies encompassing a variety of the biomedical disciplines. Industry Certification Available: NOCTI Biotechnology

- Principles of Biomedical Science
- Human Body Systems
- Medical Interventions
- Biomedical Innovations

ENGINEERING CAREER PATHWAY

**Civil Engineering (PLTW)**
This pathway generally prepares individuals to apply mathematical and scientific principles to the design, development and operational evaluation of structural, load-bearing, material moving, transportation, water resource, and material control systems; and environmental safety measures. Civil engineers design, build, supervise, operate, and maintain construction projects and systems in the public and private sector, including roads, buildings, airports, tunnels, dams, bridges, and systems for water supply and sewage treatment.

2 credits from:
- Introduction to Engineering Design
- Principles of Engineering

2 credits:
- Civil Engineering & Architecture
- PLTW course TBD