

**2015-2016**



**LINN-MAR**  
**High School**

**LINN-MAR HIGH SCHOOL  
PROGRAM OF STUDIES**

Inspire Learning. Unlock Potential. **Empower Achievement.**

Linn-Mar High School Program of Studies  
Program of Studies

<b><u>Table of Contents</u></b>	<b>page</b>
LM High School Program Options.....	<b>4</b>
LM Academic Guidelines.....	<b>5</b>
LM High School .....	<b>9</b>
LM Core.....	<b>10</b>
English.....	<b>11</b>
Foreign Language.....	<b>22</b>
Mathematics.....	<b>27</b>
Science.....	<b>34</b>
Social Studies.....	<b>42</b>
LM Arts.....	<b>46</b>
Art.....	<b>47</b>
Music.....	<b>53</b>
LM Fitness/Health.....	<b>61</b>
LM CTE/Exploratory.....	<b>66</b>
Agricultural-Science.....	<b>67</b>
Business.....	<b>74</b>
Design/Engineering/Materials.....	<b>80</b>
Family/Consumer Sciences.....	<b>87</b>
LM Online Opportunities.....	<b>94</b>
LM Extension Opportunities.....	<b>95</b>
Talented and Gifted.....	<b>95</b>
LM Capstone Experiences.....	<b>97</b>
Early College Options.....	<b>99</b>
LM Alternative Program.....	<b>101</b>
Student Support Services.....	<b>101</b>
Off-Campus Programming (CTE).....	<b>103</b>

## KEY



Regents Admissions Index (RAI) approved course



NCAA approved course



Weighted course graded on a 5.0 scale



Project Lead the Way course



Kirkwood Community College credit course

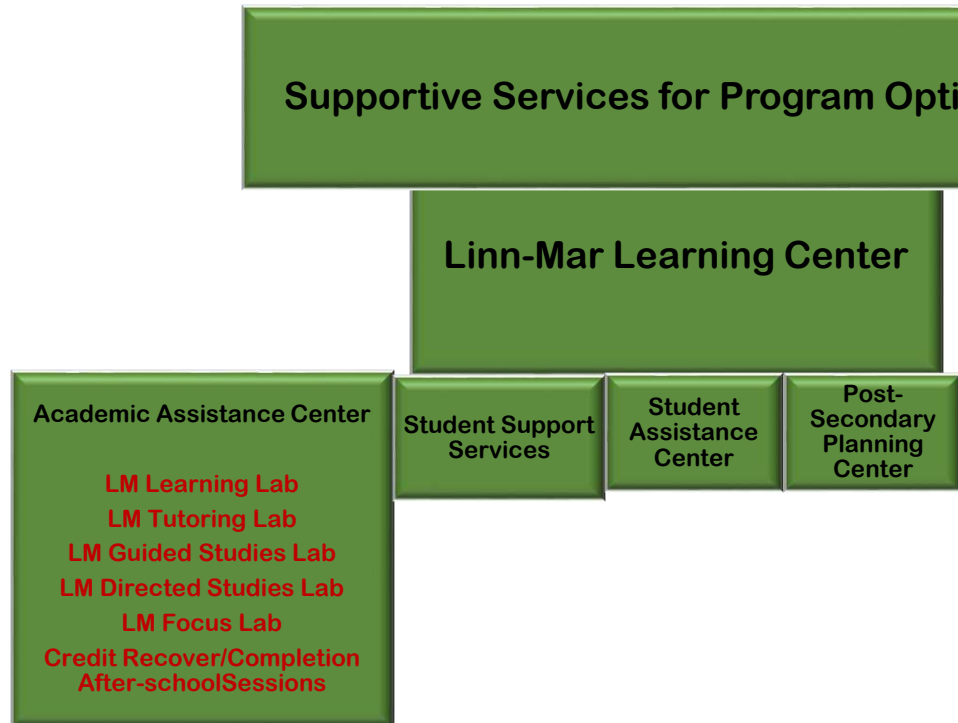
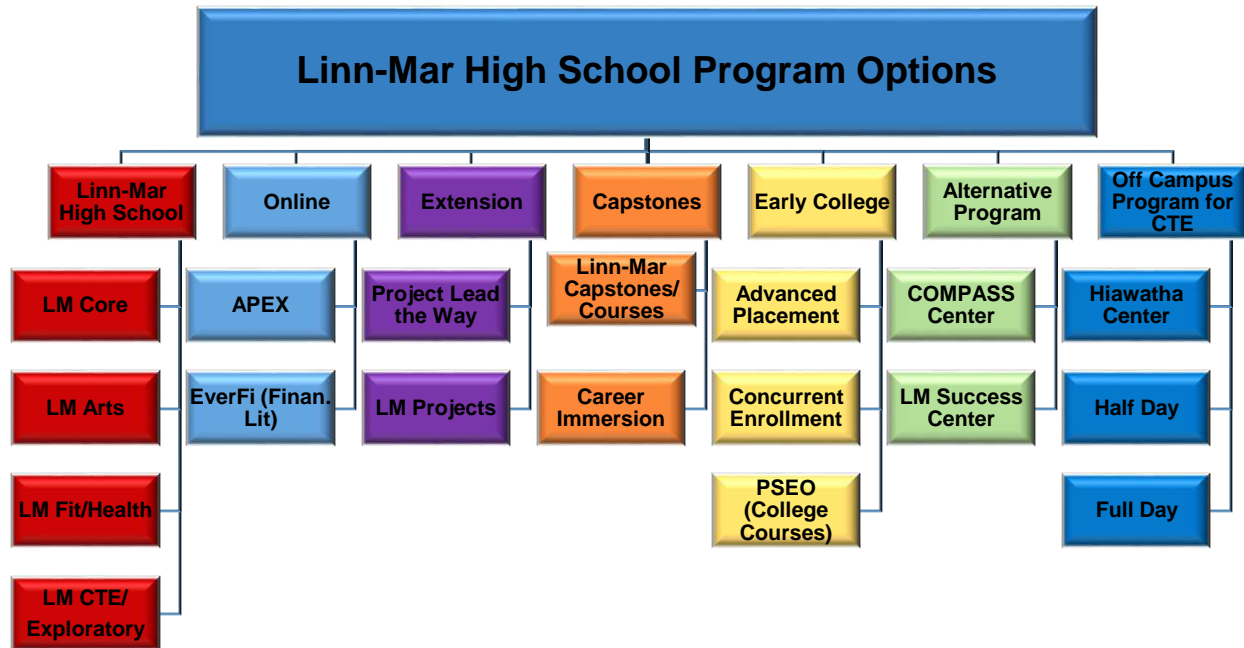


Talented and Gifted Program Course



Curriculum for Agricultural Science Education

Linn-Mar High School Program of Studies  
Academic Guidelines



# LINN-MAR ACADEMIC GUIDELINES

## **Academic Letter**

Students who achieve a 3.33 or higher grade point average during a given school year are eligible for a Linn-Mar High School academic letter. Academic letters are presented to students at an assembly each fall. Students must have been in attendance at Linn-Mar High School during both semesters of the previous school year to qualify. Academic Letter recipients who achieve a GPA of 4.00 or higher during a given school year are eligible to receive a Linn-Mar High School Academic Letter *with Distinction*. Recipients with a GPA of 3.75-3.99 during a given school year are eligible to receive a Linn-Mar High School Academic Letter *with Honors*.

## **Course Load**

Students in grades 9-11 must enroll in 70 credit hours per year. Students in grade 12 must enroll in 60 credit hours per year.

## **Credit Hours**

Most block courses (which meet 95 minutes per day) are worth five credits per quarter (9 weeks). Most other courses (which meet for 45 minutes per day) are worth five credits per semester (18 weeks).

## **Credit/Fail Option**

Students in grades 10-12 may elect to take a course "Credit/Fail". **Courses needed to satisfy graduation requirements in Math, Science, Social Studies, and English may not be taken Credit/Fail.** A limit of 25 credits may be taken Cr/F during the high school career. A grade C- (70%) or higher must be earned to receive credit. Grades lower than C- will receive an F grade. Students must choose this option by the end of the 5<sup>th</sup> week for block classes and by the end of the 10<sup>th</sup> week for semester/traditional classes.

## **Drop/Add Deadlines**

A student must add a new block course before the end of the 3<sup>rd</sup> day of a new grading period. A new Math, Music, Foreign Language, or **early-bird** course must be added before the end of the 5<sup>th</sup> day of a new semester. A student must drop a block course before the end of the 4<sup>th</sup> week of a given grading period. A 45 minute "skinny" course must be dropped before the end of the 8<sup>th</sup> week.

Linn-Mar High School Program of Studies  
Academic Guidelines

### **Grading**

Linn-Mar High School uses a standard grading scale: A+ (99%); A (93%); A- (90%); B+ (87%); B (83%); B- (80%); C+ (77%); C (73%); C- (70%); D+ (67%); D (63%); D- (60%); F+ (55%). Percentages are rounded to the nearest whole percentage (0.5 or higher is rounded up and 0.49 or lower is rounded down). Extra credit or same test re-takes may raise a grade to no more than an A-.

### **Grade Point Calculation**

Grade point averages (GPA) are computed on a 4.33 scale as follows: A+ (4.33); A (4.0); A- (3.67); B+ (3.33); B (3.0); B- (2.67); C+ (2.33); C (2.0); C- (1.67); D+ (1.33); D (1.0); D- (0.67). Transfer GPA will be computed using the Linn-Mar High School grade point calculation values.

### **Graduation – Early**

Students meeting all requirements for graduation and **electing to graduate early must apply for early graduation at least one month prior to the student's final quarter**. Applications can be picked up in the Counseling Office and submitted to the Principal's Office. The Principal will meet with each early graduation applicant prior to recommending candidates to the Board of Education for approval.

### **Graduation Requirements**

Linn-Mar High School students are required to earn 250 credits in order to graduate. In addition, the following department requirements must be met in order to earn a diploma:

- **English – 40 credits.** Must include English 9 or English I (10 credits each), English II (may opt out if pass English I with a 90% or higher grade), English III or Advanced English III, and one speech/acting course (5 credits).
- **Mathematics – 30 credits.** Must include Algebra (10 credits) or Algebra Fundamentals I and Algebra Fundamentals II (20 credits). Students who successfully complete both semesters of Algebra may not then take Algebra Fundamentals I or Algebra Fundamentals II to fulfill the Algebra or three year Math requirement.
- **Science – 30 credits.** Must include General Biology (10 credits) or Fundamentals of Biology I and Fundamentals of Biology II (20 credits), a physical science course (Chemistry, Physics, or Earth and Physical Science) (10 credits). Ten elective credits may include the following technical offerings: Agriculture, Food and Natural Resources, Principles of Agricultural Science- Plant, Principles of Agricultural Science- Animal, Natural Resources and Ecology, Food Science and Safety, Aquacultural Science. Introduction to Engineering Design, Principles of Engineering.
- **Social Studies – 30 credits.** Must include U.S. History 9 (10 credits), U.S. History I (10 credits) or AP U.S. History (15 credits); World History (10 credits) or AP World History (15 credits); American Government (5 credits) or AP U.S. Government (10 credits), and one social studies elective (5 credits).
- **Health/Fitness – 25 credits.** Must include Health I (5 credits).

Graduation requirements for students with an Individual Education Program (IEP) will be in accordance with the prescribed course of study as written in their IEP.

Linn-Mar High School Program of Studies  
Academic Guidelines

Prior to graduation, the IEP team shall determine whether the graduation requirements have been met.

**Standards Reporting**

Linn-Mar High School reports on Priority Standards of the Iowa Core and content standards in subject areas not included in the Iowa Core. Standards reporting is based off of proficiency scales used for assessing student progress for each priority standard. Standards will be reported in addition to traditional percentage grading. For teachers who convert a proficiency scale score to a percentage score, the following conversion scale will be used:

**Curriculum Maps Proficiency Scales**

4	Advanced	In addition to proficient, in-depth inferences and applications that go beyond what was taught
3.5	High Proficient	
3	Proficient	No Major errors or omissions regarding <b>any</b> of the simple or complex concepts taught
2.5	Proficient with Support	
2	High Progressing	An understanding of the simpler details and processes taught, but requires support
1.5	Low Progressing	
1	Capable of 2.0 with Support	With help, partial understanding of details and processes taught
0.5	Limited Success	
0	Not Attempted	Not Attempted

**Proficiency Scale Conversion**

4	100	A+
3.5	95	A
3	90	A-
2.5	80	B-
2	70	C-
1.5	65	D
1	60	D-
0	50	F

Linn-Mar High School Program of Studies  
Academic Guidelines

**Standardized Testing Program**

Standardized testing plays a significant part in the planning process for post-high school transition. The counseling staff, homeroom teachers, parents, and students will collaborate to develop an appropriate four-year academic plan for each student. The LMHS testing plan is designed to comply with Iowa Department of Education requirements. In addition, these tests provide helpful information about students' strengths and interests. Finally, test results are analyzed to provide feedback regarding the effectiveness of curriculum, instruction, and assessment.

*\* Required assessments are subject to change each year.*

**9<sup>th</sup> Grade**

- Iowa Assessment (required)

**10<sup>th</sup> Grade**

- Iowa Assessment (required)
- NWEA MAP test (math and reading assessment) (required)

**11<sup>th</sup> Grade**

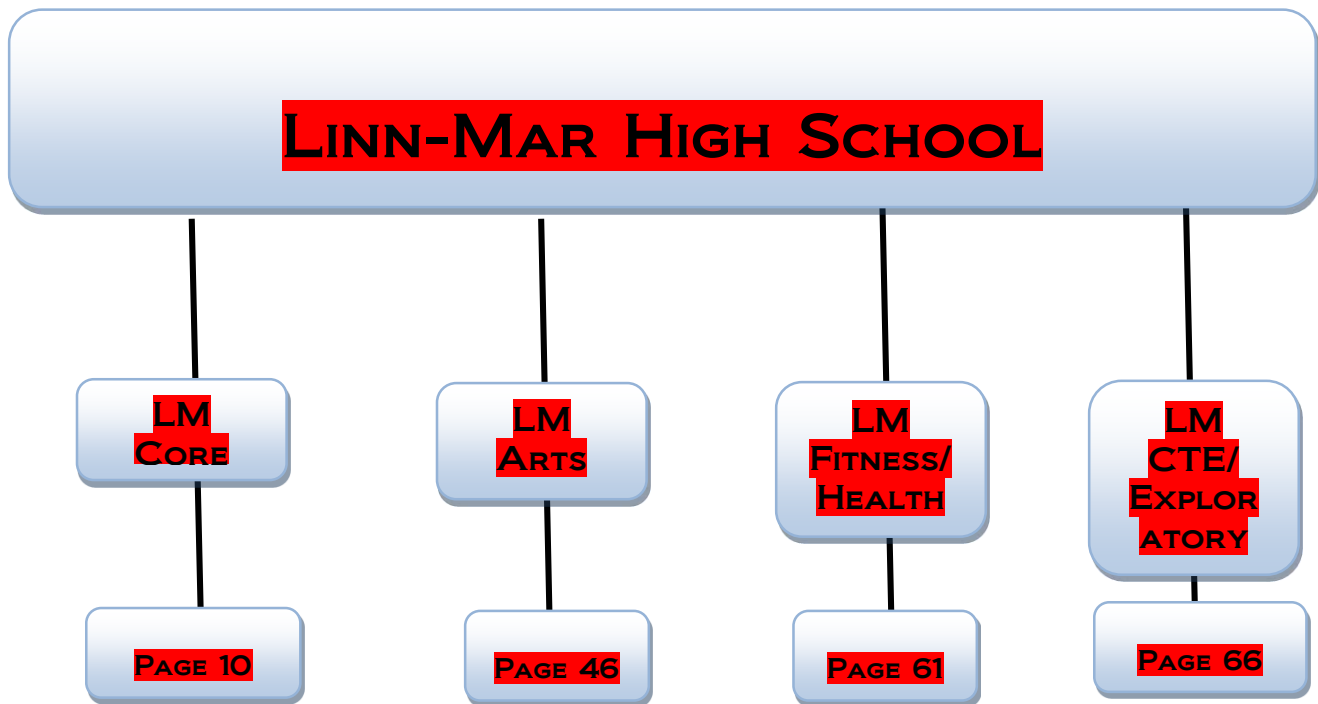
- Iowa Assessment (required)
- ASVAB – military career inventory (optional)
- ACT (optional) *\*\* fee required*
- SAT I and SAT II (optional) *\*\* fee required*
- PSAT: Pre-SAT/National Merit Scholarship Qualifying Test (optional) *\*\* fee required*

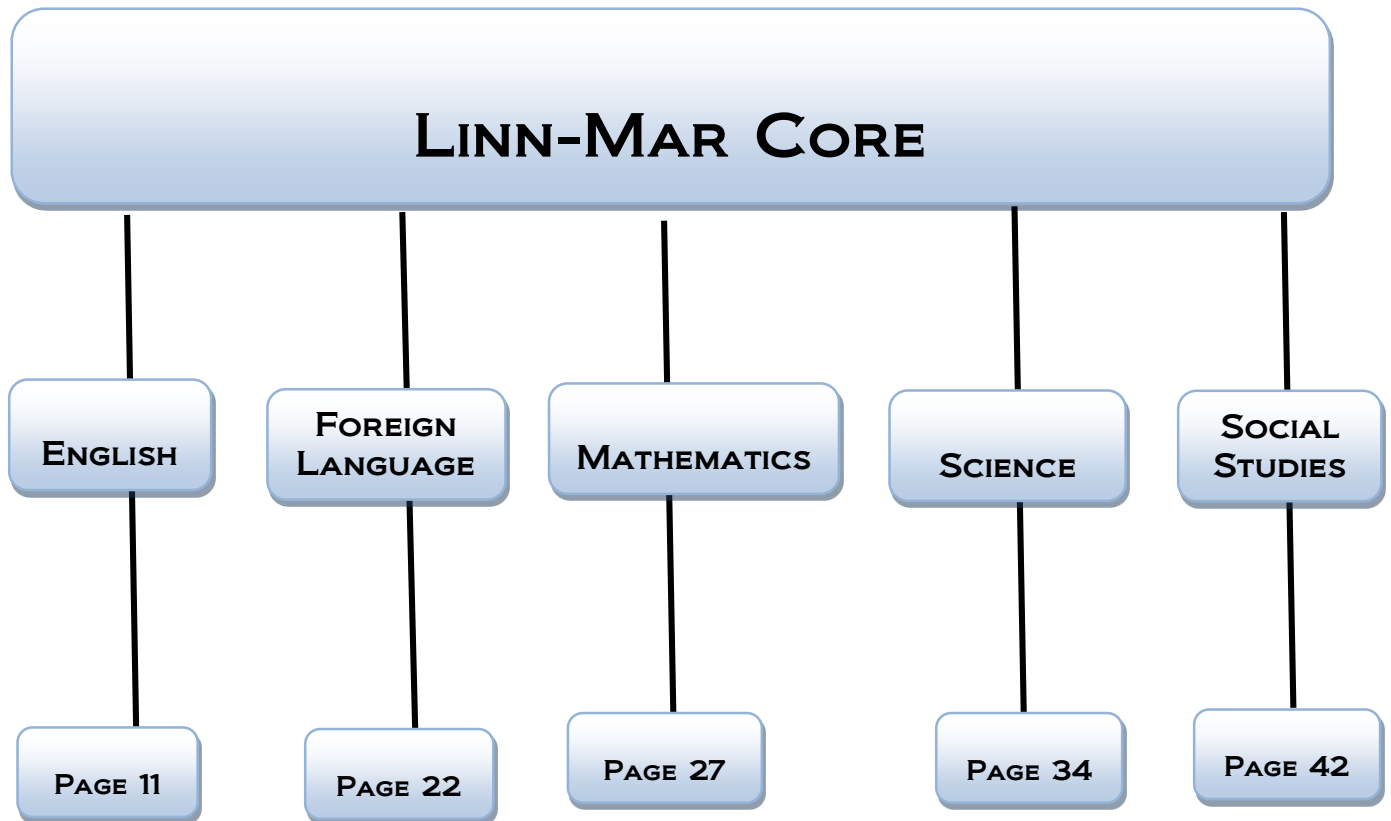
**12<sup>th</sup> Grade**

- ACT (optional) *\*\* fee required*
- SAT I and SAT II (optional) *\*\* fee required*
- COMPASS (Kirkwood placement) (optional)
- ASVAB- military career inventory (optional)

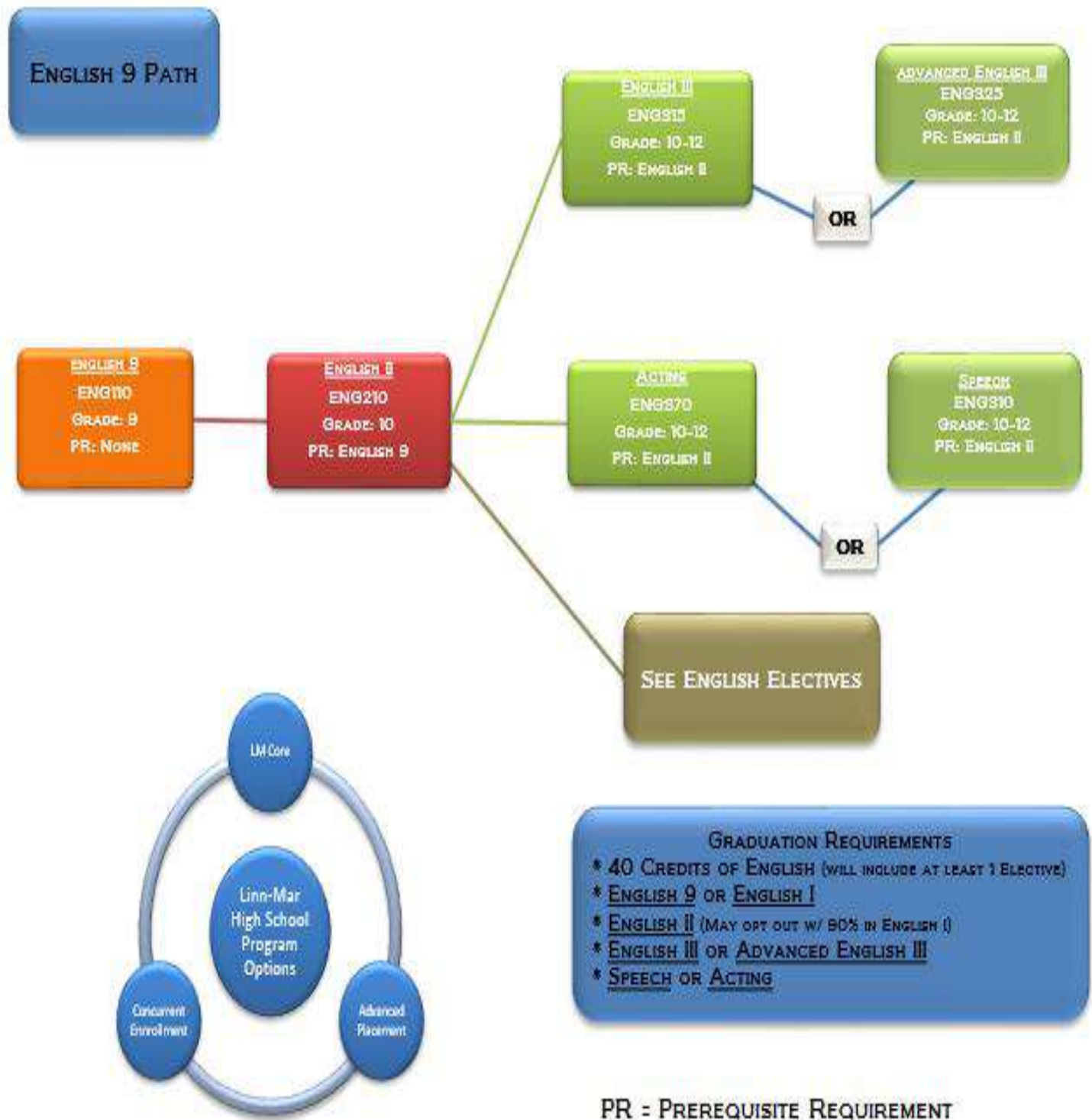
*\* If any test is required by state legislative or Department of Education action, it will be added to this listing for the year required.*



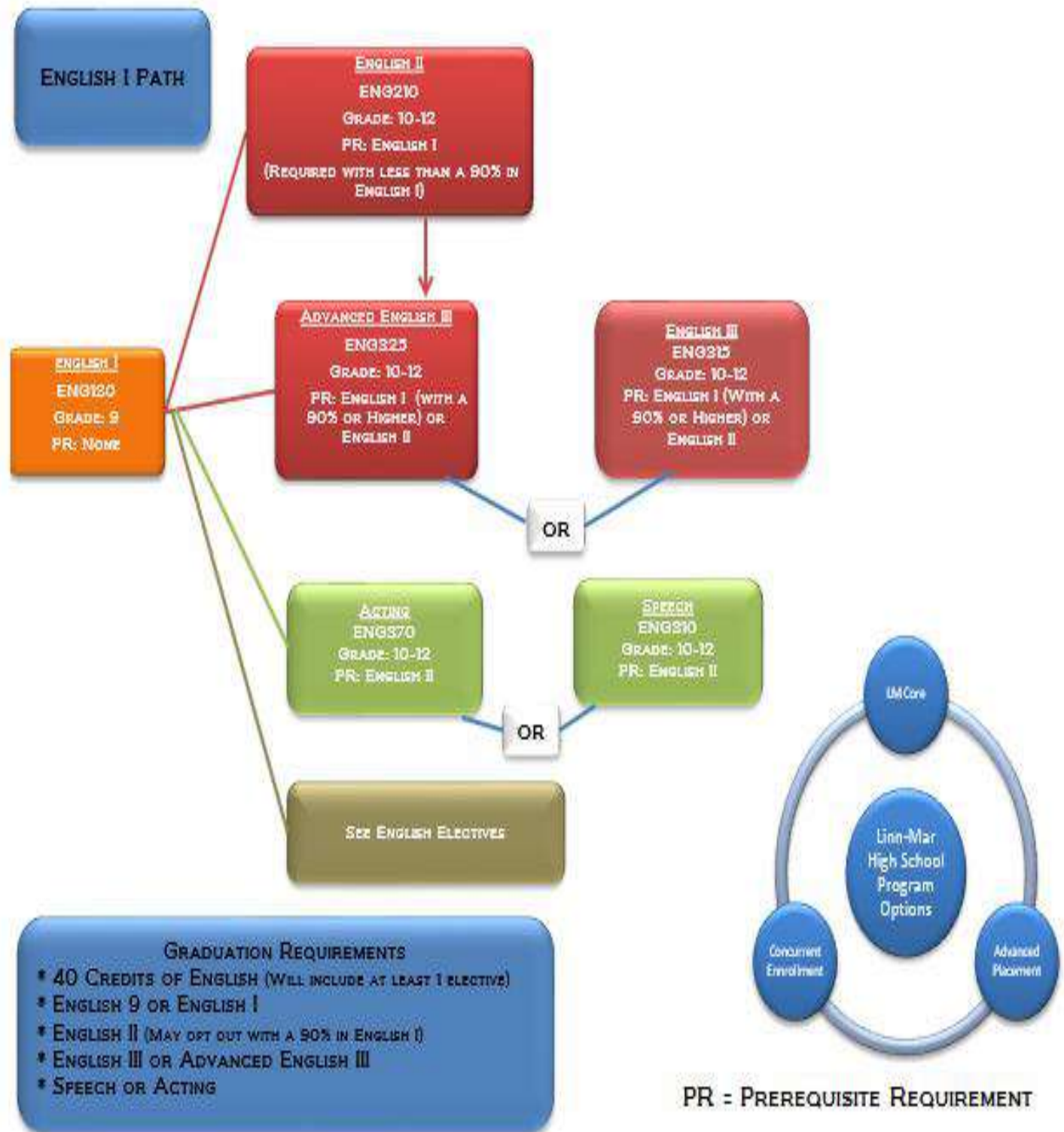




# ENGLISH



# ENGLISH



# ENGLISH

## ENGLISH ELECTIVES

ACADEMIC LITERACY I  
ENG105  
GRADE: 9  
PR: PLACEMENT

ACADEMIC LITERACY II  
ENG205  
GRADE: 10  
PR: PLACEMENT

ACADEMIC LITERACY III  
ENG305  
GRADE: 11-12  
PR: PLACEMENT

The above courses may be required for individual students

JOURNALISM I  
ENG320  
GRADE: 10-12  
PR: ENGLISH I OR  
ENGLISH II

BRITISH LITERATURE  
ENG340  
GRADE: 11-12  
PR: ENGLISH II OR  
APPROVAL

CLASSICS  
ENG350  
GRADE: 11-12  
PR: ENGLISH II OR  
APPROVAL

CONTEMPORARY  
LITERATURE  
ENG360  
GRADE: 10-12  
PR: ENGLISH II OR  
APPROVAL

CREATIVE WRITING  
ENG410  
GRADE: 10-12  
PR: ENGLISH I OR  
ENGLISH II

INTRO TO COLLEGE  
WRITING  
ENG450  
GRADE: 11-12  
ENGLISH III OR ADV.

COLLEGE GRAMMAR  
ENG450  
GRADE: 10-12  
ENGLISH II OR  
APPROVAL

COLLEGE READING  
ENG450  
GRADE: 10-12  
PR: ENGLISH II OR  
APPROVAL

COMPOSITION I  
ENG460  
GRADE: 11-12  
PR: ENGLISH III OR  
ADVANCED ENGLISH III

COMPOSITION II  
ENG465  
GRADE: 11-12  
PR: ENGLISH III OR  
ADVANCED ENGLISH III

AP ENGLISH  
ENG501 & ENG502  
GRADE: 11-12  
PR: ENGLISH III OR  
ADVANCED ENGLISH III  
(RECOMMENDED)

PR = Prerequisite Requirement

## Academic Literacy I



Course #: ENG105  
 Grade Level: 9  
 Credits: 2.5  
 Length: 1 Quarter  
 Format: Skinny  
 Prerequisite: approval

**Considerations:** Students are placed in this course per recommendation of the 8<sup>th</sup> grade language arts teachers, Iowa Assessment scores and other indicators. This course is designed for students reading significantly below grade level.  
 \* May be required for individual students.

**Course Description:** This course develops reading rate and comprehension skills of material presented in all content areas. Each unit will include the reading process, independent reading and vocabulary. Specific units will focus on reading textbooks, fiction, non-fiction, internet, graphics and tests.

## English 9



Course #: ENG110  
 Grade Level: 9  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** English 9 or English I required for graduation.

**Course Description:** This course develops communication skills in reading, speaking, listening, thinking and writing. It includes units in the short story, the novel, poetry, drama and research. The student will practice various forms of writing and will work toward improving grammar, mechanics, and vocabulary.

## English I



Course #: ENG130  
 Grade Level: 9  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** English I or English 9 required for graduation. Students need to be highly motivated in reading and writing. Expectations are high regarding motivation and achievement, reflected in the pace and rigor of the curriculum. Additionally, good basic writing and research skills are expected.

**Course Description:** This is an accelerated class which emphasizes analytical reading and writing. Students will write numerous literary analysis papers over reading selections, a full-length research paper and several in-class essays. Students will read several novels, non-fiction, drama and short stories.

## Academic Literacy II

Course #: ENG205  
 Grade Level: 10  
 Credits: 2.5  
 Length: 1 Quarter  
 Format: Skinny  
 Prerequisite: Academic Literacy  
 OR English 9

**Considerations:** Students are placed in this course per recommendation of 9<sup>th</sup> grade English teachers, Iowa Assessment scores, and other indicators. This course is designed for students reading significantly below grade level. \*May be required for individual students.

**Course Description:** This course continues to develop reading rate and comprehension of material presented in all content areas. This course reinforces strategies learning in Academic Literacy I.

## **English II**



Course #: ENG210  
 Grade Level: 10  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: English 9 OR  
 English I

**Considerations:** See prerequisite. Fulfills the 10<sup>th</sup> grade English requirement for graduation.

**Course Description:** This course continues to develop and refine student skills in the areas of reading, writing, listening, and speaking. In English II work continues on student responsibility, respect for each other, intellectual curiosity, and tolerance for varying viewpoints.

## **Journalism**



Course #: ENG220  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Passed English II OR  
 passed English I with  
 90% or higher

**Considerations:** See prerequisite.

**Course Description:** This course is an introductory, overview class which teaches basic journalism skills while examining the role of newspapers in our society. Areas explored include newspaper interviewing, writing, and editing. Students are also introduced to the concepts of Press Law. This course DOES NOT meet the composition requirement for admission to UNI.

## **Academic Literacy III**

Course #: ENG305  
 Grade Level: 11-12  
 Credits: 2.5  
 Length: 1 Quarter  
 Format: Skinny  
 Prerequisite: none

**Considerations:** Students are placed in this course per recommendations of 10<sup>th</sup> grade English teachers, Iowa Assessment scores, and other indicators. This course is designed for students reading below grade level. \*May be required for individual students.

**Course Description:** This course continues to develop reading rate and comprehension of material presented in all content areas. This course reinforces strategies learned in Academic Literacy I and II.

## **Speech**



Course #: ENG310  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR  
 passed English I  
 with 90% or higher

**Considerations:** See prerequisite. Speech or Acting is required for graduation.

**Course Description:** Speech is designed to make students more effective communicators by emphasizing a variety of real-life speaking situations and building self-confidence in all of these settings. Because this is a performance based class, students should carefully consider conflicts which may result in absences.



### **English III**



Course #: ENG315  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: English II OR  
 passed English I  
 with 90% or higher

**Considerations:** See prerequisite.

**Course Description:** Students will analyze and interpret a variety of American literature, including selections from our earliest writers to our foremost contemporaries. This class will also introduce various writing styles. This is a process oriented class where students will revise and edit their own work.

### **Advanced English III**



Course #: ENG325  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Passed English II OR  
 English 9 or passed English  
 I with 90% or higher

**Considerations:** Fulfills the literature and writing requirement for graduation and is encouraged for students planning to take AP English.

**Course Description:** This is an accelerated version of English III where students will analyze/interpret a variety of American literature with an emphasis on analytical writing and interpreting literary pieces. Students will also write informative, persuasive, research and personal essays. Students should be highly self-motivated and independent and should expect homework each night. This course has a high level of rigor and expectations. The following text will be covered in class:

- Billy Budd
- The Awakening
- The Jungle
- The Adventures of Huckleberry Finn

- The Great Gatsby
- I Know Why the Caged Bird Sings
- The Crucible
- Selections of poetry from Walt Whitman, Emily Dickinson and other American poets
- Short pieces of fiction and nonfiction from American authors

### **British Literature**





Course #: ENG340  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR passed  
 English I with 90% or  
 higher

**Considerations:** See prerequisite.

**Course Description:** This course is designed to broaden a student's reading and writing experiences. Students will read approximately five novels, excerpts from classic British works, historical overviews of the literary periods and articles related to Britain. Students will do individual and group presentations. Among these are: serve on a discussion group for a novel, present their research project, and design and discuss their coat-of-arms.



## Classics

Course #: ENG350    
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR passed  
 English I with 90% or  
 higher

**Considerations:** See prerequisites.

**Course Description:** Students in this course will analyze selected works of literature that speak compassionately of the human experience, that relate human values and that represent some of the best of the literary traditions in order to gain new awareness of themselves and others.

## Contemporary Literature



Course #: ENG360  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR passed  
 English I with 90% or higher

**Considerations:** See prerequisites.

**Course Description:** Students will read a variety of selected contemporary titles in multiple genres, including fiction, non-fiction, memoir, short stories, essays and poetry. Specific attention will be devoted to identifying classifications, and the study of theme, author voice and specific author intent within the writing. Students will complete multiple projects to promote lifelong literacy and will discover how technology and the internet can enhance reading selections. Some selections in this course have a more mature theme.

## Acting


Course #: ENG370  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR  
 passed English I  
 with 90% or higher

**Considerations:** See prerequisites. Acting or Speech is required for graduation. Acting DOES NOT meet the Board of Regents criteria for the RAI.

**Course Description:** Acting is designed to make students more effective communicators by emphasizing a variety of speaking situations and building self-confidence in all these settings. Because this is a performance based class, students should carefully consider potential conflicts that may result in absences.

## Literature of a Selected Author

(Not offered in 2015-2016)

Course #: ENG380   
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR pass English  
 I with 90% or higher

**Considerations:** See prerequisites. This is an advanced, college preparatory literature course.

**Course Description:** Students will read, discuss, and analyze a variety of texts surrounding a selected author. Students will relate historical events and their impact on the literature, will relate the author's life, world/regional events of the time, and social conditions of the works of the author. Students will respond to common elements and themes in the author's major body of work.

(OFFERED ALTERNATING YEARS)

### Creative Writing

Course #: ENG410  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR pass English I with 90% or higher



**Considerations:** See prerequisites.

**Course Description:** This course is designed for students who genuinely like to write in a variety of forms. Students will take writing from the initial idea through the developmental and polishing stages.

### Intro to College Writing

Course #: ENG420  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English III or Adv. English III



**Consideration:** Students should take this class if they need to improve their writing skills, and do not yet feel comfortable taking a college-level writing class.

**Course Description:** This course is designed for any student who is considering college, interested in improving general writing skills, and/or considering taking Composition I. Students will improve organizational skills in writing, learn how to develop their ideas, improve their skills in word choice and sentence structure, improve their mechanics in writing, improve their research skills, and learn how to better develop and write a research paper in MLA style. Papers may include the following essays: Personal, Definition, Division/Classification, Comparison/Contrast, and Persuasive. In addition, students will write a research paper in which they will support their position on a contemporary issue.

### College Grammar

Course #: ENG430  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II OR passed English I with 90% or higher



**Considerations:** See prerequisites.

**Course Description:** This course develops skills in analyzing sentences and applying rules of standard written English. Included are units on vocabulary development, grammatical punctuation, and editing written products.

### College Reading

Course #: ENG450  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English II



**Considerations:** See prerequisites.

**Course Description:** This course is designed for students who wish to improve their reading rate and comprehension skills in order to be successful in their studies beyond high school.

## Advanced Placement English 1 & 2



Course #: ENG511 & ENG512  
 Grade Level: 11-12  
 Credits: 15  
 Length: 3 Quarters  
 Format: Block  
 Prerequisite: Advanced English III is Strongly recommended

**Considerations:** See prerequisite. Students MUST sign up for both sections listed above. This course is a three-quarter class beginning the second quarter of the year. Students may take the AP English exam in May.

**Course Description:** This course is for highly motivated students capable of college level work. Students will further develop critical thinking skills through the study of complex literature and writing numerous literary analyses. Students will be expected to have read one text prior to the beginning of the course, and should check with their instructor for further information.

## Composition I



Course #: ENG460  
 Grade Level: 11-12  
 Credits: 5 (LM), 3 (KW)  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: English III OR Adv. English III AND qualifying placement score

**Considerations:** See prerequisite. Basic writing and research skills are expected and needed. This is a dual-credit course, and the expectations reflect those of college courses.

**Course Description:** This course strengthens students' writing skills that have been developed in previous English courses. Particular emphasis is on furthering skills in argument writing. The course also seeks to develop a student's ability to think critically. Students will complete several formal papers, impromptu essays in response to current events, and two papers involving research. Additionally, students will make presentations and frequently conduct peer review. This class is combination of seminar and lab time.

## **Composition II**

Course #: ENG465  
 Grade Level: 11-12  
 Credits: 5 (LM), 3 (KW)  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Composition I



**Considerations:** See prerequisite. This is a dual-credit course, and the expectations reflect those of college courses.

**Course Description:** This course continues to develop writing skills and critical thinking skills introduced in Composition I, with a particular emphasis on argument analysis. The course requires critical analysis of reading materials, audience and self, and further emphasizes precise and effective use of research tools while honing a student's ability to analyze and construct logical arguments. This class is a combination of seminar and lab time.

## **English Language Learners I**

Course #: ENG140  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: approval

**Considerations:** Students are placed in the course based on the Home Language Survey and their scores on the IPT English language tests.

**Course Description:** This course is designed to develop students' speaking, listening, reading and writing skills in the English language and develop the skills that students need to be successful at L-M and beyond.

## **English Language Learners II Reading**

Course #: ENG245R  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: approval

**Considerations:** Students are placed in the course based on the Home Language Survey and their scores on the IPT English language tests.

**Course Description:** This course is designed to continue to develop students' speaking, listening, reading, and writing skills in the English language. This course focuses on academic reading, analyzing and interpreting different genres which build academic vocabulary and grammar skills.

## **English Language Learners II Composition**

Course #: ENG245C  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: approval

**Considerations:** Students are placed in the course based on the Home Language Survey and their scores on the IPT English language tests.

**Course Description:** This course is designed to develop students' composition skills in the English language. This course will focus on reading, analyzing and interpreting different genres which build academic vocabulary and grammar skills.

### **English Language Learners III Reading**

Course #: ENG255R  
Grade Level: 9-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: approval

**Considerations:** Students are placed in the course based on the Home Language Survey and their scores on the IPT English language tests.

**Course Description:** This course is designed to continue to develop students' speaking, listening, reading, and writing skills in the English language. This course focuses on academic reading, analyzing and interpreting different genres which build academic vocabulary and grammar skills as well as texts that relate to American history and culture in order to increase students' background knowledge on these subjects while honing their reading skills.

---

### **English Language Learners III Composition**

Course #: ENG255C  
Grade Level: 9-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: approval

**Considerations:** Students are placed in the course based on the Home Language Survey, their scores on the IPT English language tests, and school performance.

**Course Description:** This course is designed to continue to develop students' composition skills in the English language. This course focuses on the writing process, a variety of essay styles and writing research papers.

### **English Language Learners III College Prep**

Course #: ENG001CP  
Grade Level: 9-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: approval

**Considerations:** Students are placed in the course based on the Home Language Survey, their scores on the IPT English language tests, and school performance.

**Course Description:** This course is designed to continue to develop students' composition skills in the English language. This course will focus on preparing for the ACT and SAT exams through extensive grammar, reading and composition practice. Focus will also be given to the college admissions process, financial aid concerns, and scholarship opportunities.

---

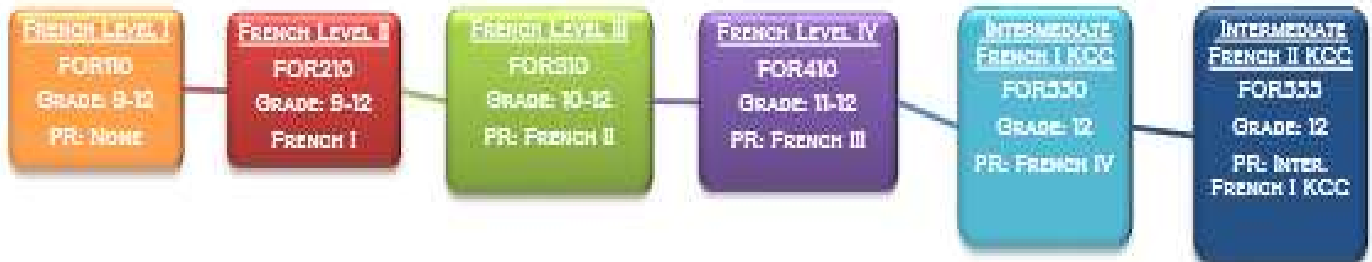
### **English Language Learners Directed Studies**

Course #: ENG001DS  
Grade Level: 9-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: approval

**Considerations:** Students are placed in the course based on the Home Language Survey, their scores on the IPT English language tests, and school performance.

**Course Description:** This course is designed to assist students with their other academic classes. Supports provided include help with understanding the expectations and assignments for classes, one-on-one tutoring and administration of assessments when necessary.

# FOREIGN LANGUAGE



PR = PREREQUISITE REQUIREMENT



### Level I French



Course #: FOR110  
 Grade Level: 8-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: none

**Considerations:** none

**Course Description:** Foreign language basic grammar and vocabulary are introduced as well as reading, writing, speaking, and listening skills. Use of the target language is expected during class time.

### Level II French



Course #: FOR210  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: French I

**Considerations:** Second semester grade of 60% or higher in Level I is required.

**Course Description:** Grammar concepts and vocabulary are expanded. Reading, writing, speaking, and listening skills are further developed.

### Level I Spanish



Course #: FOR130  
 Grade Level: 8-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: none

**Considerations:** none

**Course Description:** Foreign language basic grammar and vocabulary are introduced as well as reading, writing, speaking, and listening skills. Use of the target language is expected during class time.

### Level II Spanish



Course #: FOR230  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Spanish I

**Considerations:** Second semester grade of 60% or higher in Level I is required.

**Course Description:** Grammar concepts and vocabulary are expanded. Reading, writing, speaking, and listening skills are further developed.

### Level III French



Course #: FOR310  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: French II

**Considerations:** A dictionary of target language/English will be used. Grade of 60% or higher for second semester in Level II is required.

**Course Description:** Complex grammar concepts are introduced with a continued emphasis on all four skills of communication. Dictionary usage is introduced.

### Level III Spanish



Course #: FOR330  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Spanish II

**Considerations:** A dictionary of target language/English will be used. Grade of 60% or higher for second semester in Level II is required.

**Course Description:** Complex grammar concepts are introduced with a continued emphasis on all four skills of communication. Dictionary usage is introduced.

### Level IV French



Course #: FOR410  
 Grade Level: 11-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: French III

**Considerations:** A dictionary of target language/English will be used. Grade of 60% or higher for second semester in Level III is required.

**Course Description:** Level IV continues work on grammar concepts and vocabulary in all four communication skills. Class will be conducted extensively in the target language.

### Level IV Spanish



Course #: FOR430  
 Grade Level: 11-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Spanish III

**Considerations:** A dictionary of target language/English will be used. Grade of 60% or higher for second semester in Level III is required.

**Course Description:** Level IV continues work on grammar concepts and vocabulary in all four communication skills. Class will be conducted extensively in the target language.



## Intermediate French I KCC



Course #: FOR550  
Grade Level: 12  
Credits: 5 (LM), 4 (KW)  
Length: 1 Semester  
Format: Skinny  
Prerequisite: French IV

**Considerations:** see prerequisite. Class is conducted in French.

**Course Description:** This course continues to develop the “5 Cs” of second language acquisition (communication, cultures, connections, comparisons, and communities) by providing intensive practice in the fundamental communicative skills of listening, speaking, reading and writing, with a methodic study of different cultural contexts and a review of the basic grammar. This class offered the opportunity for language use beyond the limited sphere of the elementary courses. Discussion of the cultural practices and products of francophone countries presented in the readings and viewing materials constitute an important part of the course. Comparisons and connections between francophone and Anglophone cultures and language will also be examined.

## Intermediate French II KCC



Course #: FOR555  
Grade Level: 12  
Credits: 5 (LM), 4 (KW)  
Length: 1 Semester  
Format: Skinny  
Prerequisite: Intermediate French I

**Considerations:** see prerequisite. Class is conducted in French.

**Course Description:** This course continues to develop the “5 Cs” of second language acquisition (communication, cultures, connections, comparisons, and communities) by expanding the repertoire of realia (movies, readings, Internet explorations) and class activities. The class provides continuous practice in developing the communicative skills and encourages group discussion. Examining the practices and products of francophone cultures as well as recognizing the importance of comparisons and connections between French and American culture and language is an important class component.

## Intermediate Spanish I KCC



Course #: FOR560  
Grade Level: 12  
Credits: 5 (LM), 4 (KW)  
Length: 1 Semester  
Format: Skinny  
Prerequisite: Spanish IV

**Considerations:** see prerequisite. Class is conducted in Spanish.

**Course Description:** In this class, students will continue to develop their ability to communicate in Spanish in everyday, practical situations that they might encounter both in the U.S. and abroad. Along with the development of oral skills, students will also work on the other 3 vital components of language: reading, writing and listening comprehension. Students will actively engage themselves in pair/group activities to express themselves in basic situations. Classroom time will be used for intensive language practice in meaningful contexts (i.e. applying important grammatical concepts, essential vocabulary, and cultural norms needed to maintain basic communication.) Class time will consist of communication activities following grammatical explanations. Students are expected to study and complete assigned workbook, video, lab and textbook activities outside of class.

## Intermediate Spanish II KCC

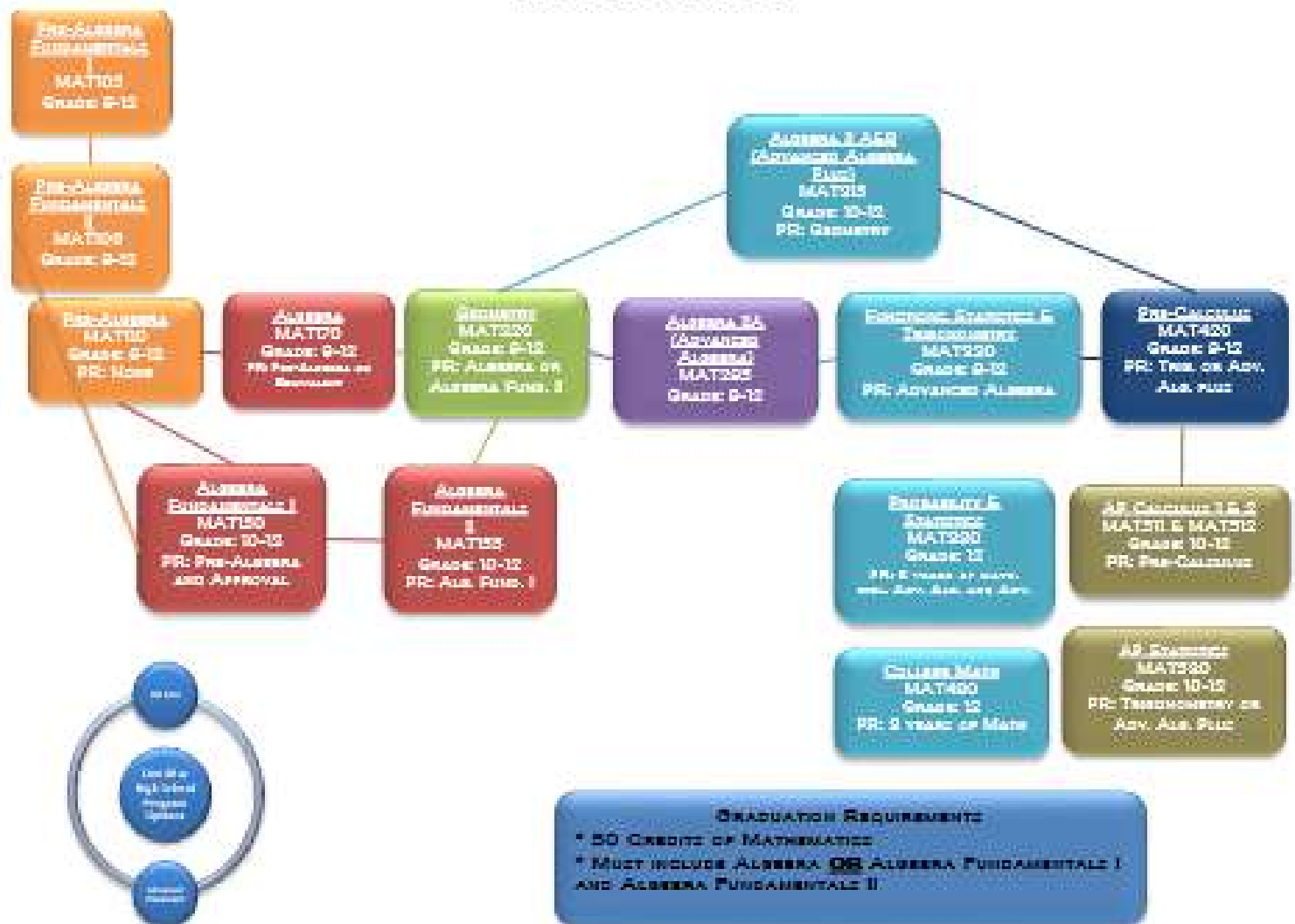


Course #: FOR565  
Grade Level: 12  
Credits: 5 (LM), 4 (KW)  
Length: 1 Semester  
Format: Skinny  
Prerequisite: Intermediate Spanish I

**Considerations:** see prerequisite. Class is conducted in Spanish.

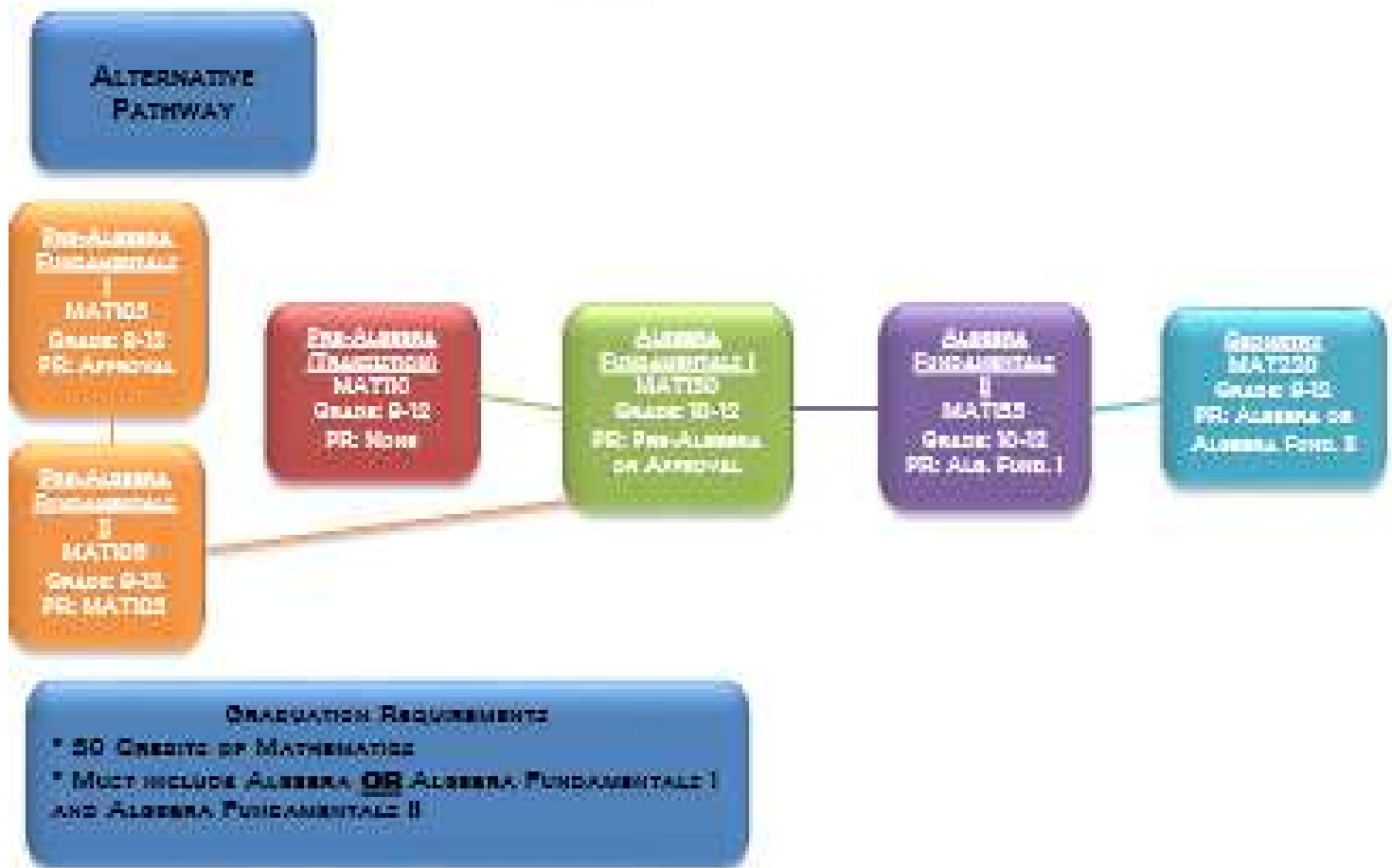
**Course Description:** In this class, students will continue to develop their ability to communicate in Spanish in everyday, practical situations that they might encounter both in the U.S. and abroad. Along with the developments of oral skills, students will also work on the other 3 vital components of language: reading, writing and listening comprehension. Students will actively engage themselves in pair/group activities to express themselves in basic situations. Classroom time will be used for intensive language practice in meaningful contexts. (i.e. applying important grammatical concepts, essential vocabulary, and cultural norms needed to maintain basic communication.) Class time will consist of communication activities following grammatical explanations. Students are expected to study and complete assigned workbook, video, lab and textbook activities outside of class.

# MATHEMATICS



PR = Prerequisite Requirement

# MATHEMATICS



### Pre-Algebra Fundamentals I

Course #: MAT105  
 Grade Level: 9th  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: approval

**Considerations:** Students are placed in this course per approval of the math department based on 8<sup>th</sup> grade math results, NWEA Map Test, and Iowa Assessment scores. A TI-30x scientific calculator or equivalent is needed. Graphing calculators are not allowed in this course.

**Course Description:** This course is an introductory class for Pre-Algebra Fundamentals II. It is designed to review basic skills and math concepts. Elementary algebra skills with variables and problem-solving techniques will be reinforced.

### Pre-Algebra Fundamentals II

Course #: MAT106  
 Grade Level: 10th  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: approval

**Considerations:** Students are placed in this course per approval of the math department based on Pre-Algebra Fundamental I results, NWEA Map Test, and Iowa Assessment scores. A TI-30x scientific calculator or equivalent is needed. Graphing calculators are not allowed in this course. High School Pre-Algebra results could be used for placement in this course.

**Course Description:** This course is an introductory class for Algebra Fundamentals I or Algebra. It is designed to review basic skills and math concepts. Elementary algebra skills to include material from second semester Pre-Algebra

### Pre-Algebra

Course #: MAT115  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: none

**Considerations:** TI-30x scientific calculator or its equivalent needed. Graphing calculators are not allowed in this course.

**Course Description:** This course is an introductory class for Algebra. It is designed to review basic skills and math concepts. Elementary algebra skills with variables and problem-solving techniques will be imperative to the curriculum.

### Algebra Fundamentals I

Course #: MAT150  
 Grade Level: 10-11  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Pre-Algebra and approval



**Considerations:** Students are placed in this course per approval of the math department based on Pre-Algebra, NWEA Map Test, and Iowa Assessment scores. A TI-30x scientific calculator or equivalent is needed. Graphing calculators are not allowed in this course. *Algebra Fundamentals I and Algebra Fundamentals II together meet the algebra graduation requirement.*

**Course Description:** This course is designed to include material covered in the first semester of Algebra. Topics include negative numbers, absolute values, opposites, linear equations, and inequalities in word problems.

## **Algebra Fundamentals II**



Course #: MAT155  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Algebra  
 Fundamentals I or  
 approval

**Considerations:** Students are placed in this course per approval of the math department based on Algebra, NWEA Map Test, and Iowa Assessment scores. A TI-30x scientific calculator or equivalent is needed. Graphing calculators are not allowed in this course. *Algebra Fundamentals I and Algebra Fundamentals II together meet the algebra graduation requirement.*

**Course Description:** This course is designed to include material covered in the second semester of Algebra. Topics include negative numbers, absolute values, opposites, linear equations, and inequalities in one variable word problems, factoring, graphing, and quadratic equations.

## **Algebra**



Course #: MAT170  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Pre-Algebra or the  
 equivalent of 7<sup>th</sup>  
 and 8<sup>th</sup> grade math

**Considerations:** Scientific calculators are required. Graphing calculators are not allowed in this course.

**Course Description:** Algebra deals with variables, properties of operations and formulas. Topics include negative numbers, absolute value, opposites, linear equations in one variable, inequalities in one variable, word problems, factoring, graphing, and quadratic equations.

## **Geometry**



Course #: MAT220  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Algebra OR  
 Algebra Fund. II

**Considerations:** Scientific calculators are required. Graphing calculators are not allowed in this course.

**Course Description:** Geometry is the logical, deductive study of points, lines and polygons. Students will learn the logical, deductive study of circles, plane figures, solids and spatial figures.

## Algebra IIA



(Formerly Advanced Algebra)

Course #: MAT295

Grade Level: 9-12

Credits: 10

Length: 2 Semesters

Format: Skinny

Prerequisite: Geometry

Subsequent: Algebra IIB (Coming in 2016-17. FST in 2015-2016)

**Considerations:** A TI83 or TI84 (preferred) graphing calculator is required. TI89 or TI-Nspire calculators are NOT allowed.

**Course Description:** This course includes a variety of topics, including equations, inequalities, linear functions and relations, systems of equations and inequalities, quadratic functions and relations, polynomials and functions, inverse functions and relations, radical functions and relations, exponential functions and relations, logarithmic functions and relations, and rational functions and relations.

## Algebra II A&B

(Formerly named Advanced Algebra Plus)

Course #: MAT315

Grade Level: 10-12

Credits: 10

Length: 2 Semesters

Format: Skinny

Prerequisite: Geometry

Subsequent: PreCalculus



**Considerations:** Recommendation from a mathematics teacher. A TI83 or TI84 (preferred) graphing calculator IS required. TI89 or TI-Nspire calculators are NOT allowed.

**Course Description:** This course includes a variety of topics, including equations, inequalities, linear functions and relations, systems of equations and inequalities, quadratic functions and relations, polynomials and functions, inverse functions and relations, radical functions and relations, exponential functions and relations, logarithmic functions and relations, and rational functions and relations; and also included in this course is an extension of the above topics, as well as the new additional topics. These include factoring, solving equations, logarithmic functions and relations, conics (including rotations and transformations), sequences and series, statistics, probability, trigonometry functions, trigonometry identities, trigonometry equations, and polar coordinates. ***This course is the combination of Algebra IIA and FS&T in one course and is an accelerated math course.***

## Function, Statistics & Trigonometry



(Will change to Algebra IIB in 2016-2017)

Course #: MAT320  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Advanced Algebra

**Considerations:** Graphing calculator is required. TI84 is recommended. TI89 and TI-Nspire calculators are not allowed.

**Course Description:** This course combines statistical and algebraic concepts and previews Pre-Calculus work with functions. Graphing calculators are used extensively for plotting functions, analyzing data and simulating real world problems.

## Probability and Statistics



Course #: MAT330  
 Grade Level: 12  
 Credits: 5  
 Length: 1 Semester  
 Format: Skinny  
 Prerequisite: 3 years of high school math, including Algebra IIA or Advanced Algebra Plus

**Considerations:** Graphing calculators are required.

**Course Description:** This course is intended to develop statistical literacy and thinking by developing skills to interpret results, write explanations, find patterns, and make decisions. Included are units on data classification, frequency distribution and their graphs, and measures of central tendency.

## Pre-Calculus



Course #: MAT420  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: FS&T or Advanced Algebra Plus

**Considerations:** Graphing calculator is required. TI84 is recommended. TI89 and TI-Nspire calculators are not allowed.

**Course Description:** This course is designed for students who want to be better prepared for College Calculus or AP Calculus. This course has been enhanced with additional materials that promote a deeper mathematical understanding of the topics, extend known topics and present new topics that are generally not included in a high school curriculum. These topics will prepare the student for subsequent courses by improving their understanding of algebra and geometry concepts.

## College Mathematics

Course #: MAT430  
 Grade Level: 12  
 Credits: 2.5 Credit/Fail  
 Length: 1 Quarter  
 Format: Skinny  
 Prerequisite: 3 years of high school math

**Considerations:** Graphing calculator is required. TI84 is recommended.

**Course Description:** This course will continue to develop skills previously learned in other math courses. Included are units on slope, polygons, graphing, variation equations, trig functions, distance formula, and other ACT prep areas. This course can only be taken for credit. No letter grade will be assigned.



**Advanced Placement  
Calculus (BC) 1 & 2**



Course #: MAT511 & MAT512  
 Grade Level: 10-12  
 Credits: 15  
 Length: 2 Semesters  
 Format: Skinny-1<sup>st</sup> semester  
 Block-2<sup>nd</sup> semester  
 Prerequisite: Pre-Calculus

**Considerations:** Students MUST sign up for both sections listed above. Students may take the AP Calculus exam in May. Graphing calculator is required. TI84 is recommended.

**Course Description:** Students will analyze and solve non-trivial mathematical problems related to calculus. Mathematical modeling and communication will be emphasized. The course surveys the mathematics of change from elementary derivatives through sophisticated integrals to infinite series.

**Advanced Placement Statistics**

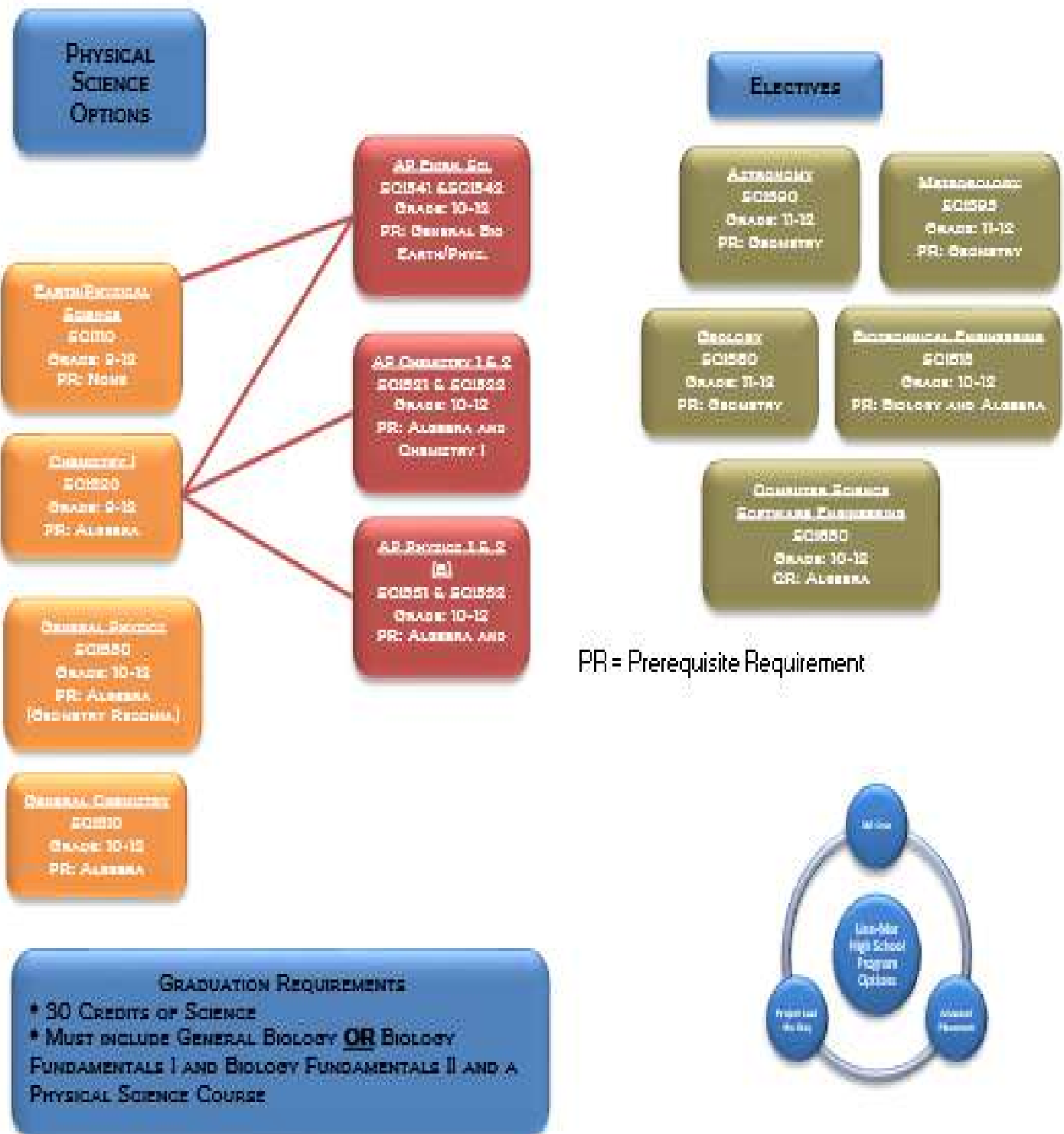


Course #: MAT530  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: FS&T OR Advanced Algebra Plus

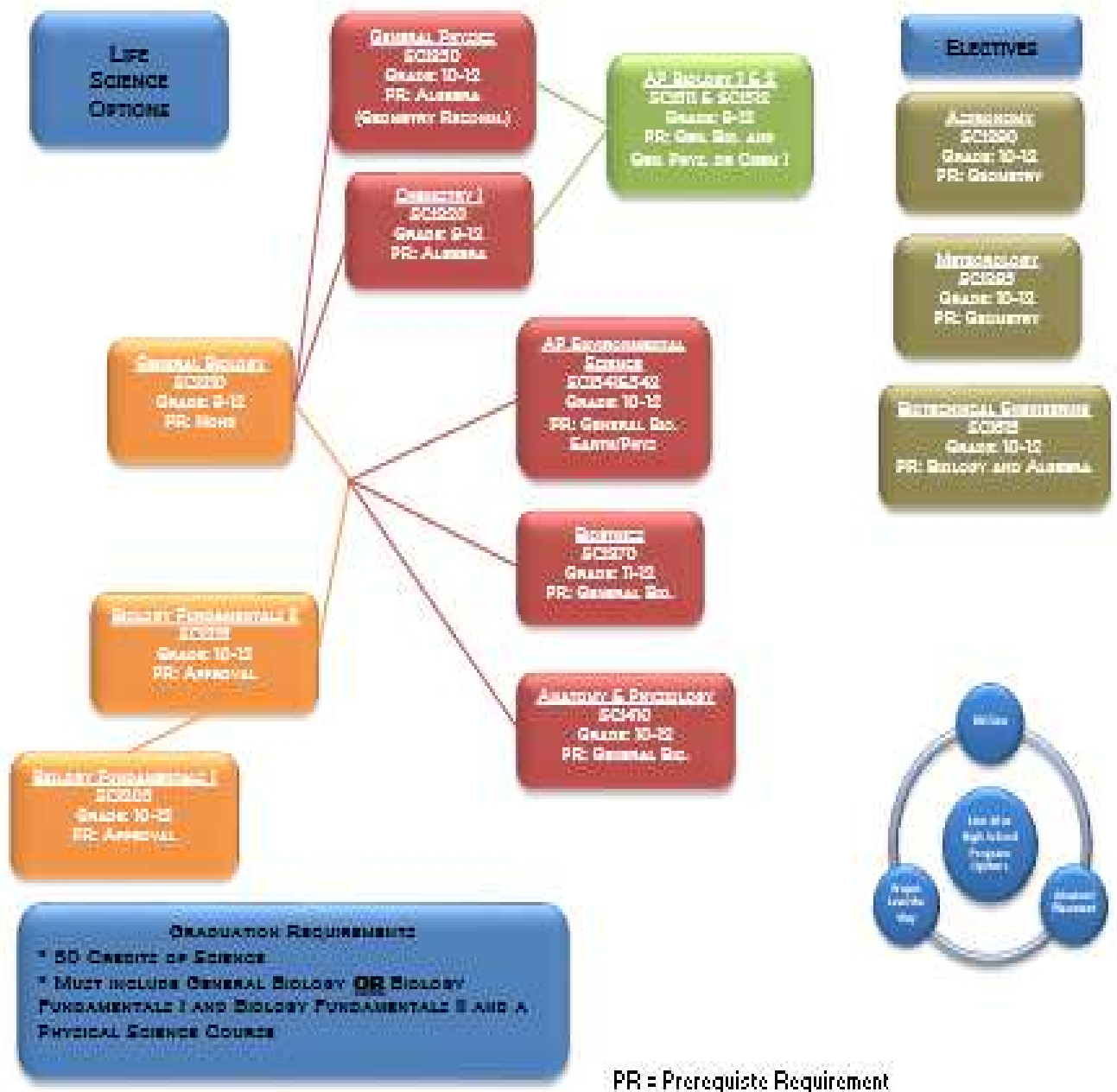
**Considerations:** Students may take the AP Statistics exam in May. Graphing calculator is required. TI84 is recommended.

**Course Description:** This course is a typical introductory college statistics course. It is divided into 4 major themes: exploratory data analysis, probability, statistical inference and planning, and conducting a study. Students will use both graphical and numerical techniques, probability to anticipate the distribution of data to be collected, design ways to collect data while avoiding bias, and make inferences from samples of data.

# SCIENCE



# SCIENCE



### Earth/Physical Science



Course #: SC1110  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** Meets the physical science requirement for graduation.

**Course Description:** Physical Science is an introduction to the topics of beginning chemistry and physics. Units covered include the nature, diversity and the interaction of matter, energy and motion, and measurement. Earth Science is an introduction to topics of concern to human society and the interaction with nature, as well as topics focused on both Earth and Astronomical origins. The class is set up as a quarter physical and a quarter Earth. Both of the physical and Earth science quarters have the requirements of basic algebra.

### General Biology



Course #: SC1210  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** Strong comprehensive vocabulary, reading and study skills.

**Course Description:** This course is a survey class in life science. The areas investigated are: biological structure and function; heredity; life's continuity and change; diversity of life.

### Biology Fundamentals I

Course #: SC1205  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: approval

**Considerations:** *Biology Fundamentals I and Biology Fundamentals II together meet the life science graduation requirement*

**Course Description:** This course will investigate scientific processes, chemistry of life, biological structures and function, and heredity.

## **Biology Fundamentals II**

Course #: SCI215  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: approval

**Considerations:** *Biology Fundamentals I and Biology Fundamentals II together meet the life science graduation requirement*

**Course Description:** This course will investigate life's continuity and change, the diversity of life (including viruses, bacteria, protists, fungi and animals)

## **General Chemistry**



Course #: SCI310  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Algebra

**Considerations:** See prerequisites. This course meets the physical science requirement.

**Course Description:** This course is designed to explore the nature of matter and how it changes. It emphasizes the relationship between chemistry and real-world applications. General Chemistry covers the same topics as Chemistry I and is suitable for all students with a variety of career interests.

## **Chemistry I**



Course #: SCI320  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Algebra

**Considerations:** See prerequisites. This course meets the physical science requirement. (required for AP Chemistry)

**Course Description:** This course is designed to explore the nature of matter and how it changes. It emphasizes the relationship between chemistry and real-world applications. Chemistry I covers the same topics as General Chemistry and is intended for students with a strong interest in science, math, or engineering careers.

## **General Physics**



Course #: SCI350  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Algebra  
 (Geometry recommended)

**Considerations:** See prerequisites. This course meets the physical science requirement.

**Course Description:** This course examines the fundamental properties and laws of the physical world. These properties include motion, forces, momentum, energy and waves.

## **Bioethics**



Course #: SCI370  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: General Biology

**Considerations:** See prerequisites.  
 This course meets the science elective requirement.

**Course Description:** This course examines contemporary ethical issues in genetics, medicine, health, animal use, and the environment, reflecting on the ways in which technology and varying perspectives have resulted in conflict within society.

## **Geology**



Course #: SCI380  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Geometry

**Considerations:** See prerequisites.  
 This course meets the physical science requirement.

**Course Description:** Students will receive an intense, in-depth look into the core subjects of geology, which include: physical, structural and environmental geology, crystallography, mineralogy, stratigraphy, and geomorphology.

## **Astronomy**



Course #: SCI390  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Geometry

**Considerations:** See prerequisites.  
 This course meets the science elective requirement.

**Course Description:** Students will receive an intense, in-depth look at astronomy topics. This includes: astronomical history, stellar measuring, stellar evolution, forces (gravitational, inertial, nuclear, magnetic, etc.) and the universe (theories, black matter, quasars, etc.).

## **Meteorology**



Course #: SCI395  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Geometry

**Considerations:** See prerequisites.  
 This course meets the science elective requirement.

**Course Description:** Students will receive an intense, in-depth look at topics relating to the atmosphere. Students will focus on forecasting weather, using severe weather as its guideline.

## Anatomy & Physiology



Course #: SCI410  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: General Biology

**Considerations:** See prerequisites.  
 This course meets the science elective requirement.

**Course Description:** This course provides students with the fundamental concepts of human structure and function as it pertains to their bodies. It is designed to lead students into a basic career in the health field and prepare students for post-secondary education.

## Advanced Placement Biology 1 & 2



W

Course #: SCI511 & SCI512  
 Grade Level: 10-12  
 Credits: 15  
 Length: 3 Quarters  
 Format: Block  
 Prerequisite: Gen. Biology AND Gen. Chemistry OR Chemistry I

**Considerations:** See prerequisites.  
 Students MUST sign up for both sections listed above. Anatomy and Physiology is recommended. Students may take the Biology AP exam in May.

**Course Description:** This course is an in-depth study of the field of biology. Areas of emphasis include energy pathways; cell, genetics and genetic engineering; and organisms and their environments.

## Advanced Placement Chemistry 1 & 2



W

Course #: SCI521 & SCI522  
 Grade Level: 10-12  
 Credits: 15  
 Length: 3 Quarters  
 Format: Block  
 Prerequisite: Chemistry I AND Adv. Algebra OR Adv Algebra plus FS&T

**Considerations:** See prerequisites.  
 Students MUST sign up for both sections listed above. A scientific calculator is required. Students may take the Chemistry AP exam in May.

**Course Description:** This course covers the basics of chemistry at the college level. Areas of emphasis include atomic structure, molecular bonding, thermochemistry, kinetics, and chemical equilibria.

### **Advanced Placement Physics 1 & 2**

Course #: SCI531 & SCI532  
 Grade Level: 10-12  
 Credits: 20  
 Length: 4 Quarters  
 Format: Block  
 Prerequisite: Chemistry I AND  
 Adv. Algebra OR  
 Adv Algebra plus  
 FS&T



**Considerations:** See prerequisites. Students MUST sign up for both sections listed above. General Physics is NOT a prerequisite for this class. A scientific calculator is required. Students may take the Physics AP exam in May.

**Course Description:** This course covers the basics of physics at the college level. Students taking this course should have a strong interest in engineering or other related science areas. Areas of emphasis include electricity, magnetism, atomic and nuclear physics, motion, thermodynamics and optics.

### **Advanced Placement Environmental Science 1 & 2**



Course #: SCI541 & SCI542  
 Grade Level: 10-12  
 Credits: 15  
 Length: 3 Quarters  
 Format: Block  
 Prerequisite: General Biology;  
 Earth/Physical;  
 Algebra

**Considerations:** See prerequisites. Students must sign up for both sections listed above. Course adheres to the objectives instituted by the College Board for all AP Environmental sciences. Students may take the AP exam in May.

**Course Description:** This interdisciplinary course emphasizes critical thinking and application of scientific principles, concepts and methods to identifying, analyzing and evaluating environmental problems and investigating associated risks and alternative solutions through classroom and field work. Earth systems and resources; Living Systems; Populations; Land and Water Use; Energy Resources and Consumption and Pollution will be covered.



## **Biotechnical Engineering**

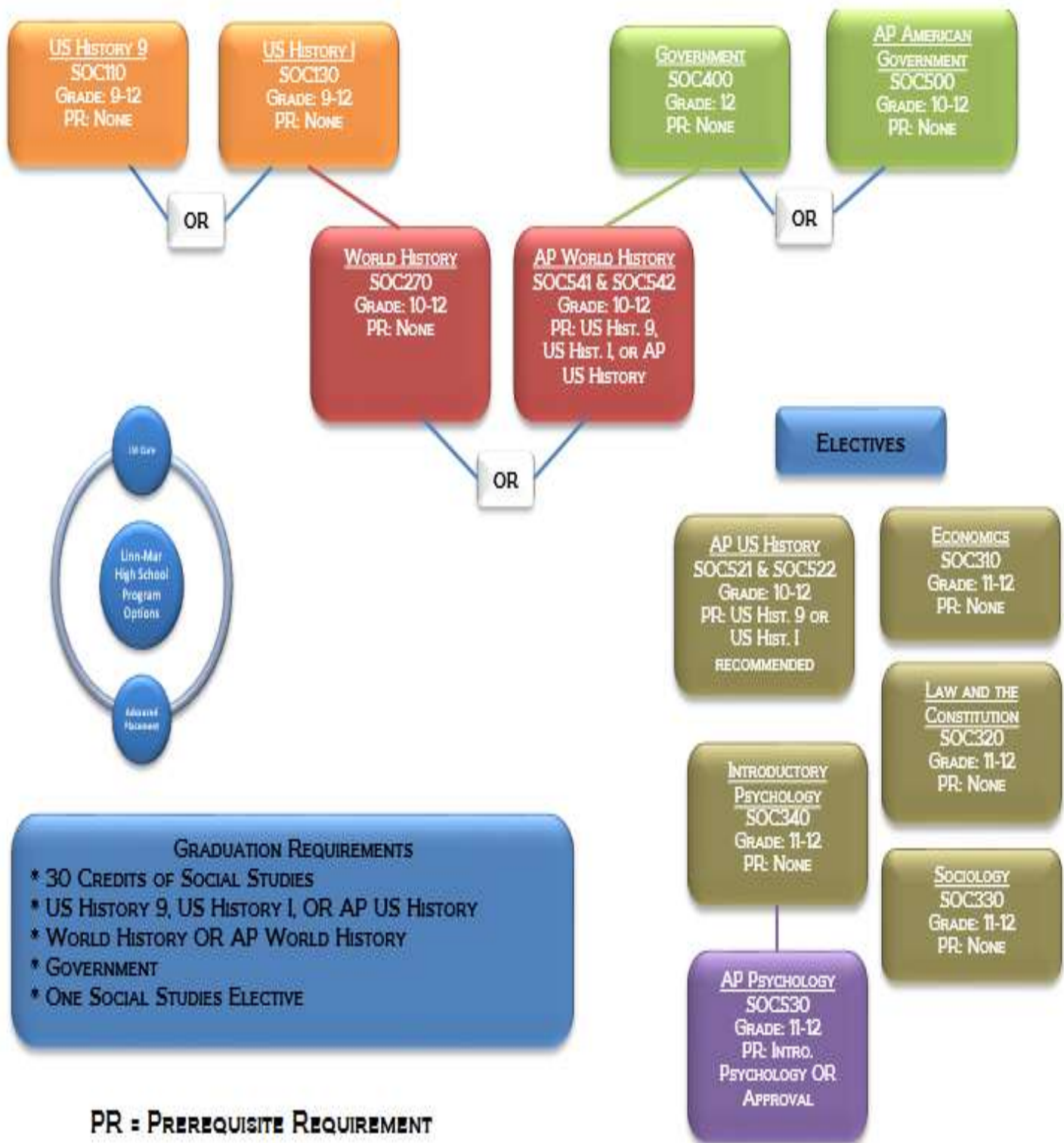


Course #: SCI615  
Grade Level: 10-12  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Prerequisite: Algebra AND  
Gen. Biology

**Considerations:** See prerequisites.  
This is a course in the Project Lead the Way engineering sequence. Students will earn credit for this course from Kirkwood Community College upon successful completion.

**Course Description:** This is an inquiry based course designed to allow students to explore the details of biotechnical engineering. Students will learn about concepts related to biomechanics, genetic engineering, and forensics. Students apply these concepts with hands on, projects, activities and laboratories.

# SOCIAL STUDIES



## US History 9



Course #: SOC110  
 Grade Level: 9  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** Required for graduation.

**Course Description:** US History 9 examines American history from the Gilded Age to the present, focusing on the people, ideas and events that have helped create the nation and world we live in today. Students are required to examine why events happened as they did and explain how our past is related to our present. A variety of learning activities, requiring both group and individual effort, allow students to become actively involved learners.

## US History I



Course #: SOC130  
 Grade Level: 9  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** Recommended for students with a strong interest in reading and writing in history. Students successful in this course may move into the AP World History elective to satisfy their world history requirement. US History 9, US History I, OR AP US History is required for graduation.

**Course Description:** This course explores the Gilded Age to present focusing on people, ideas, and events that have helped to create the nation and world we live in today. Strong emphasis is placed on developing skills in writing, interpretation and analysis of primary historical documents. Students will examine events and ideas from a variety of perspectives as they learn how to take a position on an issue, develop a thesis statement and use evidence to defend their position.

## World History



Course #: SOC270  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: None

**Considerations:** See prerequisites. World History OR AP World History is required for graduation.

**Course Description:** This course investigates the foundations of our modern world. This will be done by researching various civilizations from ancient civilizations through modern times. Students will evaluate the changing nature of the world's political, economic and social systems.

## Economics



Course #: SOC310  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** Students should be comfortable working with charts and tables.

**Course Description:** This course will focus on economic concepts (scarcity, choice, incentives); supply, demand, and markets; microeconomics (production, productivity, competitive markets); and macroeconomics (the economy in the aggregate, inflation, unemployment).

## Law and the Constitution



Course #: SOC320  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** Meets the social studies elective graduation requirement.

**Course Description:** This course focuses on the creation and operation of selected political systems and philosophies such as democracy, communism, socialism and fascism. Also students will examine the development, structure and operation of the American legal system including citizen rights and responsibilities, the role of the US Supreme Court and the functions of the courts by experiencing a mock trial.

## Sociology



Course #: SOC330  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** Meets the social studies elective graduation requirement.

**Course Description:** This course is a study of human group behavior and social problems. The course will explore the following concepts: culture, socialization, deviance and social control, social stratification, minority groups, marriage and family.

## Introductory Psychology



Course #: SOC340  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** Meets the social studies elective graduation requirement. This course is taught at the college-prep level and requires higher order thinking skills and work outside of the class room to be successful.

**Course Description:** This course is designed to help students understand human behavior. The students will learn about the psychology as a science, career options, methods of learning, human development, personality development and psychological illness.

## Government



Course #: SOC400  
 Grade Level: 12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** Government or AP American Government is required for graduation.

**Course Description:** Course highlights will include a study of the three branches of government, political voting behavior, political party membership, interest groups and elected officials. Students will study the underlying principles upon which the US government is based: limited government, rules of law, federalism and protection of individual rights.

### Advanced Placement American Government



Course #: SOC500 **W**  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters during  
 second semester  
 Format: Block  
 Prerequisite: none

**Considerations:** Instructor approval for 10<sup>th</sup> graders. Fulfills the government graduation requirement. Students may take the American Government AP exam in May.

**Course Description:** Several topics covered in this course include: Constitutional underpinnings, political beliefs & behaviors, political parties, interest groups & mass media, institutions of national government, public policy & civil rights and civil liberties.

### Advanced Placement US History 1 & 2



**W**

Course #: SOC521 & SOC522  
 Grade Level: 10-12  
 Credits: 15  
 Length: 3 Quarters  
 Format: Block  
 Prerequisite: US History 9 OR  
 US History I is  
**recommended**

**Considerations:** Instructor approval for 10<sup>th</sup> graders. Students MUST sign up for both sections listed above. Fulfills the US history graduation requirement. This course begins in 2<sup>nd</sup> quarter. Students may take the US History AP exam in May.

**Course Description:** Students will participate in reading primary and secondary history materials, lectures, research projects, and group and individual presentations. College level work is expected in this survey course which covers the full range of US history from the early European explorations to the present.

### Advanced Placement Psychology



**W**

Course #: SOC530  
 Grade Level: 11-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Intro. Psychology  
 OR approval

**Considerations:** Textbooks are available for purchase online but one will be provided in class. Class is geared to prep students to take the National Psychology AP exam in May.

**Course Description:** Areas studied: history and approaches, states of consciousness, biological bases of behavior, cognition, testing and individual differences, sensation and perception, motivation and emotion, abnormal psychology and treatment, and social psychology. College level work is expected.

### Advanced Placement World History 1 & 2

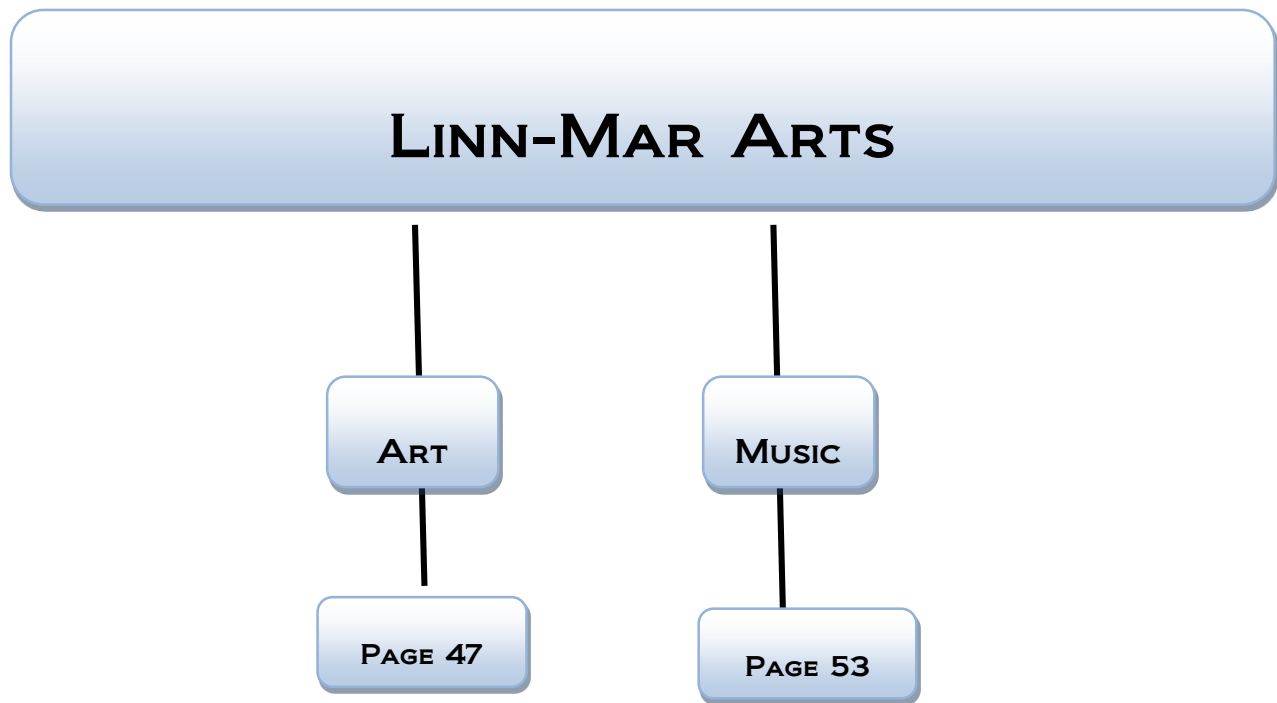


**W**

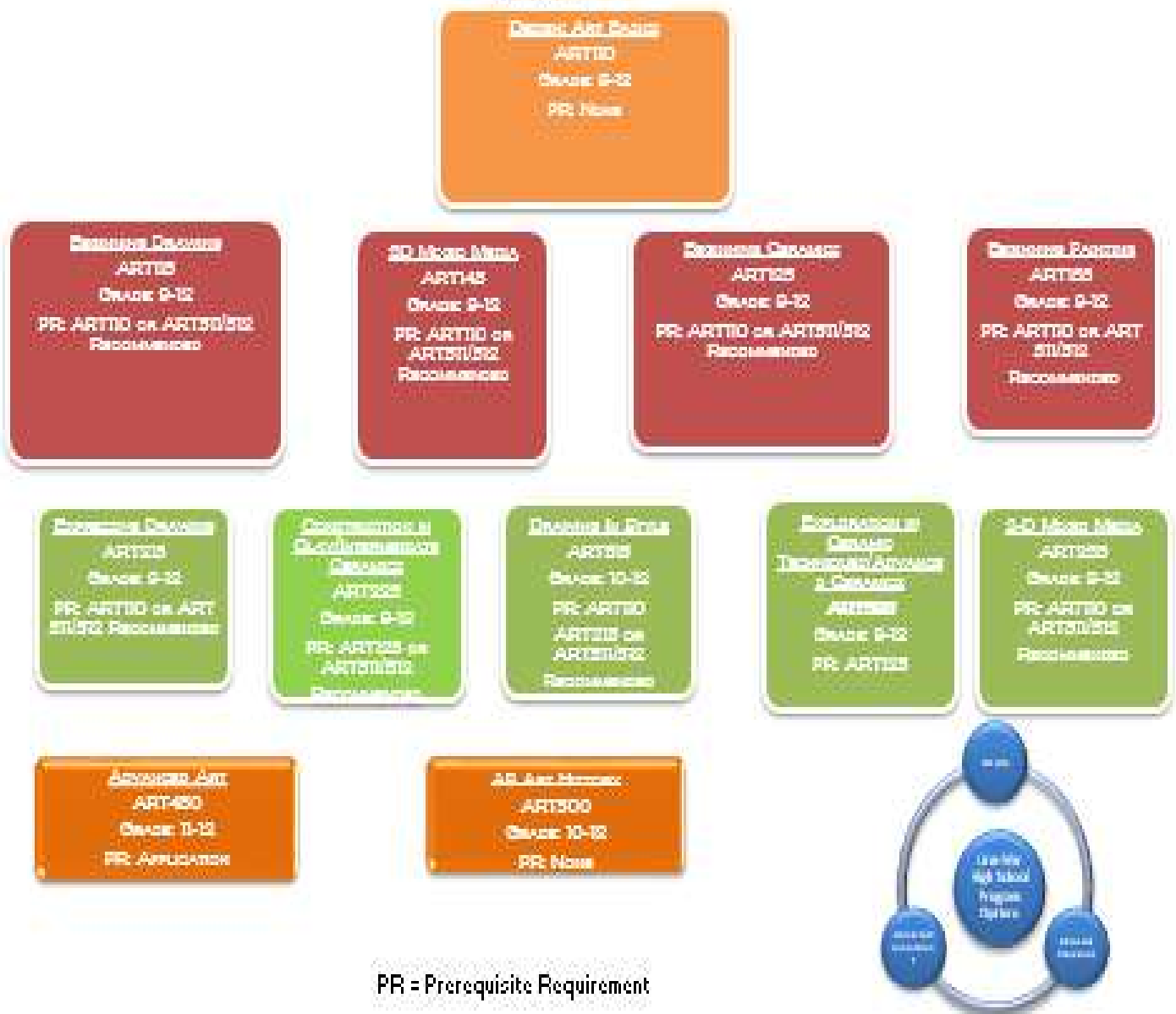
Course #: SOC541 & SOC542  
 Grade Level: 10-12  
 Credits: 15  
 Length: 3 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** Students MUST sign up for both sections listed above. Fulfills the required world history requirement. Duration is three quarters beginning in 2<sup>nd</sup> quarter. Students may take the World History AP exam in May.

**Course Description:** This course is a broad survey of the major periods of human history from a global comparative perspective. Students will study the events and trends that have shaped the world into what it is today, while refining their study, writing and critical thinking skills.



# ART



PR = Prerequisite Requirement



### Design Art Basics

Course #: ART110  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: None

**Considerations:** This course is a basic design course which is **highly recommended** before taking any art course.

**Course Description:** This is a design course that teaches basic visual literacy. By learning about the elements and principles of art, students will learn what visual images communicate. Students will gain a better understanding of how and what they are communicating in their art work through direct application of the elements and principals. Students will develop technical skills through the use of a variety of mediums including computer-generated images.

---

### Beginning Drawing

Course #: ART115  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: None

**Considerations:** This course is for the student that wants to improve their drawing skills. Design or AP Art History highly recommended.

**Course Description:** Students will draw from both life and photographic images. Emphasis will be placed on tone, line, value, and proportion. Students will also learn linear perspective drawing. The works of other artists, past and present, will be studied.

### Beginning Ceramics

Course #: ART125  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: None

**Considerations:** Design and/or AP Art History is strongly encouraged before taking this course. Students will be required to take a written midterm, as well as a written final. Students may also have to spend more than just class time to finish projects. This class is for motivated, hands-on students.

**Course Description:** Like getting dirty? Working with your hands? Then Beginning Ceramics is right for you. Beginning Ceramics allows students to dig into clay and learn the basic handbuilding methods: pinch, soil slab and sculpting. Students will also learn how to use the potter's wheel to create simple forms. Students will learn the scientific principle of clay and glazes. Class will be spent learning these skills and applying these skills to specific projects over the course of the quarter. Creativity is a must as well as using fundamentally sound techniques.

---



### **Beginning Painting**

Course #: Art135  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: None

**Considerations:** Design or AP History is strongly recommended but not required.

**Course Description:** Students will be introduced to a variety of water-based paints: water color, tempera and acrylic. Students will explore the history, vocabulary, and process used in this type of painting. Students will learn how art is used for personal expression and as social statements.

---

### **3-D Mixed Media**

Course #: ART145  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: None

**Considerations:** Design or AP Art History highly recommended. This class will involve written work as well as art work projects. Presentations and class discussions are regular occurrences in this class.

**Course Description:** Students will learn a variety of techniques related to 3-D Art, such as, sculpture in the round, relief, assemblage, mobiles, and installations. Students will learn to create art by reflecting on their own personal experiences and by researching other cultures.

### **Expressive Drawing**

Course #: ART215  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Beg. Drawing and Design or AP Art History

**Considerations:** Students will draw everyday developing ideas, revising compositions and creating projects. Students will participate in oral class critiques.

**Course Description:** Students will continue to build on the skills learned in Beginning Drawing. Emphasis will be placed on composition and mood of each drawing. Human figure studies and experimentation of a variety of media will be stressed throughout the quarter. The works of the artists, past and present, will be studied.

### Construction in Clay

Course #: ART225  
Grade Level: 9-12  
Credit Hours: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Beg. Ceramics and Design or AP Art History

**Considerations:** This class is for the more serious ceramic student. More in-depth work will be done on the wheel as well as handbuilding. Beginning Ceramic and Art Basics are required for taking this class.

**Course Description:** Students will review and expand on techniques learned in Beginning Ceramics. Emphasis in this class will be placed on alternative firings and construction methods. Students will investigate new ways of handbuilding, firing, artist and styles. Skills will continue to be developed on the wheel to create bowls and cylinders. Students will use clay as an expressive medium to communicate ideas, feelings, thoughts, emotions and moods in their work.

### 2-D Mixed Media

Course #: ART235  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Design or AP Art History

**Considerations:** Beginning Painting highly recommended.

**Course Description:** Students will continue to develop the skills learned in Art Basics and experiment new techniques using a wide variety of materials, including oil paint, collage, and Xerox transfer. Students will learn how to communicate their ideas in creative ways by combining paint with other materials to create their art work.

---

### Drawing In Style

Course #: ART315  
Grade Level: 10-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Beginning Drawing and Design or AP Art History

**Considerations:** This course will require drawing on a daily basis and researching a variety of topics to provide inspiration for artwork. This course is recommended to be taken after ART215.

**Course Description:** This course is for students who desire to create in-depth drawings in a variety of media including ink, charcoal, pencil, chalk, and computer. Students will be drawing realistically and applying their imagination to create unique and original works of art. The works of other artist, past and present, will be studied.

### Exploration in Ceramic Technique

Course #: ART325  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Beg. Ceramics and Art Basics or AP Art History

**Considerations:** Construction in Clay is highly recommended. This class is for the seriously dedicated ceramic student looking to develop a portfolio, considering art as a career or highly interested in ceramic arts.

**Course Description:** This class places an emphasis on the wheel and requires the production of wheel throwing portfolio. Students will also select different handbuilding techniques to communicate visual ideas in clay. This class allows for deeper exploration of ceramic techniques, glazing and firings. Students will experiment using new various ways of working with clay.

### Advanced Art

Course #: ART450  
Grade Level: 11-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: 1) Design or AP Art History; 2) Painting, 3-D or Ceramics; 3) Drawing

**Considerations:** 11<sup>th</sup> and 12<sup>th</sup> grade students only

**Course Description:** This class will emphasize preparing a portfolio for scholarship, college admission, and learning about art-related careers. Students will learn attitudes that promote independent idea development and problem solving. They will explore selected ideas and media in depth in their development as beginning artist.

**AP Art History 1 & 2**

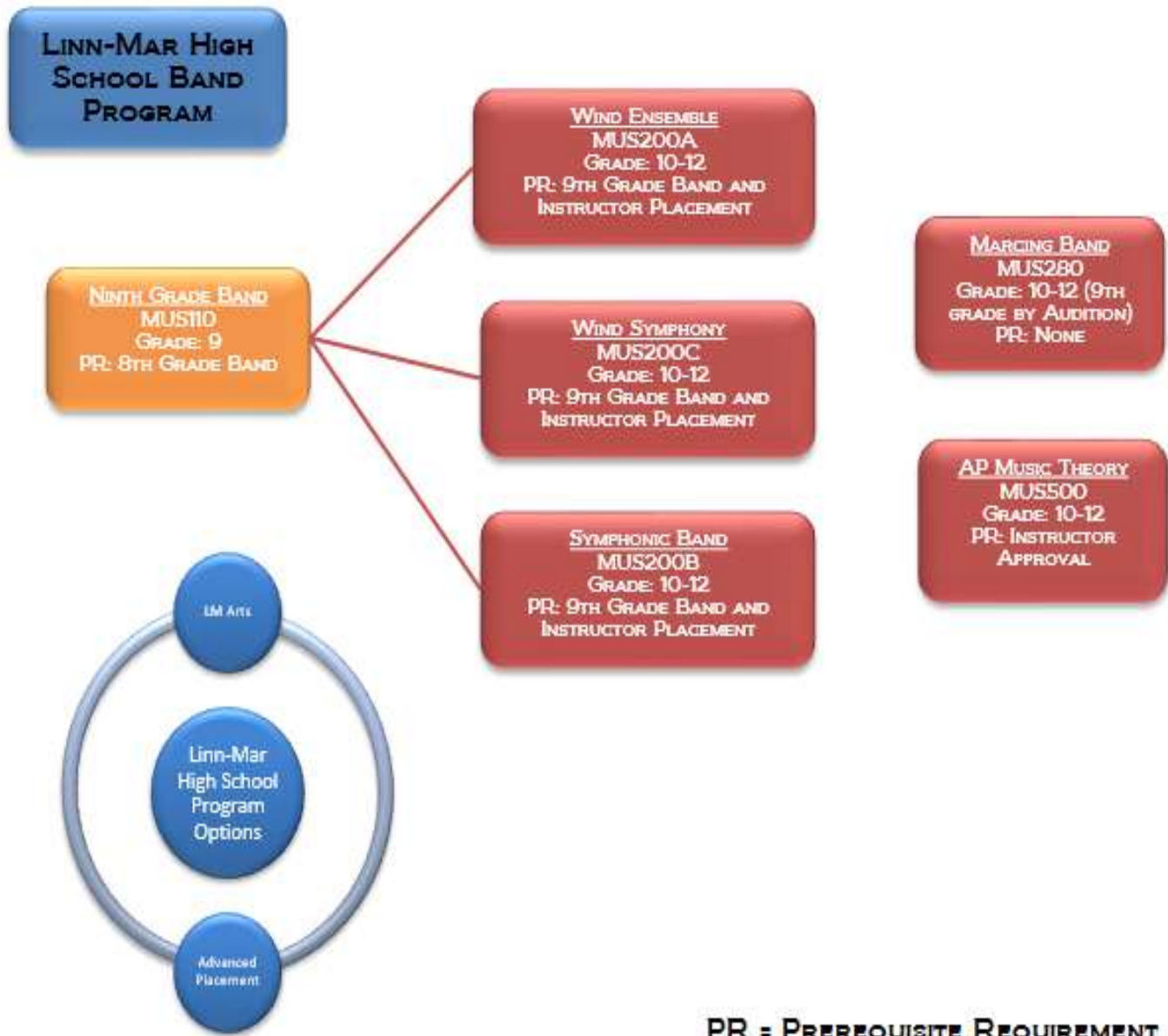
**W**

Course #: ART511 & ART512  
Grade Level: 10-12  
Credits: 15  
Length: 3 Quarters  
Format: Block  
Prerequisite: None  
Design highly  
Recommended

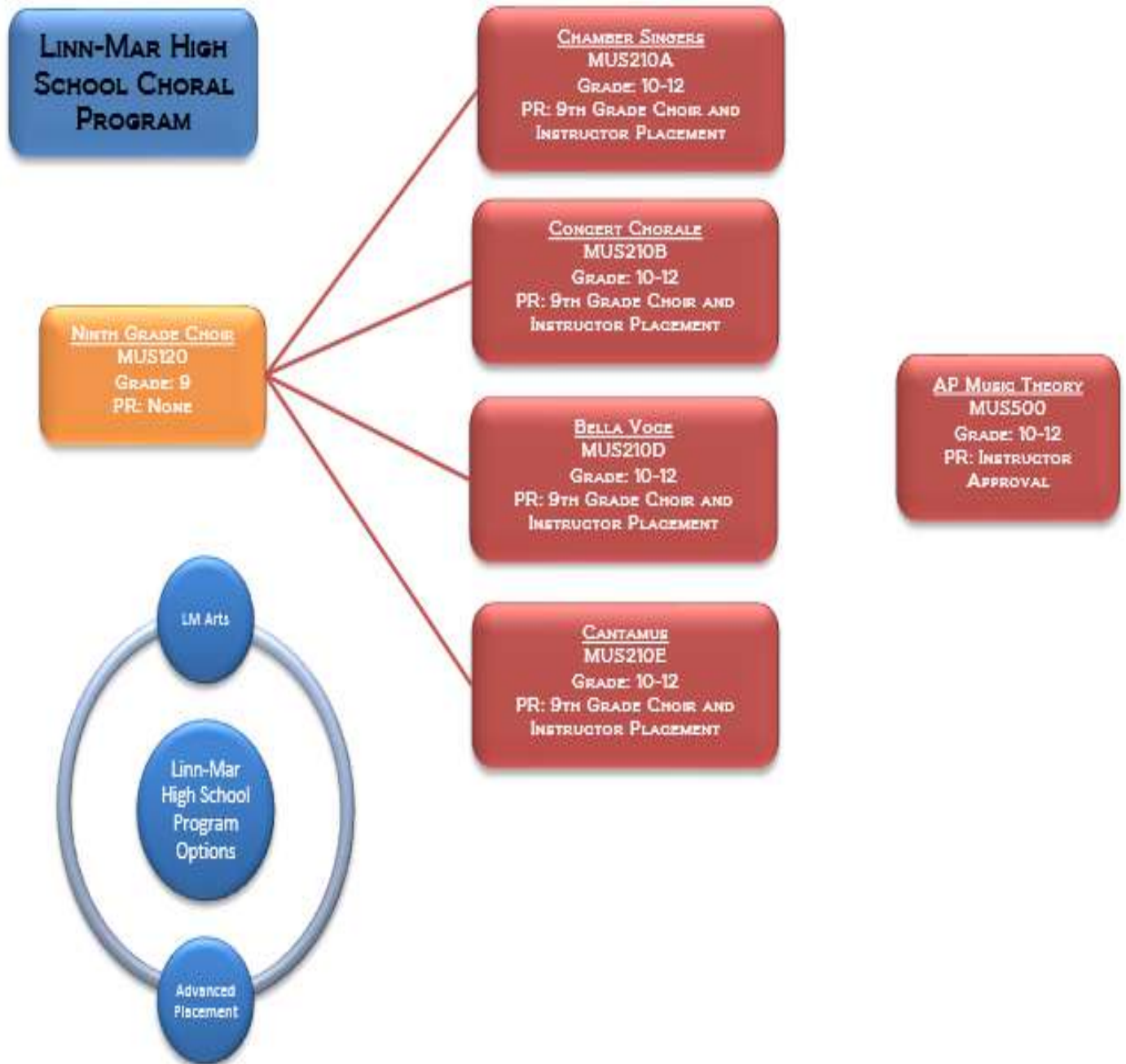
**Considerations:** Students MUST sign up for both sections listed above. Instructor approval for 10<sup>th</sup> graders. Students may take the AP Art History exam in May. Students scoring a 3 or above will earn college course credit at most universities, which will satisfy a general education requirement.

**Course Description:** This course will engage students at the same level as an introductory college art history survey. Students will develop an understanding and knowledge of diverse historical, religious, political, and sociological contexts of architecture, sculpture and painting. The students will examine and critically analyze works from the past and present from all corners of the World. The essential question for this class is, “What does it mean to be Human?”

## MUSIC

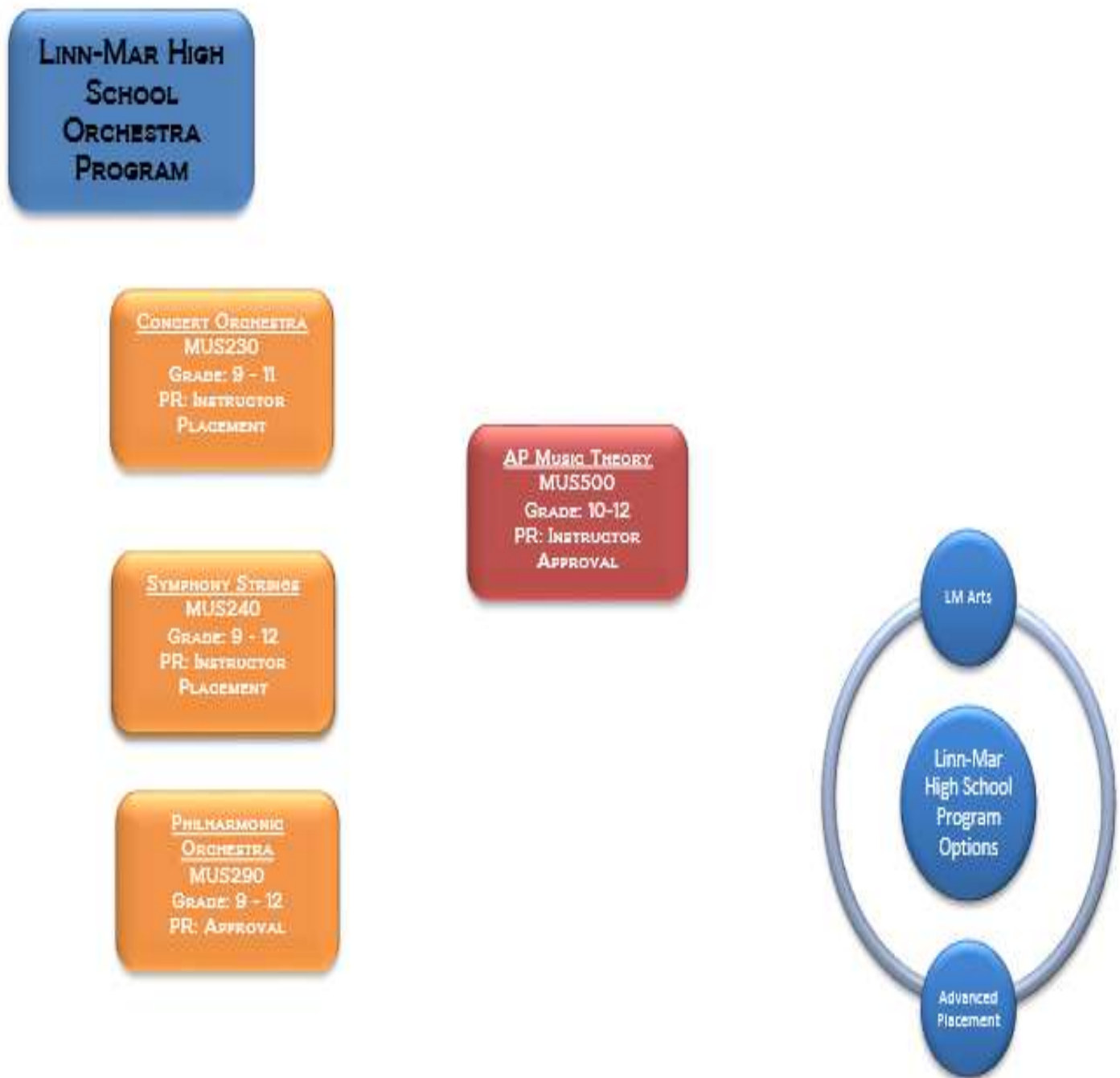


## MUSIC



**PR = PREREQUISITE REQUIREMENT**

# MUSIC



**PR = PREREQUISITE REQUIREMENT**



### **Ninth Grade Band**

Course #: MUS110  
Grade Level: 9  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 8<sup>th</sup> grade band OR  
Instructor approval

**Fees:** \$45.00 rental if using a school wind instrument. \$35.00 rental if using school percussion instrument.

**Considerations:** Some instruments are provided. Most students own their own instrument.

**Course Description:** This course is a concert band which rehearses daily. The group learns and performs concert band music. In addition, members will learn fundamentals of marching. Each member receives a lesson each six day cycle.

---

### **Ninth Grade Choir**

Course #: MUS120  
Grade Level: 9  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: none

**Considerations:** none

**Course Description:** The choir rehearses and performs four concerts locally each school year. Fundamentals of good singing and group dynamics are stressed.

### **Wind Ensemble**

Course #: MUS200A  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 9<sup>th</sup> grade band OR  
Instructor approval

**Fees:** \$45.00 rental if using a school wind instrument. \$35.00 rental if using school percussion instrument.

#### **Course Description:**

Emphasis is on the preparation and performance of college/university level quality music literature. 10-11 grade students receive at least one lesson per six day cycle. Private lessons are recommended.

---

### **Symphonic Band**

Course #: MUS200B  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 9<sup>th</sup> grade band OR  
Instructor approval

**Fees:** \$45.00 rental if using a school wind instrument. \$35.00 rental if using school percussion instrument.

**Course Description:** Emphasis is on the preparation and performance of high school level quality music literature. 10-11 grade students receive at least one lesson per six day cycle. Private lessons are recommended.



### **Wind Symphony**

Course #: MUS200C  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 9<sup>th</sup> grade band OR  
Instructor approval

**Fees:** \$45.00 rental if using a school wind instrument. \$35.00 rental if using school percussion instrument.

#### **Course Description:**

Emphasis is on the preparation and performance of advanced high school and college level music literature. 10-11 grade students receive at least one lesson per six day cycle. Private lessons are recommended.

---

### **Chamber Singers**

Course #: MUS210A  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 9<sup>th</sup> grade choir OR  
Instructor approval

**Considerations:** All registrants will complete a vocal audition and be placed in the appropriate ensemble by the instructors.

**Course Description:** Emphasis will be on the preparation of choral works for smaller groups, i.e. madrigals, early music, and contemporary music. Students will receive a weekly lesson in each nine week period. Private lessons are recommended.

### **Concert Chorale**

Course #: MUS210B  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 9<sup>th</sup> grade choir OR  
Instructor approval

**Considerations:** All registrants will complete a vocal audition and be placed in the appropriate ensemble by the instructors.

**Course Description:** Emphasis will be on the preparation of choral works for larger groups, i.e. music for double choir, major choral works with orchestra, music for operatic choruses, as well as standard acapella literature. Students will receive a weekly lesson in each nine week period. Private lessons are recommended.

---

### **Bella Voice**

Course #: MUS210D  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 9<sup>th</sup> grade choir OR  
Instructor approval

**Considerations:** All registrants will complete a vocal audition and be placed in the appropriate ensemble by the instructors.

**Course Description:** Emphasis will be on preparation of advanced quality choral music by established and emerging composers for this genre. Soloist voice as well as strong choral singers will be the foundation of the group. Students will receive a weekly lesson in each nine week period. Private lessons are recommended.

### **Cantemus**

Course #: MUS210E  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: 9<sup>th</sup> grade choir OR  
Instructor approval

**Considerations:** All registrants will complete a vocal audition and be placed in the appropriate ensemble by the instructors.

**Course Description:** Emphasis will be on preparation of advanced quality choral music by established and emerging composers for this genre. Soloist voice as well as strong choral singers will be the foundation of the group. Students will receive a weekly lesson in each nine week period. Private lessons are recommended.

### **Concert Orchestra**

Course #: MUS230  
Grade Level: 9-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: approval

**Fees:** \$45.00 rental instrument fee.

**Considerations:** Entry-level ensemble no audition required. Cellos and Basses are provided for daily rehearsal only. Most students own their own instrument.

**Course Description:** Emphasis is on the preparation and performance of high school level quality music literature for the string instruments. Lessons are offered during a six day cycle and scheduled based on schedule availability. Private lessons are recommended.

### **Symphony Strings**

Course #: MUS240  
Grade Level: 10-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: approval

**Fees:** \$45.00 rental instrument fee.

**Considerations:** All students must audition for the director to be enrolled in this ensemble. Specific audition materials are required for the audition and can be acquired from the director.

**Course Description:** Emphasis is on the preparation and performance of college/university/professional level quality music literature for string instruments. Students also participate along with the wind, brass, and percussion to form the Full-Symphony Orchestra. Lessons are offered during a six day cycle and are scheduled based on schedule availability. Private lessons are recommended.

### **Philharmonic Orchestra**

Course #: MUS290  
Grade Level: 9-12  
Credits: 10  
Length: 2 Semesters  
Format: Skinny  
Prerequisite: approval

**Fees:** \$45.00 rental instrument fee.

**Considerations:** All students must audition for the director to be enrolled in this ensemble. Specific audition materials are required for the audition and can be acquired from the director.

**Course Description:** Emphasis is on the preparation and performance of high school level quality music with some literature for string instruments. Lessons are offered during a six-day cycle and scheduled based on schedule availability. Private lessons are recommended.

## **Marching Band**

Course #: MUS280  
 Grade Level: 10-12  
 (9<sup>th</sup> by audition)  
 Credits: 2.5  
 Length: 1 Quarter  
 Format: Early-Bird(7:15-8:00)  
 Prerequisite: none

**Course Description:** Meets daily during 1<sup>st</sup> quarter and is recommended for all grade 10-12 band members. The color guard is open to non-band members with dance experience, or students who have the desire to perform. Auditions for the color guard and incoming 9<sup>th</sup> graders will be during the 2<sup>nd</sup> semester of the previous school year. The Marching Lions perform at the Swamp Fox and Linn-Mar Homecoming parades, all home football games, 4-5 contests, the Indoor Marching Band Classic, and the Band Extravaganza.

## **Advanced Placement Music Theory**

Course #: MUS500 **W**  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: Music  
 Fundamentals or  
 Instructor approval

**Considerations:** Students may take the Music Theory AP exam in May. This course is strongly recommended for students considering studying music at the college/university level.

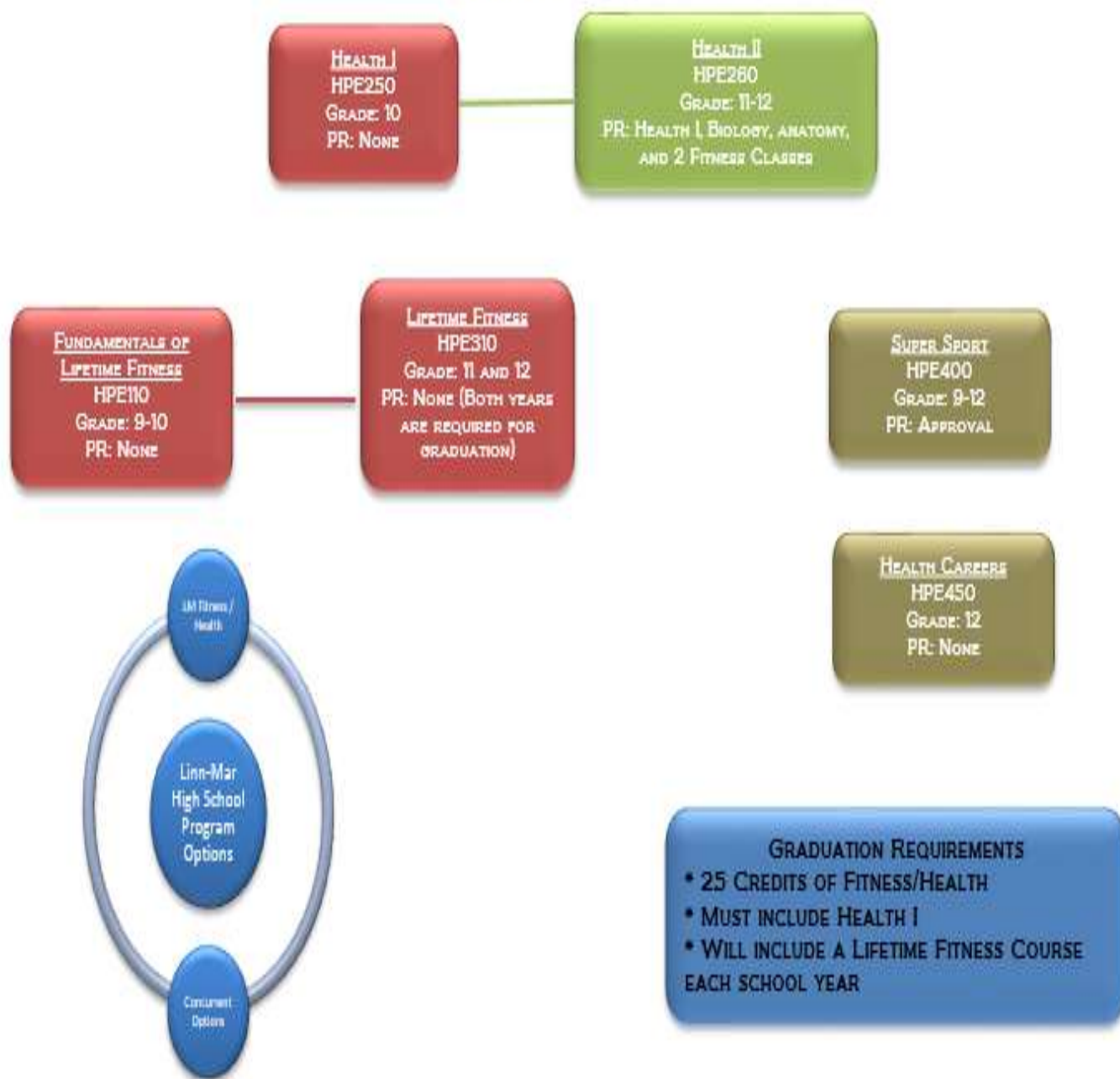
**Course Description:** This college-level class is progressive with each unit building on the previous. Major areas of study include the basic materials of music, time classification, notation, intervals, scales, time signatures, structure of tonality, triads, phrase structure and harmonization, seventh chords, musical style, exploration of arranging, composing, sight-singing, melodic and harmonic dictation.

## LINN-MAR FITNESS/HEALTH

### **Physical Education Waiver**

Physical education is required for every student in Iowa (Department of Education regulations, chapter 12). The focus of Fitness at Linn-Mar High School is activity in the core component areas of cardiovascular fitness, strength training, endurance fitness, flexibility, competitive fitness activities and CPR certification/water safety. All students are required to work toward a goal in each component area. Lifetime Fitness (in grades 11 and 12) will use credit/no credit grading on

## FITNESS/HEALTH



PR = PREREQUISITE REQUIREMENTS

## **Health I**

Course #: HPE250  
 Grade Level: 10  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** This course is **required** for graduation.

**Course Description:** This course is designed to lead students to healthy lifestyle choices through use of decision making processes. Students are encouraged to assess their attitudes and behavior patterns and to understand the impact their lifestyle choices have on their communities and on their own well-being. Topics covered include: fitness and wellness, CPR/choking/AED for infant, child and adult; nutrition; eating disorders; sexual education; substance abuse; STDs; HIV/AIDS; cancer; infectious and non-infectious diseases.

## **Health II**

Course #: HPE260  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Health I  
 AND Biology  
 AND Anatomy AND  
 2 P.E. courses

**Considerations:** none

**Course Description:** This is an in-depth course for students interested in the health related field. This broad spectrum includes but is not limited to: nutrition, sports medicine, sports management, exercise science, sports psychology, and mental/emotional health.

## **Super Sport**

Course #: ALT400  
 Grade Level: 9-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Approval

**Considerations:** Specific skills taught and assessed are determined by a student's individualized education plan. Must have administrative approval to enroll.

**Course Description:** This adaptive physical education course focuses on individual and team activities to promote an active and healthy lifestyle. This course will adapt the activities to meet the physical needs of all students.

### **Fundamentals of Lifetime Fitness**

Course #: HPE110  
Grade Level: 9-10  
Credits: 5 (Each Year)  
Length: 1 Quarter  
Format: Block  
Prerequisite: none  
Grading: Credit/No Credit

**Considerations:** This course is **required** for both freshmen and sophomores. This course is **required** for graduation.

**Course Description:** This course is designed for freshmen and sophomores. The class emphasis includes; enhancing personal fitness through daily fitness workouts and games designed to improve aerobic capacity, core endurance, upper body muscular strength and overall flexibility. The students will demonstrate the ability to use goal-setting and decision-making skills to aid in enhancing their personal fitness level. The students will achieve a level of fitness while demonstrating knowledge of fitness concepts and principles. Students will complete a district-approved fitness assessment for completion of the class.

### **Lifetime Fitness**

Course #: HPE310  
Grade Level: 11-12  
Credits: 2.5 (Each Year)  
Length: 1 Quarter  
Format: Skinny  
Prerequisite: Fundamentals of Lifetime Fitness or Permission  
Grading: Credit/No credit

**Considerations:** This course is **required** for both Junior and Senior years.

**Course Description:** This course is designed for juniors and seniors. The class emphasis includes; enhancing personal fitness through daily fitness workouts and games designed to improve aerobic capacity, core endurance, upper body muscular strength and overall flexibility. The students will demonstrate the ability to use goal-setting and decision-making skills to aid in enhancing their personal fitness levels. Students will complete CPR and Water Safety Certification/Recertification, as well as a district-approved fitness assessment for completion of the class.



## **Health Careers**

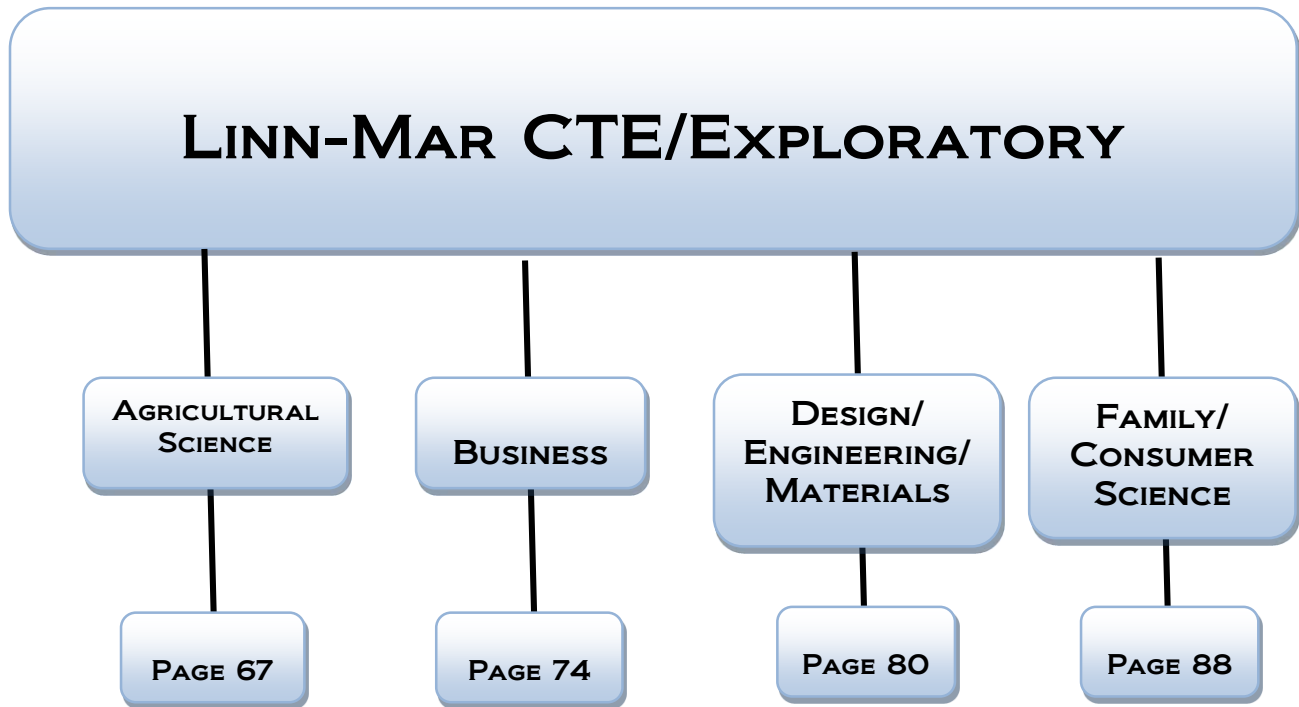


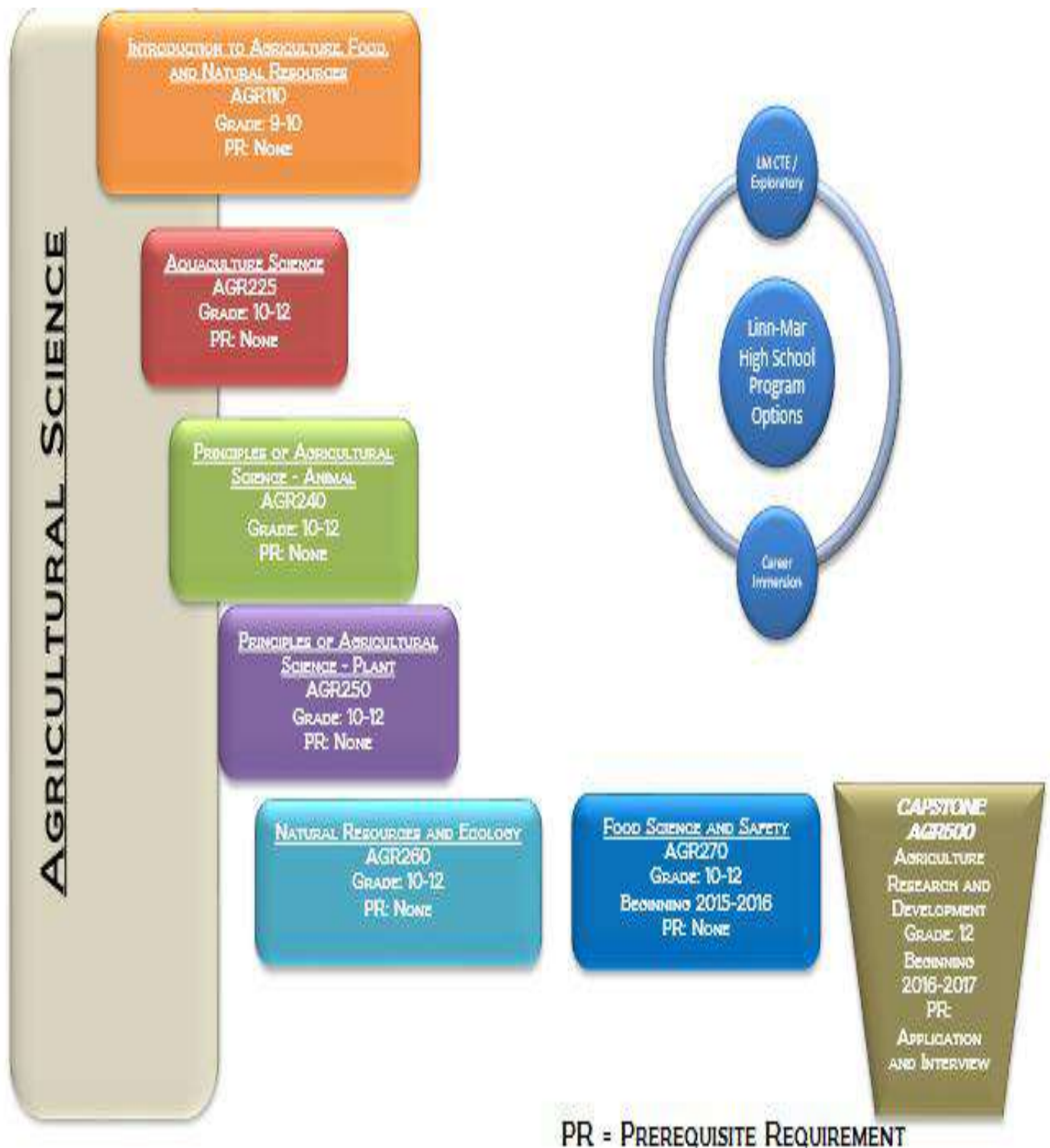
Course #: HPE450  
Grade Level: 12  
Credits: 5  
Length: 2 Semesters  
Format: Block  
Prerequisite: none

**Considerations:** This course is a part of the **Career Edge Academy** and is taught on-site by Kirkwood staff. This course fulfills the senior physical education requirement.

**Fee:** Purchase of safety and consumable materials used in the course may be required.

**Course Description:** The Health Sciences Academy includes hands-on patient care and meets for 85 minutes per day for the entire school year. Students will learn the basic expectations of a health care professional through a combination of coursework, job shadows and assisting with patient care. When completed, students will be eligible to take the Licensed Practical Nurse certification test.





**Introduction to Agriculture,  
Food, and Natural Resources**

Course #: AGR110  
Grade Level: 9-10  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Prerequisite: none



**Considerations:** The CASE™ Introduction to Agriculture, Food and Natural Resources course is intended to serve as the introductory course within the CASE™ Program of Study. This course is structured to enable all students to have a variety of experiences that will provide an overview of all fields of agricultural science and natural resources so that students may continue through a sequence of courses through high school. The knowledge and skills students develop will be used in future courses within the CASE™ program. In addition, students will understand specific connections between their lessons and SAE (supervised agricultural experience) and FFA components that are important for the development of an informed agricultural science education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. **Meets L-M science elective credit.**

**Course Description:**

Students participating in the CASE™ Introduction to Agriculture, Food and Natural Resources course will experience exciting “hands-on” activities, projects, and problems. Student experiences will involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and

natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. For example, students will work in groups to determine the efficiency and environmental impacts of fuel sources in a practical learning exercise. Students will be introduced to the aquaculture lab and greenhouse.

## Principles of Agricultural Science- Animal



Course #: AGR240  
Grade Level: 10-12  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Prerequisite: none

**Considerations:** Students participating in the *CASE™ Principles of Agricultural Science – Animal* course will explore “hands-on” projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. In addition, students will understand specific connections between animal science lessons and SAE (supervised agricultural experience) and FFA components that are important for the development of an informed agricultural science education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. The knowledge and skills students develop will be used in future courses within the CASE curriculum.

**Meets L-M science elective credit.**

**Course Description:** Students participating in the *CASE™ Principles of Agricultural Science – Animal* course will have experiences in various animal science concepts with exciting “hands-on” activities, projects, and problems. Student experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will

acquire the skills in meeting nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets.

### **Aquaculture Science**

Course #: AGR225  
Grade Level: 10-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** Students participating in the *Aquaculture Science* course will explore “hands-on” projects and activities to learn the characteristics of aquaculturists and work on major projects and problems similar to those that animal science specialist such as aquaculture producers, zoologists, veterinarians, fisheries scientists, marine scientists, pet store owners and managers, and industry personnel, face in their respective careers. In addition, students will understand specific connections between aquaculture science lessons and SAE (supervised agricultural experience) and FFA components that are important for the development of an informed agricultural science education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. The knowledge students will develop will be used in future courses within the Agricultural Science Education Department. **Meets L-M science elective credit.**

**Course Description:** Students participating in the *Aquaculture Science* course will have experiences in various aquaculture science concepts with exciting “hands-on” activities, projects, and problems. Student experiences will involve the study of the aquaculture industry, taxonomy, habitat, and genetics, aquatic biology, nutrients and feeding, disease and pest management, water quality and management, and ornamental aquaculture. For example, students will

acquire the skills in meeting aquatic biology needs of finfish while working in the department’s aquaculture laboratory.

## Principles of Agricultural Science-Plant

Course #: AGR250  
Grade Level: 10-12  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Prerequisite: none



**Considerations:** Students participating in the *CASE™ Principles of Agricultural Science – Plant* course will explore “hands-on” projects and activities to learn the characteristics of plant science and work on projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers and producers, and plant research specialist’s face in their respective careers. In addition, students will understand specific connections between plant science lessons and SAE (supervised agricultural experience) and FFA components that are important for the development of an informed agricultural science education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. The knowledge and skills students develop will be used in future courses within the CASE curriculum.

**Meets L-M science elective credit.**

**Course Description:** Students participating in the *CASE™ Principles of Agricultural Science –Plant* course will have experiences in various plant science concepts with exciting “hands-on” activities, projects, and problems. Student experiences will involve the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. Students will

learn to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students will discover the value of plant production perceptions and preferences of individuals within local, regional, and world markets. Students will be involved in the operation and management of the greenhouse.

## Natural Resources and Ecology

Course #: AGR260  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none



**Considerations:** Students participating in the *CASE™ Natural Resources and Ecology* course will explore “hands-on” projects and activities to explore agriculture in an environmentally conscience society and work on projects and problems similar to those that natural resources specialists, such as conservation biologists, ecologists, environmental scientists, fisheries scientists, foresters, hydrologists, range managers, renewable energy specialists, soil scientists, wildlife biologists, and research specialists face in their respective careers. In addition, students will understand specific connections between plant science lessons and SAE (supervised agricultural experience) and FFA components that are important for the development of an informed agricultural science education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. The knowledge and skills students develop will be used in future courses within the CASE curriculum.

**Meets L-M science elective credit.**

**Course Description:** Students participating in the course *CASE™ Natural Resources and Ecology* will have experiences in various natural resources conservation and ecology concepts with exciting “hands-on” activities, projects, and problems. Student experiences will involve the study of biomes and ecosystems, soil, water, air, flora, fauna,

agriculture forestry and mining and renewable energy initiatives. Students will learn to apply scientific knowledge and skills to determine the difference between conservation and preservation, human impact on the environment, environmental policies needed to meet the demands of future natural resource needs, and social concerns. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world ecosystems. Students will be study the ecosystem of the Linn-Mar High School Campus and surrounding area.



## Food Science and Safety



Course #: AGR270  
 Grade Level: 10-12  
 Credit Hours: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: None

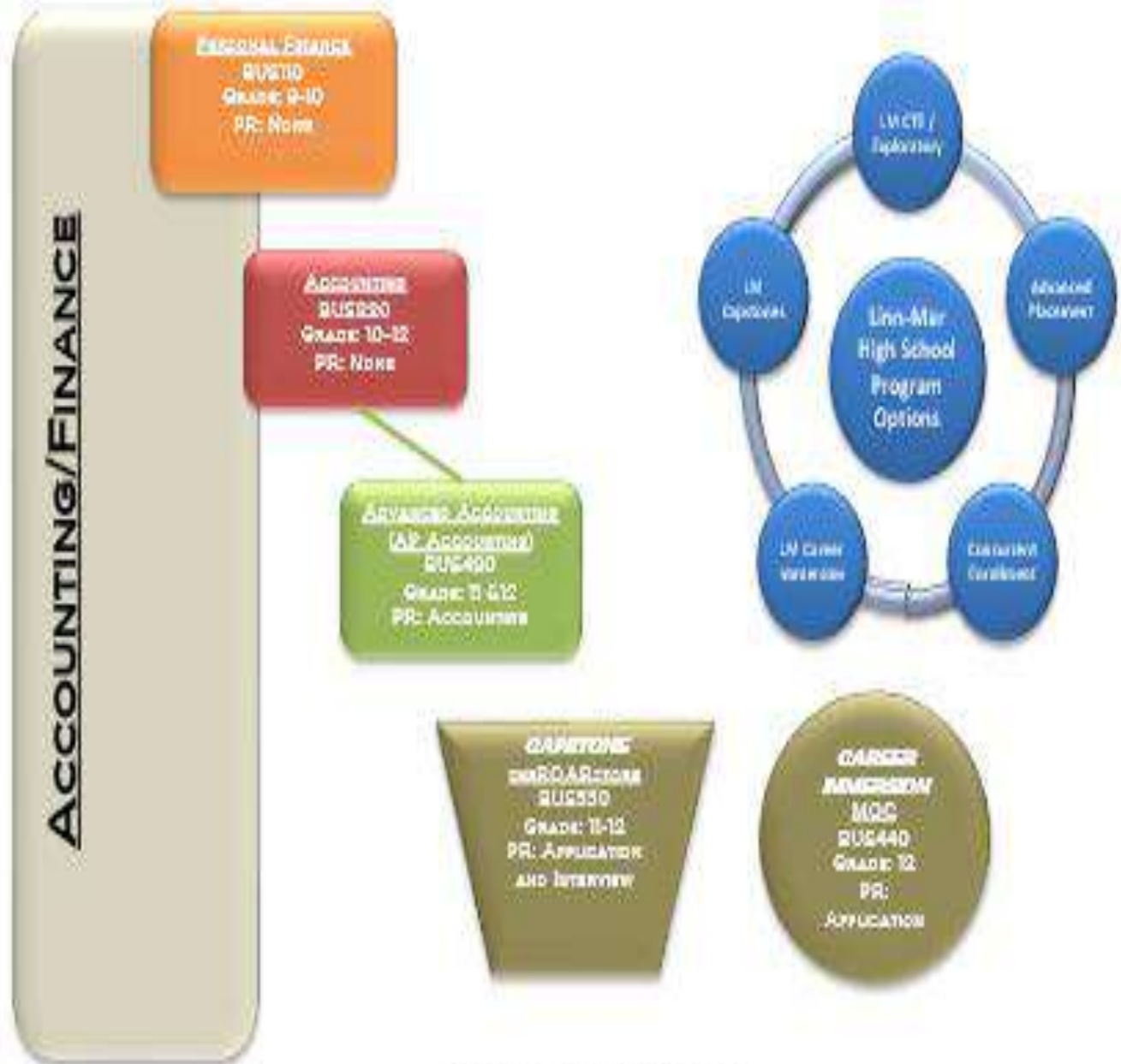
**Considerations:** Students participating in the *CASE™ Food Science and Safety* course will explore “hands-on” projects and activities to learn explore the science behind food through chemistry and microbiology, food safety, and processing and work on projects similar to food science specialists, such as food process engineers, food safety specialists, nutritionist, dietitians, viticulturists, and research specialists’ face is their respective careers. In addition, students will understand specific connections between plant science lessons and SAE (supervised agricultural experience) and FFA components that are important for the development of an informed agricultural science education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. The knowledge and skills students develop will be used in future courses within the CASE curriculum.

**Meets L-M science elective credit.**

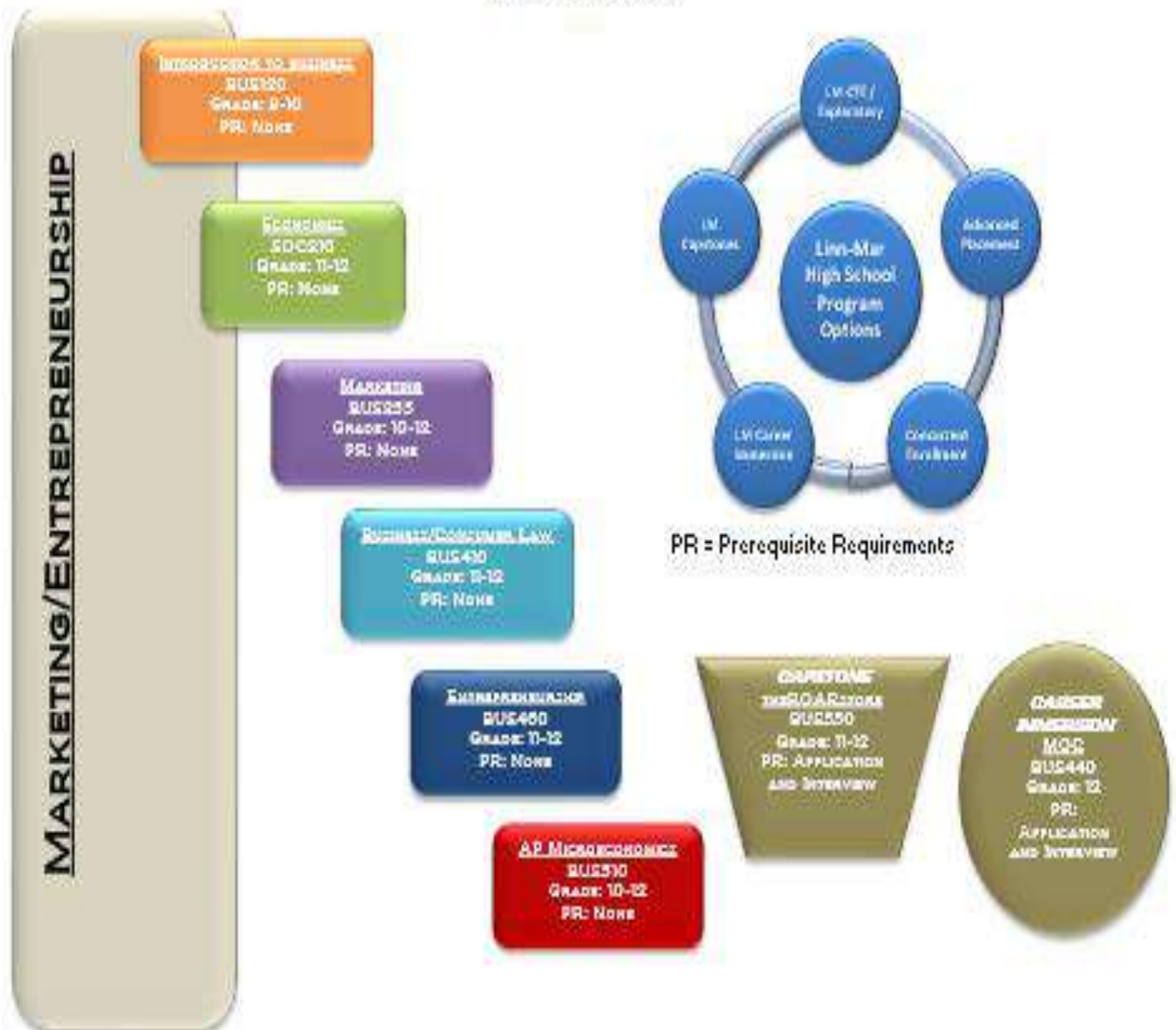
**Course Description:** Students participating in the course *CASE™ Food Science and Safety* will have experiences in various food science and safety concepts with exciting “hands-on” activities, projects, and problems. Student experiences will involve the study of food chemistry and microbiology, nutrition, processing, food quality and safety, and product development. Students will learn

to apply scientific knowledge and skills to grow, develop products, process, and distribute animal and plant foods to meet the demands of a growing global population. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world cultures. Students will be involved in a culminating project of food product development.

## BUSINESS



## BUSINESS



### **Personal Finance**

Course #: BUS110  
Grade Level: 9-10  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** This course meets all financial literary standards of the Iowa Core.

**Course Description:** This course exposes students to areas of personal finance that they will likely encounter as teenagers. The curriculum covers, among other topics: consumer awareness, money management, opening bank accounts, managing a checkbook, managing credit, applying for a job and basic information about saving and investing. Information will be presented through projects, activities, guest speakers and multimedia presentations.

---

### **Accounting**

Course #: BUS330  
Grade Level: 10-12  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Prerequisite: none

**Considerations:** none

**Course Description:** Students will learn the fundamentals of double-entry accounting for personal and small business use. They will also learn about payroll, income tax and banking activities. Computers and various business forms will be used to help students develop a beginning understanding of the business world.

### **Marketing**

Course #: BUS355  
Grade Level: 10-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** none

**Course Description:** Marketing is an all-encompassing look at today's business model and focuses on areas of study including, but not limited to: market planning, selling, promotion, distribution, pricing, marketing research and brand development.

---

### **Business/Consumer Law**

Course #: BUS410  
Grade Level: 11-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** none

**Course Description:** This course will develop a general understanding of legal concepts for personal and business use. As students become familiar with these concepts, they will better understand the importance of the law in general, become familiar with relevant specific laws, and explore the applications of law both in business and in personal transactions. This will be achieved through field trips and/or guest speakers, and analyzing real cases.

---

### Advanced Accounting

Course #: BUS430  
 Grade Level: 11/12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Accounting

**Considerations:** see prerequisite. HP 10b11 Financial calculator is required.

**Course Description:** This course uses an integrated approach to teach accounting, by learning how businesses plan for and evaluate their operating, financing and investing decisions and then how accounting systems gather and provide data to decision makers. The course covers all the objectives of a traditional college level financial accounting course, plus those from a managerial accounting course. Topics include: accounting information systems, time value of money, and accounting for merchandising firms, sales and receivables, fixed assets, debt, equity, statement of cash flows, financial ratios, cost-volume profit analysis and variance analysis.

### MOC Internship

#### *Career Immersion*

Course #: BUS440  
 Grade Level: 12  
 Credits: 20  
 Length: 2 Semesters  
 Format: Block  
 Prerequisite: see considerations

**Considerations:** Must also enroll in MOC Related; admitted when hired by a MOC teacher-approved employer; receive pay in addition to credit; must commit to one year, must complete MOC application.

**Course Description:** MOC is a cooperative training program with area business and industry. Student interns work a minimum of 15 hours per week, learning specific career related skills and attitudes. The type of internship is based on the student's career interest and skills.

### MOC Related

#### *Career Immersion*

Course #: BUS450  
 Grade Level: 12  
 Credits: 10  
 Length: 2 Semesters  
 Format: Skinny  
 Prerequisite: see considerations

**Considerations:** Must also enroll in MOC Internship; must commit to one year, must complete MOC application.

**Course Description:** Student will learn job seeking and keeping skills (teamwork, problem solving, job application, career exploration, workplace diversity, time management, listening and oral communication).

### Entrepreneurship

Course #: BUS460  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** It is recommended that students enroll in one or more of the following courses prior to enrolling in Entrepreneurship; Accounting, Marketing, Business/Consumer Law, Personal Finance.

**Course Description:** This course is divided into 8 core units designed to assist students in developing a customized business plan for a business of their choice. Students will "pitch" their idea to business professionals. Nearly all course content will be available in a webpage format. Students will set up their own account and be able to view class activities, lecture notes, PowerPoint presentations, external links and a business plan template to help in creating their business. Curriculum is tied into the National Entrepreneurship Standards, the Iowa core Curriculum, and 21<sup>st</sup> Century Skills.

## Introduction to Business

Course #: BUS120  
 Grade Level: 9-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** none

**Course Description:** This course will give students an overview of the study of business. It will allow students to see and briefly experience all aspects, including Business Ownership and Entrepreneurship, Management and Organization, Human Resources, Marketing, Finance and Accounting.

## Economics



Course #: SOC310  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** Students should be comfortable working with charts and tables.

**Course Description:** This course will focus on economic concepts (scarcity, choice, incentives); supply, demand, and markets; microeconomics (production, productivity, competitive markets); and macroeconomics (the economy in the aggregate, inflation, unemployment).

## AP Microeconomics

W

Course #: BUS510  
 Grade Level: 11-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Economics is recommended

**Considerations:** Students should be comfortable working with charts, tables, numbers, and equations. Students may take the AP Microeconomics exam in May.

**Course Description:** This course will focus on economic concepts (scarcity, choice, incentives); supply, demand, and markets; product markets (production, productivity, competitive markets); resource markets (demand for resources, wage rates); microeconomics of government; microeconomic issues and policies.



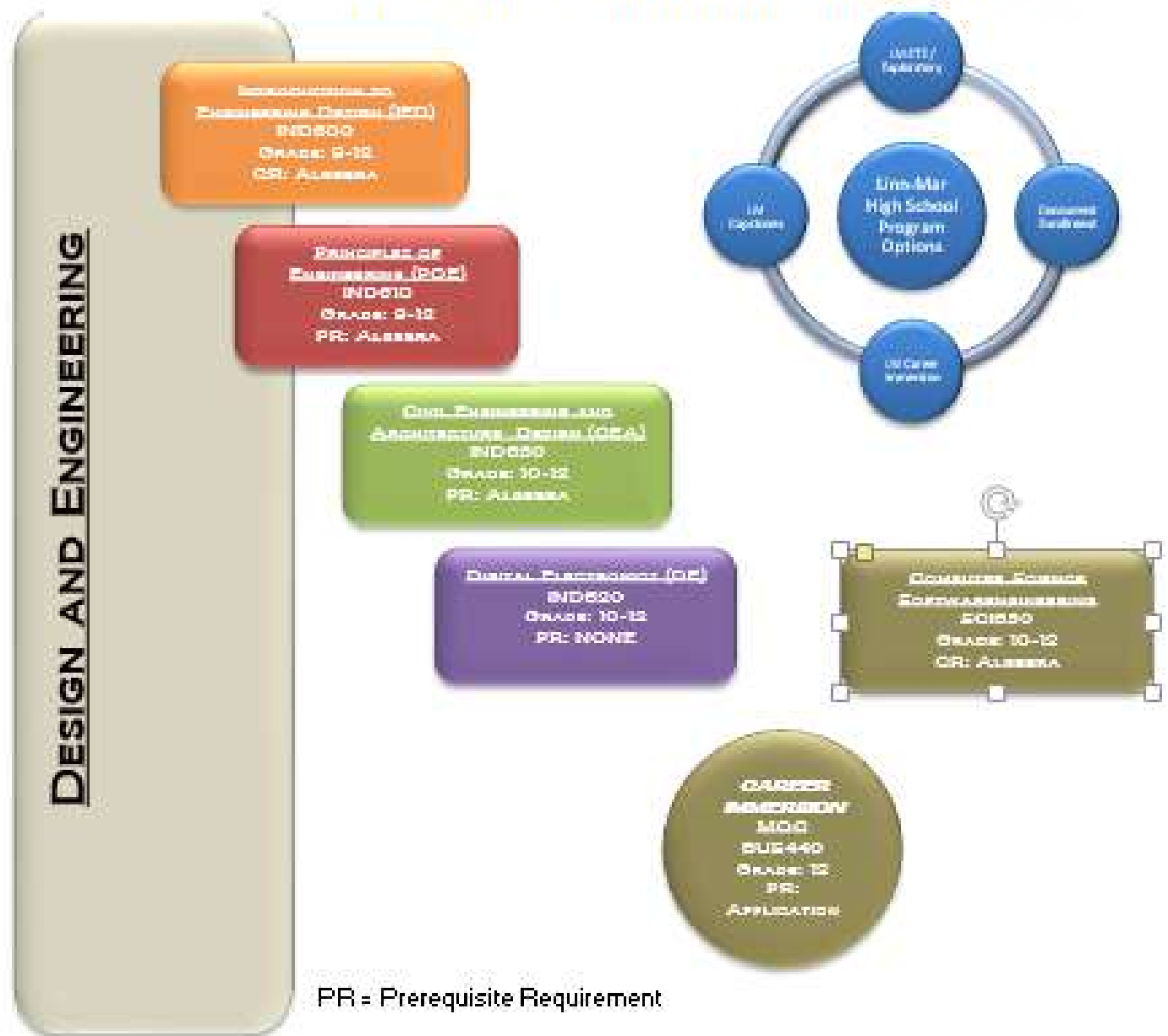
**theROARstore- A School-based Enterprise**

Course #: BUS550  
Grade Level: 11-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Any of 2 or more  
Business courses

**Considerations:** This class has a work component built-in and may require students to work outside of normal instructional time.

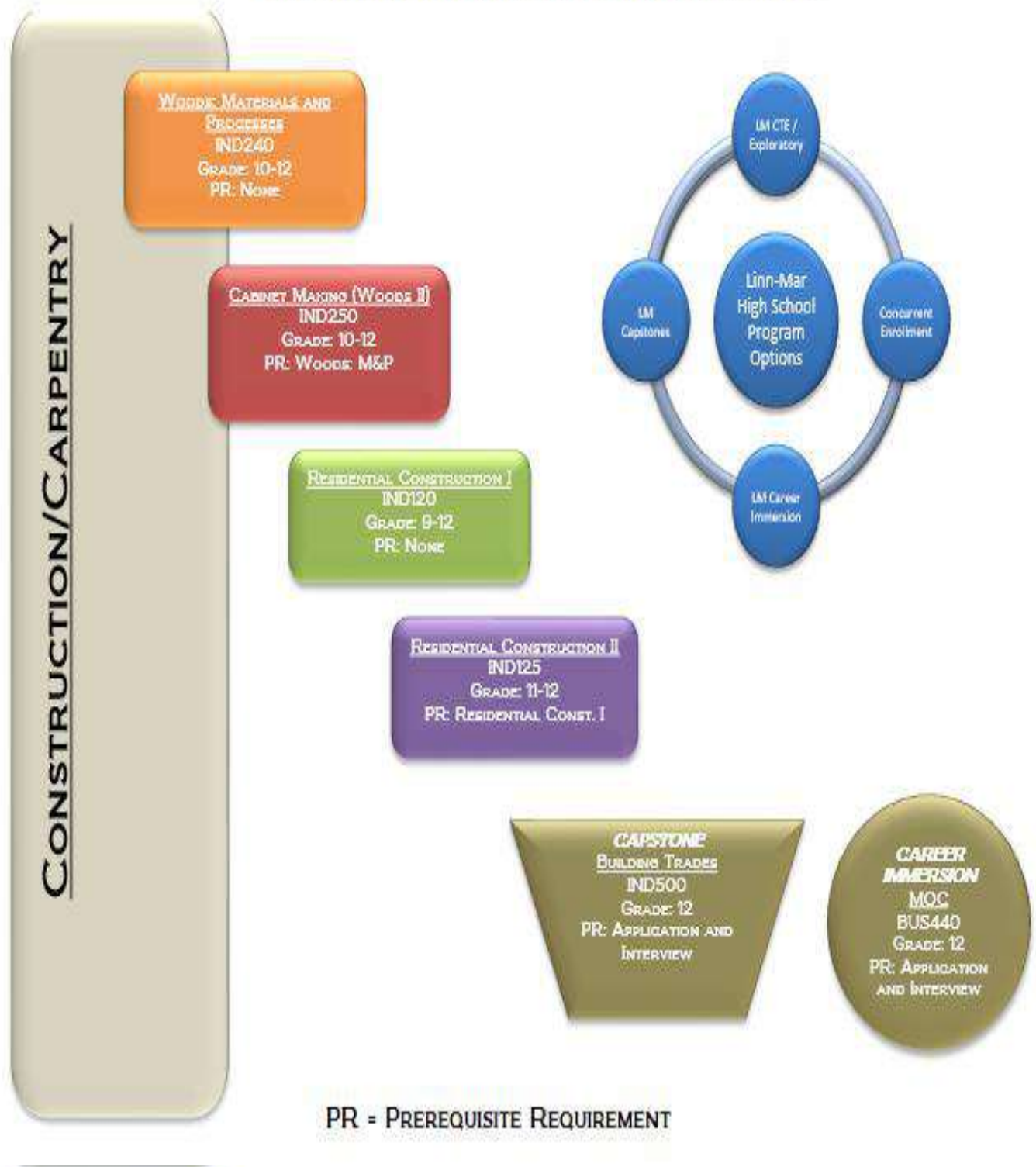
**Course Description:** Students will be involved in the continued development and operations of the ROARstore, a student-run business, specializing in selling branded Linn-Mar apparel and merchandise. Students should expect to spend their time focused on providing a PRODUCT, PROMOTING it to a group of PEOPLE, at a specific PRICE, and making it available at a specific PLACE. Specific activities may include, but are not limited to: market planning, marketing research, product/service management, promotion, pricing, merchandising, selling, distribution, and financial analysis. Skills needed to be successful include; creative and logical thinking, willingness to work as a team, effective communication, ethical behavior and professional demeanor when working with customers and investors.

# DESIGN/ENGINEERING/MATERIALS





# DESIGN/ENGINEERING/MATERIALS



### Mechanical Drawing

Course #: IND110  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** None

**Course Description:** This course is designed to provide practical application of drafting knowledge practices through sketching and computer aided drafting (CAD). Students learn to use different types of drawing to describe and communicate ideas.

---

### Residential Construction I

Course #: IND120  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** none

**Course Description:** This is an introductory course for students who wish to explore the construction industry and related careers. Major activities covered through construction of a wall section include: concrete framing, roofing, plumbing and electrical.

### Residential Construction II

Course #: IND125  
Grade Level: 11-12 or approval  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Residential Const I

**Considerations:** None

**Course Description:** This is an advance course that provides students an opportunity to learn about materials, processes and careers found in Residential Construction. Activities include building and expanding on basics covered in Residential Construction I.

---

### Production Graphics/Graphic Communications

Course #: IND140  
Grade Level: 9-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** none

**Course Description:** This course is designed to teach students introductory skills used in graphic productions. Emphasis will be placed on the developments of skills related to the design of layouts, digital photography, screen printing and video production.

## **Computer Integrated Manufacturing (CIM)**



Course #: IND640  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Co-requisite: Algebra

**Considerations:** This course articulates credit with Kirkwood Community College.

**Course Description:** How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How do assembly lines work? How has automation changed the face of manufacturing? While students discover the answers to these questions, they are learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems.

## **Civil Engineering and Architectural Design (CEA)**



Course #: IND630  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Algebra

**Considerations:** This course articulates credit with Kirkwood Community College.

**Course Description:** Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. Students will use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects.

### **Woods: Materials and Processes**

(Formally Introduction to Finish Carpentry)

Course #: IND240  
Grade Level: 10-12  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Prerequisite: none

**Considerations:** Fee- same as Cabinet Making

**Course Description:** This course is designed to teach skills necessary for basic woodworking applications. The course stresses student safety through a series of demonstrations and safety tests. Students will plan and construct introductory projects to gain skills necessary to complete a final project of their choosing. A lathe project is also required.

### **Cabinet Making**

Course #: IND250  
Grade Level: 10-12  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Prerequisite: Woods: Materials and Processes

**Considerations:** Grade of 80% or higher for second quarter of Woods: Materials and Processes is required.

**Fees:** Students will be allotted materials for required projects. Additional fees may be charged if a student exceeds the allotted amount

**Course Description:** This course is designed to expand basic skills learned in Woods: Materials and Processes. A review of machine safety will precede project work. Students will design and draw plans for their project, or find an acceptable set of plans, calculate costs and devise a plan of procedure for completion of their project prior to starting work. Project work will be required to include at least one dovetailed drawer, rail, stile and panel piece.

## **Metals: Materials and Processes**

(Formally Metal Fabrications)

Course #: IND310  
 Grade Level: 11-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** Fees the same as Cabinet Making

**Course Description:** This course will provide students the opportunity to explore the field of metal and develop skills in working with metal fabrication. The areas covered are welding, sheet metal, machining, and foundry.

## **Building Trades**

### ***Capstone Course***

Course #: IND500  
 Grade Level: 12  
 Credits: 20  
 Length: 2 Semesters  
 Format: Block  
 Prerequisite: none  
 Fees: purchase of safety equipment such as glasses or ear protection

**Considerations:** Limit of seven Linn-Mar students. Students are selected by recommendation of Linn-Mar staff. Student must provide transportation to off-campus site.

**Course Description:** Linn-Mar and Marion High School students work two hours a day to build a full-sized house. The course includes all skills and tasks needed to complete this activity.

## **Intro to Engineering Design**



Course #: IND600  
 Grade Level: 9-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Co-requisite: Have taken or currently taking Algebra

**Considerations:** See prerequisites. Project Lead the Way (PLTW) engineering courses do not replace other science classes. Students taking PLTW courses should also take 3 or more semesters of traditional science courses. Students will earn credit for this course from Kirkwood Community College upon successful completion.

**Course Description:** Students in this hands-on, project-based course will focus on creative design processes, communication and teamwork skills. 3D CAD software will be used to produce, analyze, and evaluate product modes. Sketching, geometric relationships, 3D modeling, production and marketing will be studied through the development of designs.

## Digital Electronics (DE)



Course #: IND620  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: none

**Considerations:** see prerequisites.  
 This is the third course recommended in the **Project Lead the Way** engineering sequence. Students may be able to earn community college credit with successful completion of this course.

**Course Description:** This course is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation.

## Principles of Engineering



Course #: IND610  
 Grade Level: 10-12  
 Credits: 10  
 Length: 2 Quarters  
 Format: Block  
 Prerequisite: Algebra

**Considerations:** See prerequisites.  
 This course meets the physical science graduation requirement. Students will earn credit for this course from Kirkwood Community College upon successful completion.

**Course Description:** Students will apply science and math to solve practical problems. Topics covered include machines, kinematics, thermodynamics, control systems and materials. This course will give students an idea of what some college engineering coursework is like.

## **Computer Science and Software Engineering (CSE)**



Course#: SCI650  
Grade Level: 10-12  
Credits: 10  
Length: 2 Quarters  
Format: Block  
Corequisite: Algebra

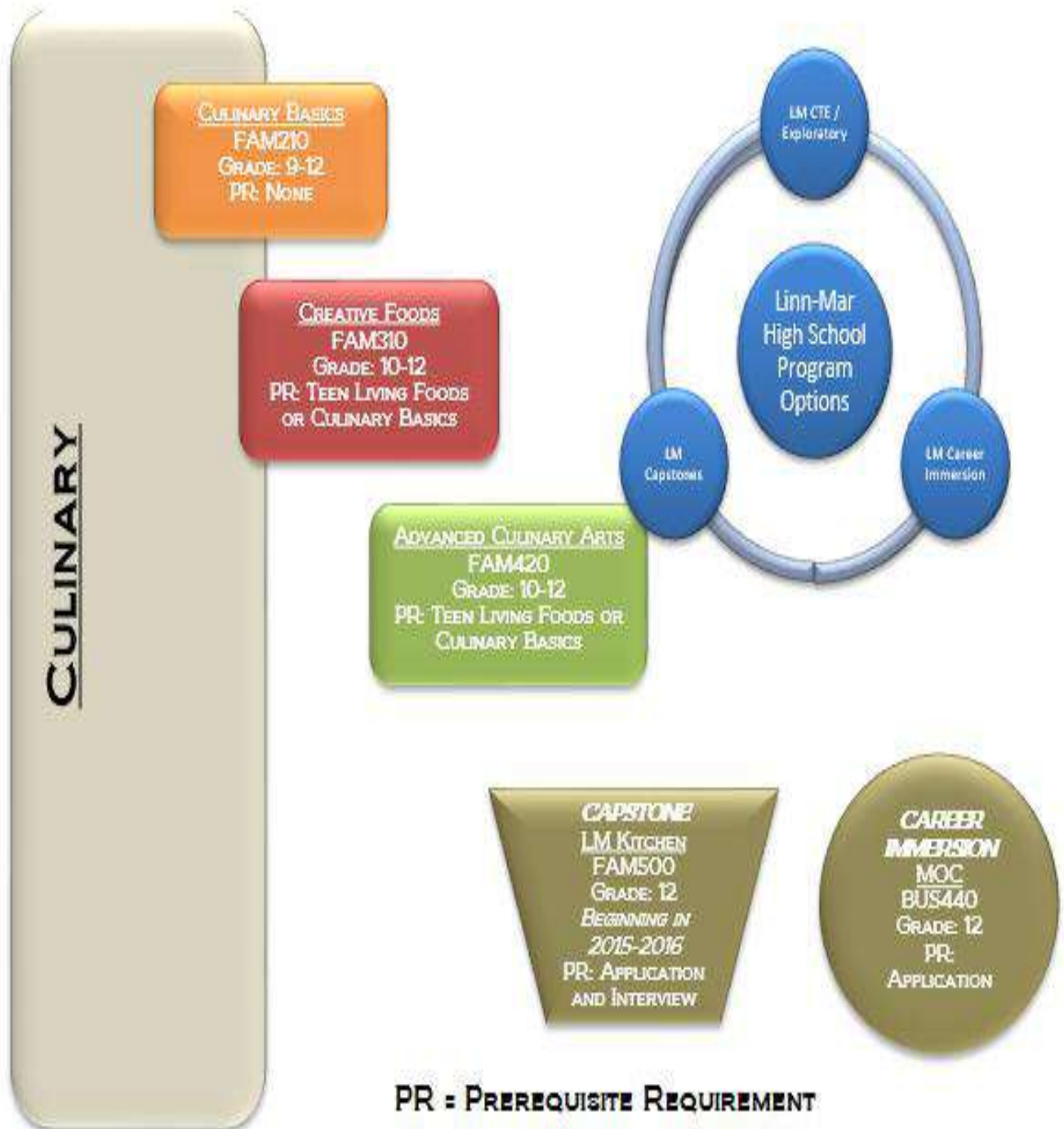
**Considerations:** This is a Project Lead the Way (PLTW) course; PLTW courses tend to be hands-on, project based, challenging courses. Students should be interested in learning new computer skills, but prior programming experience is NOT required.

**Course Description:** This course aims to develop computational thinking, generate excitement about career paths that utilize computing, and

introduce professional tools that foster creativity and collaboration. CSE helps students develop programming expertise and explore the workings of the Internet. Projects and problems include Python programming, app development, visualization of data, cybersecurity, robotics, and simulation.

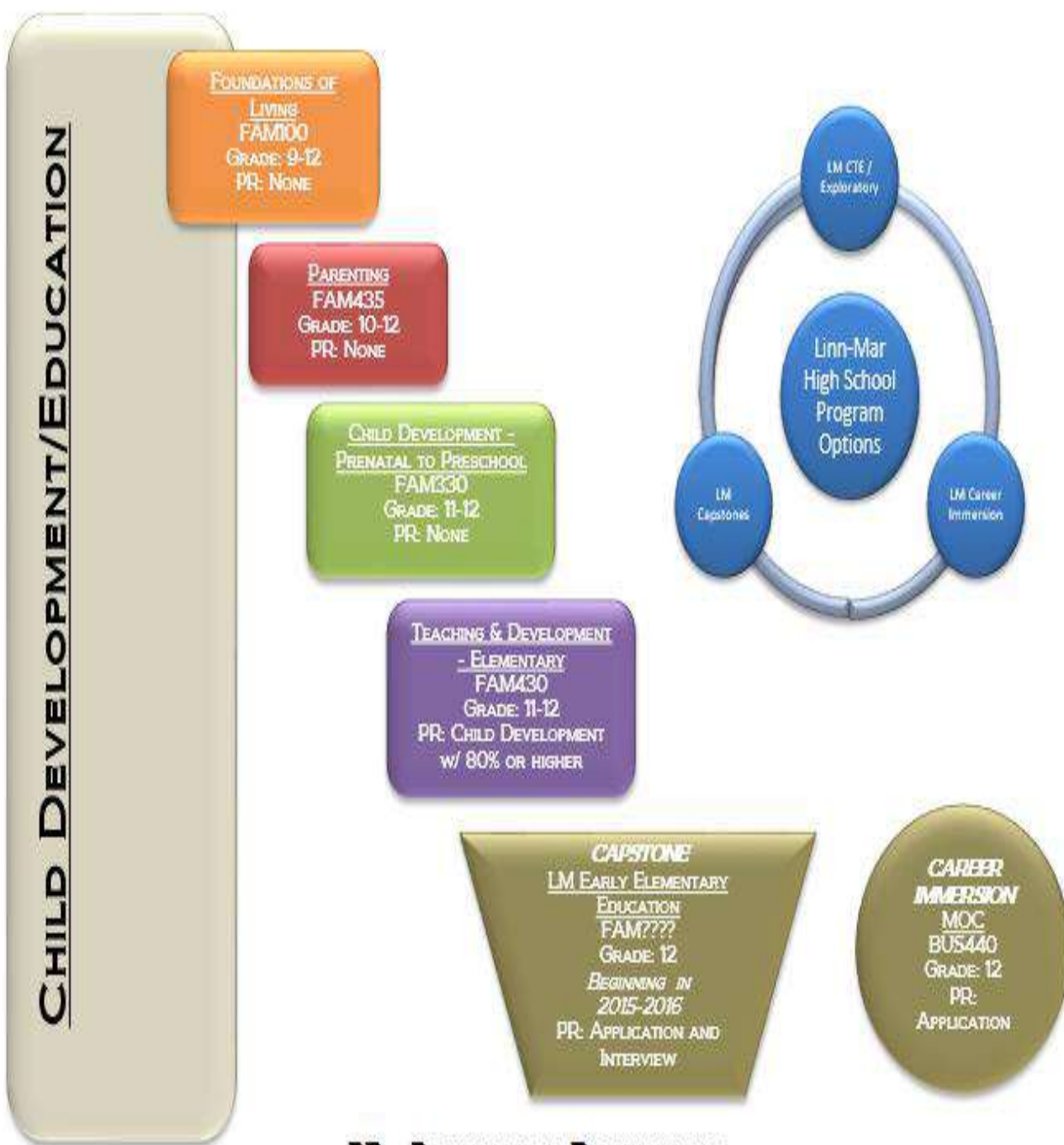


## FAMILY/CONSUMER SCIENCES

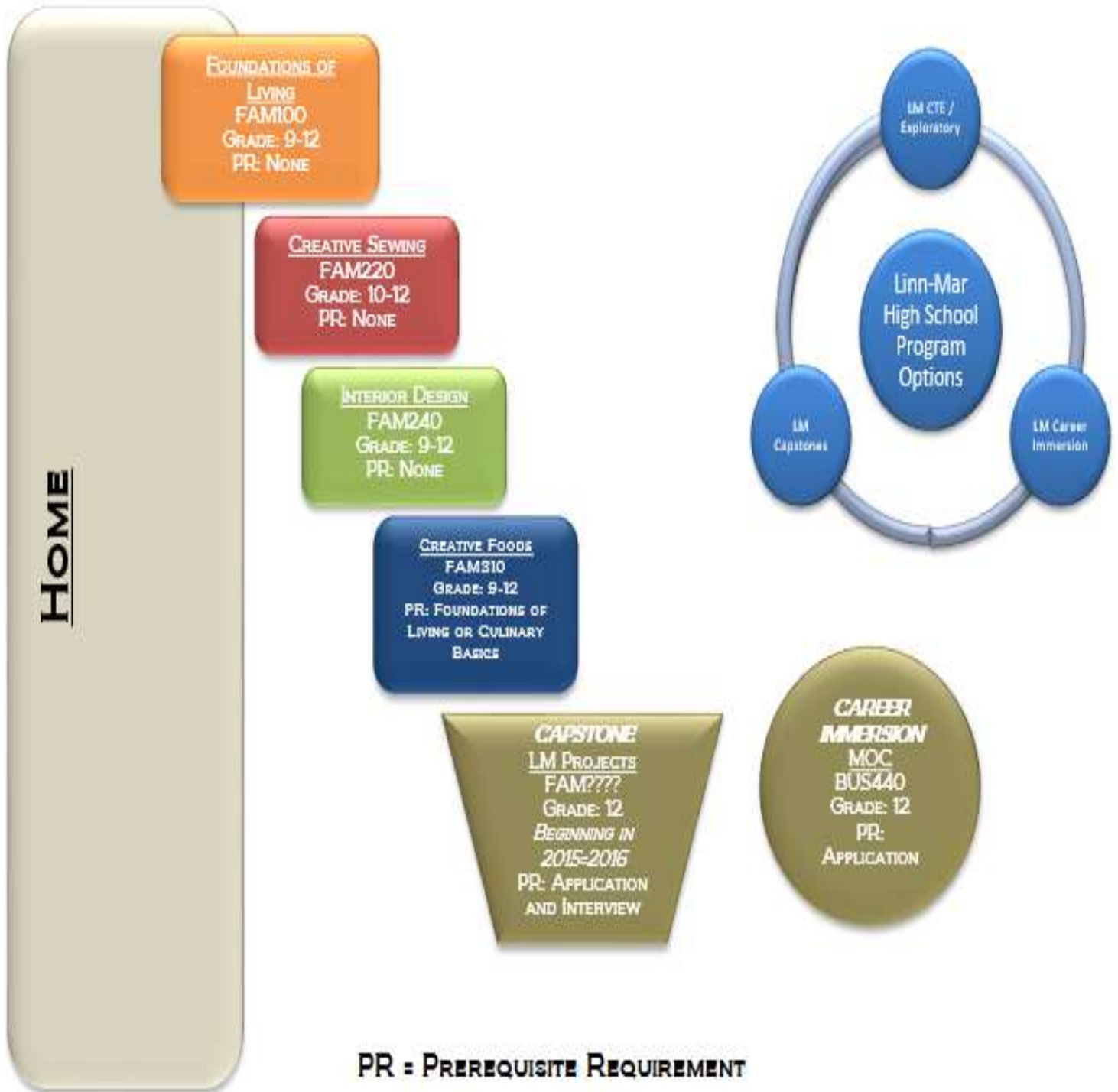




## FAMILY/CONSUMER SCIENCES



## FAMILY/CONSUMER SCIENCES



### **Foundations of Living**

Course #: FAM100  
 Grade Level: 9-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** none

**Course Description:** Students explore basic fundamentals of home and life management. Curriculum covers multiple focuses, including Child Development- infant through preschool, Home Design- living spaces and design principles, and Fashion and Sewing- Clothing choices and sewing skills.

---

### **Culinary Basics**

Course #: FAM210  
 Grade Level: 9-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** none

**Course Description:** This is an introductory foods course that develops skills and techniques related to the selection, storage, and preparation of basic foods.

### **Creative Sewing**

Course #: FAM220  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** none

**Course Description:** Students will learn to sew or increase sewing skills in this class. In addition to the sewing machine, equipment such as an embroidery machine, serger, and heat press will be used to produce professional products that are quick to make and cost effective. This course will also study clothing styles, principles of design, and take a look at careers related to this industry.

---

### **Interior Design**

Course #: FAM240  
 Grade Level: 9-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** none

**Course Description:** This course investigates housing choices and the design of living areas. Students explore, apply, and evaluate the elements and principles of design, wall and floor treatments, furniture styles and arrangement, housing types available, floor plan design, landscaping, financial aspects related to housing, and related careers.

## **Creative Foods**

Course #: FAM310  
 Grade Level: 9-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Teen Living/Home  
 and Family OR  
 Culinary Basics

**Considerations:** see prerequisites.

**Course Description:** This advanced foods course offers the student an opportunity to continue developing cooking skills while learning about the selection and use of appliances, kitchen planning, and international foods, and altering recipes. Techniques for improving the appearance of foods will be practiced.

## **Child Development - Prenatal to Preschool**



Course #: FAM330  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: none

**Considerations:** Students can gain three hours of articulation credit at Kirkwood Community College.

**Course Description:** The goal of this course is to explore current issues and skills in the care giving of young children. Areas of study will include physical, intellectual, and social-emotional development through age four, including heredity, birth defects, pregnancy and birth. Interacting with young children in an on-site preschool provides real life practice with guidance techniques.

## **Advanced Culinary Arts**

Course #: FAM420  
 Grade Level: 10-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Teen Living/Home  
 and Family OR  
 Culinary Basics

**Considerations:** See prerequisites.

**Course Description:** This course offers students entrepreneurship through catering. Students explore and practice the planning, marketing, and serving food for large groups.

## **Teaching and Development - Elementary**



Course #: FAM430  
 Grade Level: 11-12  
 Credits: 5  
 Length: 1 Quarter  
 Format: Block  
 Prerequisite: Child Development  
 passed with 80% or  
 higher

**Considerations:** see prerequisites. Students will work in elementary classrooms every week. Students can gain three hours of articulation credit at Kirkwood Community College.

**Course Description:** This course incorporates teacher training by assigning each student to work 2 times per week in an elementary classroom as a teacher's aide. In addition, students will spend 3 days per week in class at the high school studying and analyzing characteristics of school-age children as well as the teaching profession.

## **Parenting**



Course #: FAM435  
Grade Level: 10-12  
Credits: 5  
Length: 1 Quarter  
Format: Block  
Prerequisite: none

**Considerations:** Competencies taught can help students gain three hours of articulation credit at Kirkwood Community College.

**Course Description:** The emphasis of this class is on parenting and families. Areas of study include the role of families, teenage parenthood, parenting skills and decisions, handling of common problems, and strengthening of families. Emphasis will be on family resources that can help families meet challenges, solve problems, and strengthen their family life. This course offers opportunities to interact with preschool-age children in the classroom.

## LINN-MAR ONLINE OPPORTUNITIES

### **Credit Recovery**

**APEX** As more opportunities become available online for academic preparation, LMHS is developing a framework for such options as deemed appropriate. Currently, APEX offerings are available, primarily for Credit Recovery, through the Academic Assistance Center.

### **Financial Literacy**

**Ever Fi** will be an option for students to complete required standard areas in Financial Literacy.

**Linn-Mar Competency** skills will also be met online through the Business department lab in word processing, spreadsheet, Web 2.0, desktop publishing, presentation (multi-media), and keyboarding.

## LINN-MAR EXTENSION OPPORTUNITIES

In an effort to provide students the opportunity to extend interest in a particular area, Linn-Mar High School is developing a framework to allow for these opportunities. While a Linn-Mar Projects component is being developed with a goal for implementation in 2014-2015, current extension offerings are provided through courses in the Project Lead the Way (PLTW) program and for those students identified to be a part of the Linn-Mar Talented and Gifted program.

**Project Lead the Way (PLTW)** is a national program with courses designed to prepare students for a career in engineering or engineering technology. Emphasis is placed on applied learning through a challenging and engaging “hands-on” project-based approach. A national standards-based curriculum is followed. Courses for Project Lead the Way offered at Linn-Mar High School include:

- Introduction to Engineering Design (IED)
- Digital Electronics (DE)
- Principles of Engineering (PoE)
- Biotechnical Engineering (BE)
- Computer Integrated Manufacturing (CIM)
- Civil Engineering and Architectural Design (CEA)
- Computer Science and Software Engineering (CSE)

**Talented and Gifted** Ninth grade students have the option of choosing to take US History I and English I; both of these courses stress academic rigor and focus on presenting the student with challenge. These courses are open to all students, and TAG students are highly encouraged to enroll. A quarter-long career awareness and college planning seminar designed especially for TAG students is also available to them their 9<sup>th</sup> grade year. Tenth, 11<sup>th</sup> and 12<sup>th</sup> grade students may elect to take an independent study course, allowing them to design their own in-depth study. Advanced Placement courses are also available to all students in these upper grades



### **Freshman Seminar TAG I**



Course #: TAG410  
Grade Level: 9  
Credits: 2.5  
Length: 1 Quarter  
Format: Block  
Prerequisite: Instructor approval

**Considerations:** This course is for students identified by established district guidelines.

**Course Description:** Students explore how their skills, abilities, and specific personality traits relate to educational and career options. They will also study the college admissions process, scholarship application process, and how to find a college that best suits their goals. Students also participate in a community service project.

---

### **Independent Study TAG 3**



Course #: TAG480  
Grade Level: 10-12  
Credits: 3  
Length: 3 Quarters  
Prerequisite: Instructor approval

**Considerations:** This course is for students identified by established district guidelines.

**Course Description:** This course is designed for students interested in learning computer programming in the Java language. Instruction will be provided before school once each week.

### **Independent Study TAG 5**

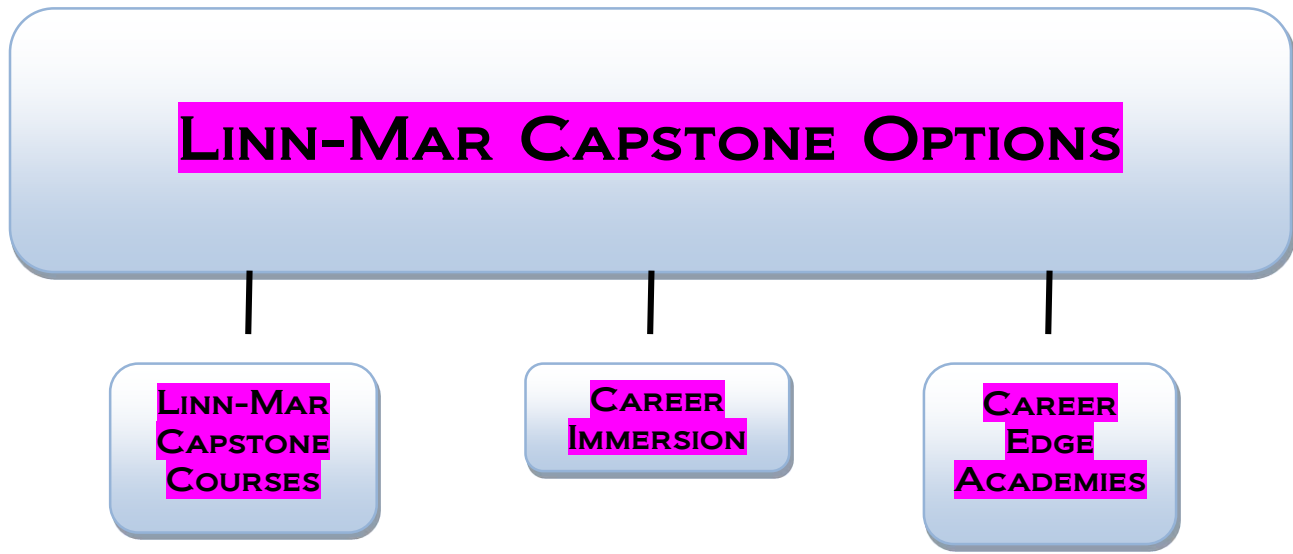


Course #: TAG510  
Grade Level: 10-12  
Credits: 5  
Length: 1 Semester  
Prerequisite: Instructor approval

**Considerations:** This course is for students identified by established district guidelines.

**Course Description:** This course is designed for students with demonstrated research skills who have a commitment to independent learning. Working with mentors from the community, students will plan and complete independent in-depth projects.





### **Linn-Mar Capstone Courses**

A “capstone” experience is an in-school immersion into the actual work environment of a particular job/subject area. These application opportunities allow a student to be trained in the specific skills of a particular work environment, as well as to be provided with experience in the career area. The following Capstone courses are currently being offered or developed:

- Building and Trades
- LM Store
- LM Kitchen (developing)
- LM Early Elementary Education (developing)
- Engineering Design and Development (EDD) (developing)
- Capstone Project in Agriculture, Aquaculture, Food and Natural Resources (developing)

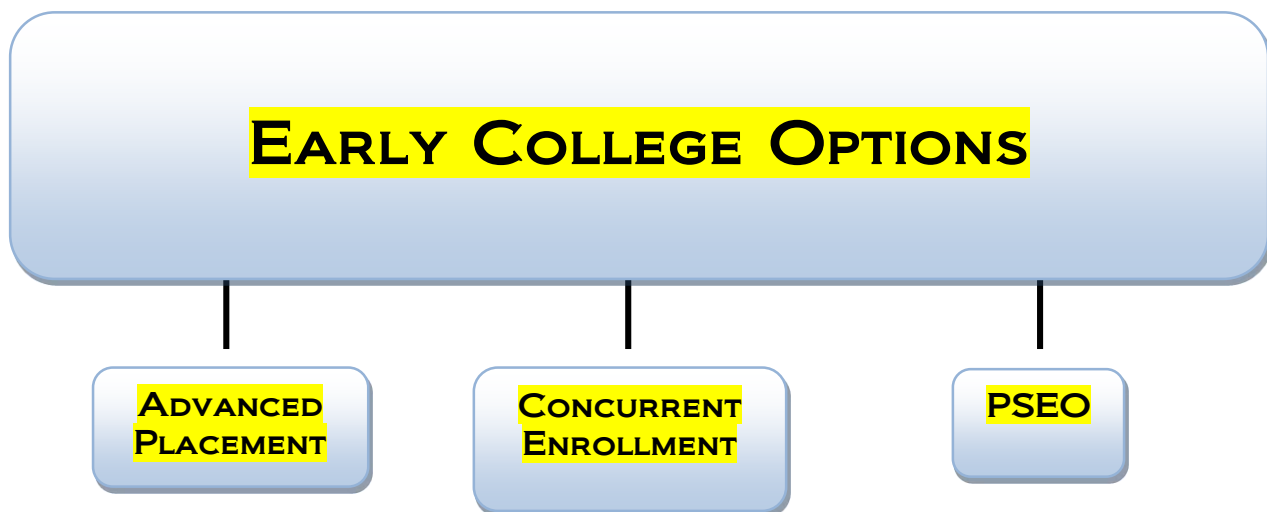
### **Career Immersion**

Career Immersion opportunities include internships, job shadows, and other experiences on the actual job site. These opportunities are provided through the MOC program, a partnership with The Workplace Learning Connection, and other businesses and agencies. Please see a counselor for more information on these opportunities.

**Career Edge Academies**

Career Edge Academies are opportunities to explore high demand careers while earning both high school and college credit. Linn-Mar and other area high schools have teamed with Kirkwood Community College to create several courses that will help students explore careers, develop new skills, and gain insights into today's workplace. Academics include:

- Architecture and Construction
- Dental
- Emergency Medical Services: EMT
- Informational Technology
- Patient Care
- Pharmacy Technician
- Physical Therapist Assistant/Occupational Therapy Assistant
- Renewable Energy/Industrial Maintenance
- Transportation
- Welding



### **Advanced Placement**

Linn-Mar High School offers Advanced Placement (AP) courses in Art History, Calculus (AB and BC), Statistics, Biology, Chemistry, Physics (B), English Literature, Music Theory, World History, Psychology, U.S. Government, and U.S. History. A minimal number of AP courses are available through the Iowa AP Online Academy. Students who complete these courses can take a standard AP exam. Many colleges and universities accept AP courses for college credit, depending upon individual AP exam scores. More information is available in the Counseling Office or the TAG Office.

### **AP course are weighted for grade point calculation purposes as follows:**

**A+; A (5.0); A- (4.67); B+ (4.33); B (4.0); B- (3.67); C+ (3.33); C (3.0); C- (2.67); D+ (2.33); D (2.0); D- (1.67)**

### **Concurrent Enrollment Courses**

Concurrent enrollment courses receive both Linn-Mar and selective college credit. Students taking a concurrent enrollment course must meet and follow all course guidelines of the respective college and understand that course performance becomes part of the individual's permanent college record. The following is a list of college-level courses offered on campus: Biotechnical Engineering, Child Development- Prenatal to Preschool, Civil Engineering and Architectural Design (CEA), Composition I, Composition II, Computer Integrated Manufacturing (CIM), Computer Science and Software Engineering (CSE), Digital Electronics (DE), Health Careers, Intermediate French I KCC, Intermediate French II KCC, Intermediate Spanish I KCC, Intermediate Spanish II KCC, Introduction to Engineering Design, Parenting, Principles of Engineering, and Teaching Development- Elementary.

**Post-Secondary Opportunities (PSEO)**

*Credit may be awarded by a college upon successful completion of course requirements. Any college credit determination is made by an individual college.*

Students may enroll in college courses under the following provisions:

- The PSEO is intended for 11<sup>th</sup> and 12<sup>th</sup> grade students as part of their four-year plan.
- A course chosen under this option must not be a comparable course to one offered in the local high school curriculum.
- The chosen course may not replace graduation requirements.
- The school district will pay up to \$250 for related tuition and related course fees. Students are responsible for textbook fees.
- A student must complete the course with a passing grade in order for the school district to pay for the course.
- Students must maintain the minimum high school course load.

## ALTERNATIVE PROGRAMMING OPTIONS

### **Student Support Services**

Students whose education is supported with an IEP will be asked to enroll in specific courses selected by the IEP team. Each student's course selection may look different based on the student's needs. *Most students will be asked to enroll in a Directed Study course for each quarter of the school year.* \*\* However, some students will be asked to enroll in additional student support courses based on the IEP team's recommendations.

#### **\*\*Quarter Long Directed Study Courses**

- ALT482A Directed Study QT1
- ALT482B Directed Study QT2
- ALT482C Directed Study QT3
- ALT482D Directed Study QT4
- ALT485 Directed Study (Transition Focus) **credit received**
- ALT490 Directed Study (Multi Focus) **credit received**
- ALT495 Directed Study (Literacy Focus) **credit received**
- ALT500 Directed Study (Math Focus) **credit received**
- ALT505 Directed Study (Social Skills) **credit received**

### **COMPASS Credits**

High School credits are available via the COMPASS alternative program. Linn-Mar will accept credit hours for approved courses that can be applied to requirements for the Linn-Mar High School diploma. Students should visit with their assigned counselor, or the Academic Assistance Counselor, to develop an approved plan for this option.

### **Academic Assistance Program**

Linn-Mar High School's Academic Assistance program has two components: *Credit Completion* is for students who receive F+ (55% - 59%). Credit completion allows students to complete course work taken during the previous grading period in order to receive a passing grade.

*Credit Recovery* is the second component of the program and is intended for junior/senior students who are significantly behind pace in earning credits for graduation. The Academic Assistance Counselor can answer questions for students and parents about guidelines and eligibility for the program.

**Test Out Option**

Students who wish to “test out” of various courses must notify **the building principal** in writing of their intent by May 1 for Year-Long and Fall semester classes, and by December 1 for Spring block classes. Within a six-week period, students will receive information related to critical course objectives and the criteria for assessment. Students will then be asked to demonstrate, via multiple performance measures, critical objective mastery for the course.

## **OFF-CAMPUS PROGRAMS FOR CTE**

Off-Campus Programs in Career and Technology areas are offered through Kirkwood Community College at both the Main Campus and Hiawatha locations. Please see your counselor for more information regarding off-campus programs for Career and Technology.