Linton High School

LINTON HIGH SCHOOL GRADUATION REQUIREMENTS

Student Planning Guide

Linton High School Graduation Requirements

<u>Course</u>	<u>Credit</u>
English/Literature 9	1.00
English/Literature 10	1.00
English/Literature 11	1.00
English/Literature 12 or College English 110/120	1.00
Pre-Algebra or Algebra 1	1.00
2 Math Electives	2.00
Physical Science	1.00
Biology	1.00
Advanced science Chem., Earth Science, Physics, or	1.00
Anatomy/Physiology	
US History	1.00
World History or Social Studies	
	1.00
POD 1 and 2 (A merican Government)	1.00
Physical Education	.50
½ unit of Family Health or Relationships	.50
Word Processing 1 and Financial Literacy	1.00
Foreign language, CTE classes	2.00
5 additional Credits	5.00
Number of Required Credits	22.00

^{*} The ½ unit of health education may be selected from Family Health or Relationships.

- Students must earn twenty-two (22) credits to meet graduation requirements. The (19) nineteen required plus another (3), which must be selected from electives that are offered.
- All students must attend eight (8) semesters of classroom instruction to be eligible for graduation from Linton High School. A student must finish the eighth semester at Linton High School in order to be eligible to graduate from Linton High School.
- All students in grades 9-12 shall enroll in no less than 6 credits per year. CORRESPONDENCE CREDIT MAY NOT BE CONSIDERED PART OF THE REQUIRED CREDITS.
- Students in grades 9-12 may have no more than one study hall per semester and must enroll in at least four academic subjects each semester.
- All requirements for graduation MUST be completed before the date of graduation for a student to participate in graduation exercises.
- All correspondence classes that are needed to meet graduation requirements must be completed prior to graduation, and the principal must receive evidence of the credit prior to graduation. Only the School Board can grant exceptions.
- Students will not be allowed to enroll in two different grade levels of English/Language Arts during the same semester unless one of the classes is being taken by correspondence study.
- In order to receive a diploma from the Linton High School, no more than 3 of the required 22 credits can be correspondence credits.

- No student may take any correspondence course in lieu of any course offered by Linton High School unless the student has failed the course previously or scheduled conflicts require it. All correspondence course work must be approved by the administration and have a Linton faculty staff member as a correspondence advisor.
- Only two credits of physical education and one credit of TEAM or tutoring may count toward graduation.

Course Selection

When selecting your courses, please consider the following:

- Graduation Requirements
- Career and Life Goals
- Things that you Enjoy Learning

English/Language Arts

Course Title: 05071 English/Literature 9

Duration: Semester

Grade Level: 9

Prerequisites: English 8

Composition and Literature are studied simultaneously.

The Composition Unit Includes:

- Media types and their importance.
- Basic speech skills.
- Basic composition mechanics (punctuation, spelling, etc.).
- Basic letter writing skills (friendly and business letters).
- Specific types of writing (cause and effect, comparison and contrast, etc.).
- Vocabulary and review of library and dictionary usage.

The Literature Unit Includes:

- Study of the short story, novel, drama, & poetry.
- Understanding, interpretation and appreciation of literature.
- Literary Terms such as plot, setting, etc.
- Vocabulary.
- Authors and styles.
- Written analysis of literature and writing related to reading.

Course Title: 05072 English/Literature 10

Duration: Semester Grade Level: 10

Prerequisites: English/Literature 9

Composition and Literature are studied simultaneously.

The Composition Unit Includes:

- Study of grammar and mechanics of the English language (pronouns, subject/verb agreement, coordination, parallelism, spelling and punctuation).
- Selected writing skills to be incorporated into daily written assignments.
- Developing short and long essays.
- Library research skills and introduction of MLA format.
- Writing and presenting speeches.

The Literature Unit Includes:

- Developing reading skills.
- Short stories, poetry, and drama by authors from around the world.
- Study of and use of literary terms.
- Study of vocabulary introduced in the reading selections and vocabulary building skills.
- Written and oral literary analysis
- Novel units.

Course Title: 05073 English/Literature 11

Duration: Semester Grade Level: 11

Prerequisites: English/Literature 10

Composition and Literature are studied simultaneously.

The Composition Unit Includes:

- Grammar studies with concentration on pronoun usage, plurals, subject/verb agreement, coordination and parallelism.
- Review of punctuation with concentration on commas and semicolons.
- Composition building skills and writing of various types of essays.
- Completing a research paper incorporating library and technology skills to gather research materials, implementing MLA format, developing an outline, note taking, discussion of plagiarism, and oral presentation of research paper.

The Literature Unit Includes:

- Survey of American Literature to include writings of early explorers to 20th century writers.
- Review of American History through selected literature.
- Emphasis on major literary figures and movements.
- Application of composition skills to literary analysis.
- Review of literary terms.
- Vocabulary study and use of selected vocabulary used in literature selections.
- Development of reading skills.

Course Title: 05074 English/Literature 12

Duration: Semester Grade Level: 12

Prerequisites: English/Literature 11

Composition and Literature are studied simultaneously.

The Composition Unit Includes:

- Personal narratives and autobiographical writing.
- Career exploration and using the information for writing assignments.
- Develop writing skills necessary for the work world.
- Advanced compositions.
- Develop oral communication skills through presentations.
- Writing critical reviews.

The Literature Unit Includes:

- World literature. Overview of history and writings of major time periods.
- Themes in literature.
- Authors and styles.
- Writing assignments about literature.
- Review of all genres including biographies, poetry, essays, short stories, and novels.

Course Title: 05077 College English 110/120

Duration: Semester Grade Level: 12

Prerequisites: English/Literature 11, ACT English score of 22 or COMPASS English score of 86

College Composition I (College English 110): The first course for developing writing skills offers students guided practice in a variety of descriptive-narrative and expository forms, related reviews of grammar and standard usage, and reading and discussion related to these activities. Library research is incorporated into this course.

College Composition II (College English 120): This second course in the composition sequence continues and reinforces the writing skills practiced in English 110, emphasizing library research and the writing of analytical and argumentative papers

making use of the thesis-support format and MLA style used in a variety of academic disciplines. Students focus on language through literature and/or film by writing, reading, responding, viewing and discussing.

Course Title: College Speech (dual credit) (ITV course)

Duration: One Semester

Grade Level: 12 Prerequisites: None

This course is designed to lay a foundation in skills for informal and formal speaking situations. There is an emphasis on content organization, audience adaption, critical evaluation of messages, language usage, and on the delivery of the speeches.

Family and Consumer Sciences

Course Title: 09022 Skills for Life

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Duration: One Semester
Grade Level: 9th Grade
Prerequisites: None

This is an 18-week course that focuses on personal and child development. Areas of study include personality development, parenting skills, babysitting, basic first aid, and careers working with children. Students will be required to take Real Care baby for three days and two nights. Students will usually do a project requiring them to work with children.

Course Title: 09022 Skills for Life 2

Duration: One Semester Grade Level: 9th Grade Prerequisites: None

This is an 18-week course that focuses on basic nutrition and cooking concepts. Areas of study include basic nutrition, equipment, cooking terms, my pyramid, and different food concepts. There will be approximately 7-9 food labs done during the semester.

Course Title: 09130 Parenting
Duration: One Semester

Grade Level: 10^{th} , 11^{th} & 12^{th} Grade

Prerequisites: Recommend Skills for Life 1

This is an 18-week course that studies children, starting with conception and concluding with school-age children. Some topics include pregnancy, development, birth defects, birth, caring for babies, toddler characteristics, and school-age learning. The class will try to visit some of the daycare centers and preschools in the community as well

Course Title: 09027 Textiles
Duration: One Semester
Grade Level: 11th & 12th Grade

Prerequisites: None

This is an 18-week course that provides an in-depth study of clothing and textiles. Personal and family clothing to fill roles, life-styles and occupations, selection, creativity in wardrobe planning, and management of resources to achieve clothing goals. Emphasis is made on developing personal standards and styles in dress and management of resources. The class will include several projects, depending on student choices.

Course Title: 09131 Food Science and Nutrition

Duration: One Semester

Grade Level: 10^{th} , 11^{th} & 12^{th} Grade

Prerequisites: Recommend Skills for Life 2

This is an 18-week course that focuses entirely on food and cooking principles. Science principles are explored and facts about different foods are usually followed up with a cooking lab from the area studied. Students will study eggs, dairy foods, breads, meats, cookies, cakes, soups, pastries, and other foods. There will usually be 10-12 different food labs that correspond with the area studied.

Course Title: 09135 Specialty Foods

Duration: One Semester Grade Level: 11th& 12th Grade

Prerequisites: Recommend Food Science and Nutrition

This is an 18-week course that focuses on foods, customs, and the land of different countries. Students study differences in religion, food, traditions, and cooking ingredients. Generally there are two labs for each country that is studied. Countries studied include but are not limited to Mexico, China, England, Spain, France, Germany, and Scandinavia. Students must be willing to try new foods.

Course Title: 09129 Individual and Family Health (offered every year; choose either this OR Relationships to meet

LHS requirement for Health)

Duration: One Semester Grade Level: 11th & 12th Grade

Prerequisites: None

This is an 18-week course that studies mental illness, HIV, AIDS, sexually transmitted diseases, nutrition, first aid, CPR, and other health topics. During this class students will become certified by the Emmons County Ambulance squad in CPR and First Aid.

Course Title: 09132 Relationships (choose this class OR Individual and Family Health to meet LHS requirement for

Health)

Duration: One Semester Grade Level: 11th & 12th Grade

Prerequisites: None

This is an 18-week course that studies life from adolescence to old age to death and dying. This is a common sense class that could be called Life 101. But as they say about common sense, it is not so common. Topics include personality, dating, love, infatuation, HIV, AIDS, marriage, crisis, aging and death. This course will include active discussion in many areas.

Mathematics

Course Title: 11030 Pre-Algebra

Duration: Semester Grade Level: 9th Grade Prerequisites: None

This course is designed to meet the needs of those students who have not fully mastered the fundamentals of grade school mathematics. A review of all of the concepts that were taught in grade school and an introduction to basic general algebra concepts will be covered.

Course Title: 11031 Algebra 1

Duration: Semester

Grade Level: 9th Grade, 10th Grade

Prerequisites: Mastery of Arithmetic Fundamentals

Algebra 1 consists of a study of the fundamental processes of algebraic operations and factoring and of factoring as they related to signed numbers and polynomials. Time is spent solving equations and applying algebraic techniques to problem solving. Algebra 1 is a prerequisite to all other advanced mathematics classes. **Required for students who took Intro to Algebra as Freshmen.**

Course Title: 11032 Algebra 2

Duration: Semester

Grade Level: 10th,11th,12th Grade

Prerequisites: Algebra 1

This is a second course in Algebra. It is designed for students who will be taking advanced courses in mathematics, engineering, and science. The course consists of a review of many topics studied in Algebra 1, a few topics from geometry, and some new topics. It will greatly strengthen the fundamentals learned in Algebra 1.

Course Title: 11120 Geometry

Duration: Semester

Grade Level: 10th,11th,12th Grade

Prerequisites: Algebra 1

Geometry is designed to develop the student's skills of logical and deductive reasoning. It will better help the student understand the relationships that exist between algebra and geometry. The student will also better understand the mathematical system.

Course Title: 11160 Trigonometry
Duration: One Semester
Grade Level: 12th Grade

Prerequisites: Algebra 1, Algebra 2, & Geometry

This course deals with measurements of angles and triangles. Much time is spent on developing formulas that are used in solving trigonometric equations. A thorough knowledge of algebra is necessary to accomplish this and a good knowledge of geometry is also helpful. Most occupations involved in engineering, science, and medicine will require a background of trigonometry.

Course Title: 11181 Advanced Mathematics

Duration: One Semester Grade Level: 12th Grade

Prerequisites: Algebra 1, Algebra 2, Geometry, & Trigonometry

This course follows trigonometry and expands upon some of the topics already covered in Algebra 2 and Trigonometry. Other topics include limits, statistics, and an introduction to calculus.

Course Title: College Algebra (dual credit) (ITV course)

Duration: One Semester Grade Level: 12th Grade

Prerequisites: Algebra 2 (students need to score a 21 in the math section of the ACT test)

This class focuses on solutions of linear and quadratic equations and inequalities, graphing functions and relations, polynomial and rational functions, systems of equations and inequalities, and on exponential and logarithmic functions.

Course Title: 11145 Consumer Mathematics 1 and 2

Duration: One Semester Each Grade Level: 11th, 12th Grade

Prerequisites: Consumer Math 1 for Consumer Math 2

This course will provide students with vocational and consumer mathematical concepts. Hourly wages, salary, commission and benefits, net pay, cash purchases, checking accounts, savings accounts, charge accounts and credit cards, loans, owning an automobile, other modes of transportation, leisure and recreation, buying an house, housing costs, energy, personal services, nutrition, home budgeting, insurance, investments, stocks, bonds, retirement, economic literacy, and personal computer will be covered. An emphasis will be made on concrete examples and application to real life situations.

Business Education

Course Title: 14230 Business Fundamentals

Duration One Semester

Grade Level: 9-12 Prerequisites: None

This course introduces the activities and language of business. Course is offered every other year with school years beginning with evens #s. Students will gain a basic understanding of the economic environment in which businesses operate, how businesses meet consumer needs and wants, and the interaction of supply and demand in the market. Personal financial management is also discussed, with emphasis on budgeting, saving, and investing.

Course Title: Financial Literacy (Required for all LHS freshmen)

Duration: One Semester

Grade Level: 9-12 Prerequisites: None This course helps students transform into informed customers while building career knowledge and developing critical-thinking skills. Students will gain an in-depth understanding of the daily financial activities experienced by citizens, both personal and professional.

Course Title: 14010 Accounting I Duration: One Semester

Grade Level: 11-12 Prerequisites: None

This course begins with the question, "What is accounting and who needs it, anyway?" It covers who uses accounting information and why accounting matters in business and life. The course includes the cycle of accounting activities of a sole proprietorship: analyzing business transactions, journalizing and posting, and preparing financial statements. An introduction to computerized accounting is included.

Course Title: 14011 Accounting II

Duration: One Semester

Grade Level: 11-12

Prerequisites: Accounting I

Students review the principles of accounting and apply them to transactions for partnerships and corporations. Attention is focused on how accounting data, in the form of financial statements, can be used. A business simulation helps develop practical skill in doing the accounting for a business. Students are also introduced to a variety of careers in accounting.

Course Title: 14096 Word Processing

Duration: One Semester

Grade Level: 9 (Required for all LHS freshmen.)

Prerequisites: None

Students will learn the basic and advanced features of word processing software, specifically Microsoft Word 2007. They will improve productivity by using the most efficient, timesaving methods to produce professional-looking documents. Emphasis will be placed on the creation and enhancements of business documents.

Course Title: 14025/14026 Spreadsheets and Databases

Duration: One Semester

Grade Level: 9-12

Prerequisites: Word Processing

Students will use spreadsheet software (Microsoft Excel 2007) to develop skills in designing worksheets, writing formulas, performing calculations, charting, analyzing and managing data to project information for making personal and business and financial decisions, track stock investments, record activities and create loan amortization schedules. Students will also use database software (Microsoft Access) to organize and automate files. These files are used to analyze business trends and solve problems. Students will create tables, forms, and reports.

Course Title: Web Design 1& 2

Duration: Semester but must take both courses

Grade Level: 10-12

Prerequisites: Word Processing

Web Design 1 is a business course that provides instruction in the principles of web design using HTML code and current WYSIWTG software programs. Areas of instruction include audience analysis, web page layout and design techniques, software integration, and publishing a web site. Web Design 2 is a business course that provides instruction in the principles of web design using the Adobe Web Premium CS5 Suite. The main focus of this semester is to learn to use Adobe Dreamweaver CS5 to create professional websites. Supplemental material will be used to learn Adobe Photos hop CS5 and Adobe Flash CS5 to enhance websites. Students will be responsible for designing and updating the school web site

Course Title: 14012/14013 Accounting III-IV (offered over ITV)

Duration: Semester

Grade Level: 12

Prerequisites: Accounting 1-2

Students will acquire in-depth knowledge of accounting procedures and techniques learned in Accounting 1-2. Emphasis will be placed on decision-making in preparation for entry-level accounting positions.

Course Title: Entrepreneurship (offered during school years beginning with odd numbers)

Duration: One Semester Grade: 10th, 11th, & 12th

Prerequisites: Introduction to Business

This course seeks to prepare students to be responsible, enterprising individuals who become entrepreneurs or entrepreneurial thinkers. Students will study the attitudes and skills that characterize entrepreneurs. They will learn enterprising skills related to creativity, initiative, problem solving, flexibility, and adaptability. Students will have the opportunity to read about and interview entrepreneurs. Most importantly they will be immersed in real life learning experiences, where they will have the opportunity to make decisions, manage the results, and learn from the outcomes.

Science

Course Title: 13030 Physical Science

Duration: Semester

Grade Level: 9
Prerequisites: None

Physical science consists of the measurement and comparison of the English and metric systems with corresponding lab material, followed by a study of material things and how to describe them. Gases of the air are studied in detail as to how they are made in the lab and for industry, their properties, and what they are used for. Students also study how chemistry is important and how it is used. Physics is discussed and includes such concepts as forces, work, energy, sound, heat, light color, and electrostatics and electricity.

Course Title: 13020 Biology
Duration: Semester
Grade Level: 10
Prerequisites: None

Biology is the study of living things. Plant study includes text material as well as collection and classification of plants and lab study. Animal study includes text material as well as lab study and the dissection of representatives of the various phyla. Microscopes are used in all studies. A unit on genetics and reproduction is included.

Course Title: 13042 Physics Duration: Semester Grade Level: 11-12

Prerequisites: Strong Math Skills

Physics is the study of matter and energy. Topics include electricity, simple heat, machines, work, sound, light, and the metric system. Class time is spent in discussion of text material and working problems. Lab units will also be included. A scientific calculator is required.

Course Title: 13031 Chemistry

Duration: Semester Grade Level: 11-12

Prerequisites: Strong Math Skills

Chemistry is the study of elements, symbols, formulas, equations, and the composition and structure of materials. Class time is spent working problems dealing with weights and volumes in reactions, writing and balancing equations, ionization, metric systems, and the periodic chat. Lab work will include the study of acids, bases, gases, indicators, and chemical tests. A calculator is required

Course Title: 13021/13022 Anatomy/Physiology

Duration: Semester Grade Level: 11-12 Prerequisites: None

This course is an introduction to the advanced study of the structure of the human body. It includes detailed instruction of the following body parts and systems: cells, tissues, skeletal system, muscular system, integumentary system, nervous system, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system.

Physiology is a continuation of human anatomy that deals with the function of the human body. Emphasis is genetics, tissue function, cell function and continuation of the functions of the structures of the systems covered in human anatomy. The course includes a comparative dissection of a fetal pig.

Course Title: 13063 Earth Science

Duration: Semester Grade Level: 12 Prerequisites: None

This course is the study of Earth and the universe around it. Branches of Earth science that will be studied are geology, oceanography, meteorology and astronomy. This class is designed for seniors that need a third science to fulfill their ND class room requirements.

Social Studies

Course Title: 15085 US History

Duration: Semester Grade Level: 10

Grade Level: 10 Prerequisites: None

US History is a required course for sophomores. It is a chronological study of US History from the Civil War Era to the present.

Course Title: 15089 World History

Duration: Semester Grade Level: 11 Prerequisites: None

World History is a required course for juniors. It is a study of the main culture regions of the world. Emphasis is placed on understanding the world today by studying the past.

Course Title: 15201 Problems of Democracy 1 & 2 (Offered every year and both semesters are required to graduate.)

Duration: Two Semesters

Grade Level: 12 Prerequisites: None

POD 1 & 2 are required courses for seniors. POD 1t provides an overview of the American Government System with topics such as the branches of government, voting procedures, political parties, and social and political issues covered.

POD 2 moves one step further to focus on world, state and local economies, history, geography, and sociology. The course will include world, state, and local current events.

Foreign Languages

Course Title: 06211 Spanish 1

Duration: Semester Grade Level: 9-12

Prerequisites: None

This is an introductory course in Spanish language and culture with special emphasis on basic communication skills and vocabulary. The use of a core textbook will be supplemented with Spanish music and other materials.

Course Title: 06212 Spanish 2

Duration: Semester Grade Level: 10-12 Prerequisites: Spanish 1

This course will continue the work from Spanish 1. A textbook will be used in class to learn new vocabulary and to both acquire new grammar skills and to enhance those skills already learned in Spanish 1. Students will utilize various cultural materials throughout the course.

Course Title: 06213 Spanish 3

Duration: Semester Grade Level: 10-12
Prerequisites: Spanish 1

This course will continue the work from Spanish 2. A textbook will be used in class to learn new vocabulary and to both acquire new grammar skills and to enhance those skills already learned in Spanish 2. Students will utilize various cultural materials throughout the course.

Course Title: 06291 German 1

Duration: Semester
Grade Level: 9-12
Prerequisites: None

This course will study the pronunciation system of German along with reading, spelling, and basic grammar. Rudimentary conversation skills are also taught via conversations and readings in the textbook. Geography and culture are also introduced b way of supplementary units in addition to units in the textbook.

Course Title: 06292 German 2

Duration: Semester
Grade Level: 10-12
Prerequisites: German 1

This course will be a continuation of those skills learned in German 1. It will stress the communicative approach to a foreign language. In addition to reading, writing, and speaking, the student will be presented with an abbreviated, formal approach to grammar. The class will use several sources to meet its objectives.

Music

Course Title: 12051 Band Duration: Semester Grade Level: 8-12

Prerequisites: Completion of 7th Grade Band

Students will be expected to perform at all public performances, including concerts, out-of-town events, and athletic events. A variety of band literature will be prepared throughout the year. The group will perform at the regional large group festival and students will be encouraged to be involved in the regional solo and ensemble festival and to audition for all-state band.

Course Title: 12040 Choir
Duration: Semester
Grade Level: 9-12
Prerequisites: None

Choir is a class that is open to all students who enjoy singing. There is no audition required for participation. Choir is designed to build and strengthen the voice and confidence of the student for participation in other singing events outside the school. The group performs at all concerts and at regional large group festival. Other opportunities include the regional solo and ensemble festival and all-state choir.

Art

Course Title: 12020 Art 1
Duration: Semester
Grade Level: 9-12
Prerequisites: None

This course will introduce students to a variety of media and techniques with a strong emphasis on creativity. The course will cover art history, principles of design, critique of artwork, color theory, painting, drawing, and sculpture.

Course Title: 02020 Art 2-3
Duration: Semester
Grade Level: 10-12
Prerequisites: Art 1

This course will incorporate advanced techniques in painting, drawing, design, compositional problems, ceramics, paint making, and sculpture. Independent projects will be arranged with each student.

Physical Education:

Course Title: 08030 High School Physical Education

Duration: One Semester

Grade Level: 9-12 Prerequisites: None

Physical education is an organized, sequential, and systematic application of the principles and foundations of human movement. The application of this learning medium is developed through participation in planned physical activities. Physical education also has a goal to create an interest in some type of physical activity. It will also introduce lifetime activities to the student and teach them to treat their bodies with respect and to understand the importance of physical activity.

Tutoring

Course Title: 00090 TEAM Tutoring

Duration: One Semester Grade Level: 11 & 12

Prerequisites: Rated as Proficient in Math and in Reading/Language Arts on the NWEA Test and cumulative GPA of

2.00 or higher

TEAM is a tutoring program for high school students who wish to provide one-on-one tutoring to students who require assistance in reading, mathematics, or study skills.

Driver Education

Course Title: 21014 Driver Education
Duration: Summer Program

Grade Level: 9-12 Prerequisite: None

Classroom driver education and behind-the-wheel training introduce the proper techniques of driving. Students are provided with the knowledge of rules of the road and are prepared for their permit test. A quarter credit is given to students who complete both the classroom and behind-the-wheel portions of the class. Driver education is an elective course and is not required for graduation. Driver education is, however, required to obtain a drivers license if a student is under the age of 16.

Technology Education

Course Title: 10094 Foundations of Technology

Duration: One Semester

Grade Level: 9
Prerequisites: None

Technology consists of key concepts and processes. Students learn that technology is the basis for all that we have and do. Students design and develop innovations and engineer solutions to gain an understanding of technology. Mathematics and science contribute to the unit topics.

Course Title: 10515 Technology Systems

Duration: One Semester

Grade Level: 9
Prerequisites: None

Students participate in technological systems; their design, development and connections with other systems. They will create, test and evaluate systems, such as transportation, information and biotechnology systems. A state course guide is used.

Course Title: 10510 Invention and Innovation, 1 and 2

Duration: One Semester For each class

Grade Level: 11&12 Prerequisites: None

Students develop skills to systematically assess technology. Students practice approaches to assess technology using analytical thinking, decision-making and techniques for redesigning. This is an activity based course that addresses all 20 of the Standards for Technological Literacy.

Course Title: 10127 Manufacturing Systems

Duration: One Semester

Grade Level: 11-12 (Limit of 10 students)

Prerequisites: None

This course will provide students with an introduction to the design and operation of production systems. They will study of the efficient and appropriate plan layouts, process selection and sequencing, materials handling system design, quality control procedures, production planning and control activities, work measurement practices, and product manufacturing.

Course Title: 10410 Engineering Technology

Duration: One Semester

Grade Level: 11-12 Prerequisites: None

This is an activity-based course that provides orientation and exposure to the careers and challenges of engineering. Major engineering concepts include modeling, systems, design, optimization, technology-society interaction, and ethics. Content is provided in applied engineering graphics, communicating technical information, engineering design principles, material science, research and development processes, manufacturing techniques and systems, and opportunities and challenges of other emerging branches of engineering. Students are actively involved with the practices of various engineering fields, high-technology systems, high-technology devices and materials, engineering graphics, and mathematics/science princi