



**COURSE DESCRIPTION HANDBOOK**

**2018-2019**

# ST.MARY'S COURSE DESCRIPTION BOOK

## Purpose of Course Description Book

This course description book is designed to help you plan your secondary education. Courses listed are only tentative and a class may be cancelled if too few students register. If this occurs, you will be asked to choose another course. The counselor will go over your schedule choices with you. You should discuss them with your parents also. Be prepared to commit yourself to your choices and make responsible decisions. Use the enclosed planning sheet to work out your schedule.

## Requirements for Graduation

Each student must register for a minimum of six (6) full time classes each semester (P.E. courses are not full time classes nor count as one of the 6). Students may register for additional courses with the approval of the counselor. Students are allowed one study hall a day. All students both Catholic and non-Catholic are required to take and pass a Theology course each semester. Each student must successfully complete 49 credits during their 9 - 12 grade years. The following list presents required courses and directs you to another page in this book for other courses offered to achieve the required credits in each department.

<u>Department</u>	<u>Required Number of Credits</u>
<b>Theology</b>	<b>8 credits</b>
<b>English:</b>	<b>8 credits</b>
English 1	2 credits
English 2	2 credits
American Lit.	2 credits
Communications	1 credit
<b>Mathematics</b>	<b>6 credits</b>
<b>Science:</b>	<b>6 credits</b>
Physical	2 credits
Biology	2 credits
Chemistry/Basic Chem	2 credits
<b>Foreign Language:</b>	<b>4 credits</b>
Spanish I	
Spanish II	
<b>Social Sciences:</b>	<b>6 credits</b>
Modern U.S. Hist.	2 credits
Modern World Hist.	2 credits
World Geography	1 credit
U.S. Government	1 credit
<b>Physical Education</b>	<b>4 credits</b> (PE will be taken each year unless otherwise approved)
<b>Health I and II</b>	2 credits
<b>Career Expl./21<sup>st</sup> Cent. Skills</b>	1 credit
<b>Business:</b>	
Basic Computer	1 credit
Consumer Economics	1 credit
<b>Electives</b>	3 credits
<b>Total</b>	<b>50 credits</b>

Note: 1 credit = 1 semester of class meeting five days a week

## Class Load

All students are required to have a minimum of six (6) classes on their schedules each semester, regardless of credits already accumulated. (PE is not included). However, one period must be allowed for P.E.

## Grade Scale

A 4.33 scale to determine grade point average is used at St. Mary's High School. Incomplete work is recorded as an "I" on the report card. Work must be complete within 2 weeks after the close of the quarter/semester unless special arrangements have been made in advance with the administration. If the work is not complete after 2 weeks, the student receives an F.

<b>% --Percent</b>	<b>Grade</b>	<b>Honor Roll Pts.</b>	<b>Weighted Scale (College Courses)</b>
<b>100-98</b>	<b>A+</b>	<b>4.3300</b>	<b>4.83</b>
<b>94-97</b>	<b>A</b>	<b>4.0000</b>	<b>4.50</b>
<b>90-93</b>	<b>A-</b>	<b>3.6700</b>	<b>4.17</b>
<b>87-89</b>	<b>B+</b>	<b>3.3300</b>	<b>3.83</b>
<b>83-86</b>	<b>B</b>	<b>3.0000</b>	<b>3.50</b>
<b>80-82</b>	<b>B-</b>	<b>2.6700</b>	<b>3.17</b>
<b>77-79</b>	<b>C+</b>	<b>2.3300</b>	<b>2.83</b>
<b>73-76</b>	<b>C</b>	<b>2.0000</b>	<b>2.50</b>
<b>70-72</b>	<b>C-</b>	<b>1.6700</b>	<b>2.17</b>
<b>67-69</b>	<b>D+</b>	<b>1.3300</b>	<b>1.83</b>
<b>63-66</b>	<b>D</b>	<b>1.0000</b>	<b>1.50</b>
<b>60-62</b>	<b>D-</b>	<b>0.6700</b>	<b>1.17</b>

(Class Rank/GPA is computed at the completion of each semester)

## P.E. Credits:

All students are required by the state to have 120 minutes of physical activity per week. Students unable to have a PE course due to (1) Student is taking 8 academic courses (2) Student's schedule does not match up with the periods that PE is offered (parents must sign a waiver stating that they are aware of the student not receiving the required physical activity time within the school day).

## Make-up work

All anticipated absences require permission/notification in advance and therefore make-up work should be completed before the anticipated absence. A student has two (2) days for every day of absence to turn in make-up work assigned. If the absence is more than three (3) consecutive days, more time may be given at the discretion of the teacher. Make-up work will receive full credit if turned in on time. Any make-up work turned in late will receive a lower grade. Work not turned in within a week of the last date of absence may result in a failing grade.

## Course Opportunities at SLHS

Qualified students may attend certain courses at Storm Lake High School. The course(s) involved is/are one(s) **not** currently offered at St. Mary's School. Enrollment is possible with the permission of Storm Lake's administration, St. Mary's administration and the student's parents. Contact the school counselor if interested. (See Storm Lake Public Course Descriptions-under Guidance)

## Career/Vocational/Fine Arts--Education Programs

Courses are available through Storm Lake Public and ICCC and are held at various sites.

Credit earned is recorded as 1 credit per hour in class; grade is recorded as 1 credit per hour in class on high school transcripts, i.e. Offerings include:

- Physics --@SLCSD (Grades 11-12) 2 sem. science elective.
- Sociology (Online) (Grades 11-12, 1 sem + 3 Hours ICCC college credits; pre-req scores required).
- Principles of Statistics – @SLCSD 1 sem. SM elective credit + 3 Hours ICCC college credits (Pre-req: ALEKS test scores)
- Calculus I and II @ BVU (Grade 12) 2 sem. SM elective credit +6 Hours BVU College credits; Pre-req: ALEKS test scores)
- Foundations of Construction @ SLCSD (9,10,11,12) 1 semester elective/1 credit
- Woods I @ SLCSD (10,11,12) 1 semester elective/1 credit (Pre-req: Found. Of Construction)
- Foundations of Engineering and Architectural Design @SLCSD (9,10,11,12) 1 semester elective/1 credit
- Foundations of Energy Technology @ SLCSD (Grades 9,10,11,10). 1 semester elective/1credit.
- Residential Drafting and Design @ SLCSD (Grades 10, 11,12) 1 year elective/2 credits.  
Pre-req: Found. of Engineering/Design.
- Adv. Architectural Drafting and Design @SLCSD (Grades 11,12) 1 yr. elective/2 credits. Pre-req:Resident.Drft/Design
- Band/Orchestra@ SLCSD (Grades 9-12) 1 year elective/1 credit per semester.
- Vocal Music @ SLCSD (Grades 9-12) 1 year elective/1 credit per semester.

- Art Survey 2D and 3D @ SLCSO (Grades 9-12) 1 semester each
- Painting @ SLCSO (Grades 10,11,12; Pre-req. Art Survey 2D or 3D) 1 semester elective
- Ceramics @ SLCSO (Grades 10,11,12; Pre-req. Art Survey 2D or 3D) 1 semester elective
- 3D Design @ SLCSO (Grades 10,11,12; Pre-req. Art Survey 2D or 3D) 1 semester elective
- Drawing @ SLCSO (Grades 10,11,12; Pre-req: Art Survey 2D or 3D) 1 sem elective
- Advanced Drawing @SLCSO (10,11,12; pre-req: Drawing)
- Painting @ SLCSO (10,11,12) Pre-req: Art Survey 2D or 3D) 1 sem elective
- Adv. Painting (Grades 11,12; Pre-req. Painting) 1 semester elective;
- Creative Photo @ SLCSO (Grades 11,12; 3 hours ICCO college credit/semester; Pre-req. Art Survey 2D or 3D) 1 sem
- Ceramics @SLCSO (Grades 10, 11,12; Pre-req: Art Survey 2D or 3D) 1 sem
- Advanced Ceramics @ SLCSO (Grades 10-12; 3 hours college credit/semester; Pre-req. Art Survey, Ceramics). 1 sem
- Graphic Design I @ SLCSO (Grades 11-12; Pre-req: Art Survey 2D or 3D) 1 sem
- Graphic Design II @SLCSO (Grades 11-12; Pre-req: Graphic Design I; 3 hours ICCO college credit) 1 sem
- Welding @ SLCSO (Grades 11,12) 1 sem.SM elective credit + 3 Hours ICCO college credit
- Auto Tech I @SLCSO (Grades 11,12) Full Year, 2 periods –4 credits + ICCO credits

## **Senior Year Plus/Earlybird Courses**

Qualified juniors and seniors may enroll in college level classes through Iowa Central Community College to earn college credit. These college courses are available depending on required minimum scores on ACT's or Iowa Assessments. All College Math courses (except Statistics—which has Iowa Assessment score requirements) require ALEKS placement test scores. Students may be responsible for books and materials for the course unless other arrangements are made through the counselor's office. St. Mary's offers college credit courses taught on St. Mary's campus (College General Education Courses) as well as courses through the Business Department, all requiring additional fees (however at a much lesser cost than same credits while in college. Certain college credit courses may be available at the public school or by a Online delivery system through ICCO.

High school credit earned through concurrent enrollment will be recorded as 1 credit per 3 hours of college credit. These courses will then also begin the students' College GPA. Contact the school counselor for more information.

## **Registration/Course Add-Drops**

Course add/drop requests may be made during the first week of each semester for both HS and College courses. Request forms may be obtained from the counselor. Forms must be signed and returned to the counselor's office before action will be taken.

## **Off-Campus Class Policy**

Students enrolled in off-campus classes will abide by the following:

1. When not in class, the student is required to be in an assigned study hall or class on St. Mary's campus.
2. The students need to arrange with teachers if they need to leave early or arrive late to St. Mary's high school classes. (On SM campus college classes require the full attendance time).
3. The student is responsible for checking with the office for the announcements of the day.
4. Transportation will be provided by the Storm Lake District for classes. The student/parent **may be** responsible for his/her own transportation to and from a class off-campus, depending on the class and the time of the class. If the student is driving, an "Off-Campus Transportation Release" form will be required.

## **Transcripts**

Official copies of transcripts will be sent directly to colleges, training schools and other post-secondary institutions from St. Mary's **through the Counselor's Office**. A student's parent/legal guardian of a student under the age of 18, or a student older than 18, or a graduate, who is the legal age of 18, may request that a transcript be forwarded by completing and signing a form (available in the Counselor's office). There is no charge for transcripts sent during a student's senior year or during the first year of post-secondary education. However, after that time period there is a \$5.00 charge for each additional request. Official College transcripts need to be requested and sent from the source institution; ie: Iowa Central Community College. For ICCO, this process is available online with the student's ID number.

## Course Descriptions

### **Business Department Philosophy**

The primary mission of business education is to provide instruction for and about business and to prepare students to become contributing citizens who are capable of making astute personal economic decisions. St. Mary's High School is always looking to the future and adjusting and adapting as innovations emerge. In our classrooms students will learn the basics of personal finance, master economic principles, learn how businesses operate, and develop an understanding and appreciation for technology and the impact it has on the world today. Together with parents and the community, students will be prepared, both spiritually and professionally, for successful participation in the business world whether as a consumer, employee or owner.

### **Business Courses \* = Graduation requirement (3 Credits)**

#### **12104G05012: Accounting I**

(11-12) 1<sup>st</sup> semester 1 credit

This course introduces and expands upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports.

The second semester of this course is a college level course

*Prerequisite: None*

#### **12104C05102: Intro to Accounting 1 –College Level (ACC111)**

(11-12) 2<sup>nd</sup> semester 1 credit

Students will receive instruction in analyzing and recording various business transactions and in completing the accounting cycle by journalizing, posting, preparing worksheets, making adjusting and closing entries, and preparing financial statements for service and merchandising businesses. Instruction will be provided for accounting for cash by using a petty cash fund, reconciling a bank statement, and utilizing the cash short and over account; calculating and journalizing employees' payroll; and calculating and journalizing employer payroll taxes. (3 College Credits) . (Tuition fee required)

*Prerequisite: Accounting I*

#### **12104G05021: Accounting II**

(12) 1<sup>st</sup> semester 1 credit

Students will cover advanced accounting topics such as financial analysis budgeting and break-even and cost accounting. Students will complete two business simulation packets for merchandising businesses organized as corporations. Students will also have the opportunity to create and use computer applications for accounting. (3 ICCC College Credits) (Tuition fee required)

*Prerequisite: Intro to Accounting I*

#### **12104C05022: Computer Accounting II College Level ACC311**

(12) 2<sup>nd</sup> semester 1 credit

The course is designed to provide the student experience in handling automated accounting in a number of areas. These include General Ledger, Accounts Receivable, Accounts Payable, Payroll, Depreciation, Inventory and Accounting Statement Analysis. Simulation of business and its activities are processed through the entire accounting cycle culminating in the various accounting reports. The applications will be done on a computer. (Tuition fee required).

*Prerequisite: ACC-111 Introduction to Accounting*

#### **10001G05000: Introduction to Computers/Basic Computer\***

(9-12) 1 credit

Introduction to Computer courses introduce students to computers and peripheral devices, the functions and uses of computers, the language used in the computer industry, possible applications of computers, and occupations related to computer hardware and software. These courses typically explore legal and ethical issues associated with computer use, as well as how computers influence modern society. Students may also be required to perform some computer operations.

#### **22998G10000: School to Work**

(11-12) 1 semester 1 credit

*Prerequisite: Permission of School Counselor/Principal*

**10202C05000: Photoshop (Web Graphics)**

(11-12) 1 semester 1 credit

Get a thorough grounding in Adobe Photoshop, the must-have digital imaging program for today's web and print designers. Hands-on projects include working with layers, making selections, incorporating color technique, creating special effects with filters and more. (3 ICCC College Credits) (Tuition fee required)

*Prerequisite: Basic Computer*

**10201C05000: Dreamweaver (Web Design) NOT AVAILABLE '18-'19**

(11-12) 1 semester 1 credit

Learn to create sophisticated web-sites with Macromedia's Dreamweaver - the preferred HTML editor of professional Web designers. Become skilled in designing sites with advanced layouts by using tables, style sheets, images and more. Go from beginner to intermediate as you create a portfolio-building project Web site. (3 ICCC College Credits) (Tuition fee required)

*Prerequisite: Photoshop or Permission from Instructor*

**10251C05000: Introduction to Business NOT AVAILABLE '18-'19**

(10-12) 1 semester 1 credit

Students will understand the importance of basic business skills in their everyday life. Students will study basic budgeting skills, how to identify alternative choices, and how to choose, plan for and get a job in a chosen career field. Students will examine the role of the various types of insurance available and study and explain when and why buying on credit is used. This is an ICCC college level course – 3 credit hours. (Tuition fee required).

*Prerequisite: None*

**12152G05011: Marketing**

(10-12) 1 semester 1 credit

Marketing—Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

*Prerequisite: Recommended—Intro to Business (many things will carry over into second semester)*

**04201G05011: Consumer Economics\***

(12) 1 semester 1 credit

Economics courses provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

*Prerequisite: None*

**22152G05011: Employability Skills (21<sup>st</sup> Century Skills) \***

(9) 1 semester (T-Th) .5 credit

Employability Skills courses help students match their interests and aptitudes to career options with a focus on using employment information effectively, acquiring and improving job-seeking and interview skills, composing job applications and resumes, and learning the skills needed to remain in and advance within the workplace. Course content may also include consumer education and personal money management topics.

**22151G05011: Career Education: \***

(9) 1 semester (T-Th) 1 credit

Students will use "I Have a Plan Iowa" (IHAPI) and complete the Interest Profiler, the Career Finder activities in the ICAP (Individual Career and Academic Plan) and fill out an electronic copy of the student's 4-year plan, to be in compliance with the Department of Education's guidelines. In addition, students will also spend time navigating the IHAPI software to research careers and colleges. Students will experience creating cover letters, resumes, and thank you letters. In addition, they will go through mock interviews for a job, answering pre-selected questions from IHAPI. Additional college prep and career prep activities will be used to enhance exposure to choosing future careers.

**22999G10011 Yearbook**

(10-11-12) 1 year 0 credits

For 2018-2019 this will be an extracurricular activity. Students in this course are responsible for producing The Pawprints, the school yearbook. Planning, financing, editing, photography, layout, and general management of this publications will be handled by students assisted by a monitor.

*Prerequisite: Photoshop recommended.*

**10152G05010 Computer Programming/Coding: NOT AVAILABLE 2018-2019**

(10-12) 1semester

1 credit

Students will be introduced to coding and programming using both block programming and native scripting. They will learn to think creatively, work collaboratively and reason systematically. Using the accelerated program from code.org, students will learn how to use, drag and drop block programming while learning the commands such as loops, macros, arrays and other commands.. Then students will be introduced to more complicated programming at Scratch.mit.edu. They will program and share interactive media such as stories and games with people from all over the world. Next, the students will be introduced to native coding using HTML. They will learn to create web pages with buttons, java and other multimedia additions. Finally, the students will create a project of their own, using the programming method of choice for a final project. The material easily adapts for everyone from ages 10-18. The course will use: [www.code.org](http://www.code.org), [www.scratch.mit.edu](http://www.scratch.mit.edu) and then native HTML.

## Foreign Language Department Philosophy

The major focus of St. Mary's High School is Christ. We were taught to be accepting of all people - races, colors, and sex - by our first teacher, Christ. Because of this, everyone needs to be exposed to other cultures and to develop an acceptance of each other. Foreign language allows for this exposure to other cultures. Knowledge of another language, besides giving a person another way to communicate, also teaches about people and other cultures. It makes the learner a globally aware person. The learner will develop a higher self-esteem, excellent communication skills, an open mind, and be tolerant and caring for others.

### Foreign Language Courses \*= Graduation requirement (4 credits)

#### **24042G:10000 Spanish 1\***

(9-11) 1 year 2 credits

The students are introduced to the language by stressing the development of writing, reading, listening, and speaking skills. A large vocabulary is built concentrating on everyday words and phrases. Exposure to Hispanic culture through special projects, research, and reading will be covered.

*Prerequisite: None*

#### **24053G10000: Spanish 2\***

(10-12) 1 year 2 credits

Students will continue to build on vocabulary from Spanish I and will focus more on grammar and language structure. Further development of speaking, writing, reading, and listening skills will occur as well as opportunities to explore in more depth the culture.

*Prerequisite: Spanish 1*

#### **24054G10000: Spanish 3**

(11-12) 1 year 2 credits

Continued practice of reading, speaking, and writing of the language will be accomplished. Application of grammar skills will be emphasized. A still further in-depth look at the Hispanic culture will occur.

*Prerequisite: Spanish 2*

#### **24055G10000: Spanish 4**

(12) 1 year 2 credits

This course is a continuation of Spanish 3. Mastery of communication skills of the language will be accomplished. Practical usage of the language will be a major focus of the class. An in-depth look at the Hispanic culture will occur including projects, research, and presentations.

*Prerequisite: Spanish 3*

#### **24057G10005: Spanish for Native Speakers 1, 2,**

(9-12) 1 year 2 credits

Spanish for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Spanish for Native Speakers courses often move faster than do regular Spanish foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.



# Health & Physical Education Department

## Physical Education Philosophy

Physical Education is basic to the best development of the whole person because it is a continuous, ever-present part of life, developing from simple movements for small youngsters to lifetime leisure activities for adults. Physical Education must help all children grow physically, socially, intellectually, and emotionally, as individuals and as members of society, by providing opportunities for participation in physical activities adapted to the needs, interests, and capacities of the children and the community. Through Physical Education, children will become more aware of and comfortable with their bodies, which will enable them to feel special as they make their unique and individual contributions to society.

## Health Philosophy

Good health is necessary for a person to function happily, effectively, and productively. Therefore, Health is an essential part of the St. Mary's High School curriculum because it is related to every aspect of our Catholic education. The definition of Health is rapidly changing. Where once health referred to the presence or absence of physical illness, today we realize Health refers to PHYSICAL- (fitness, hygiene, drug affects, anatomy), MENTAL-(self-concept, family relations, spirituality, hygiene), and SOCIAL-(peer groups, social skills, environmental causes) well being and all are part of today's Health Education. At St. Mary's we believe good Health in today's modern society is challenged by the prevalence of alcohol and drug misuse, sexual exploitation, selfish individualism, materialism, welfarism, conformity and violence that is often glorified by the media and idolized by our young. We believe a Catholic school health program must challenge these cultural icons in order to produce a whole person who builds up society rather than tears it down.

## Health & Physical Education Courses \*= Graduation requirement

(Health -2credits; PE – 4 credits)

### 08001G10000: Physical Education I\*

(9-12) 1 year 1 credit

Cardio-respiratory conditioning and weight training will be key units in this course. Various team sport rules, strategies, and skills will be described and demonstrated. Also, for students in grades 11-12, there will be CPR training in their PE course. This will be required in order to graduate from High School.

Prerequisite: None

### 08051G05010: Health I \*

(9-12) 1 semester 1 credit

General health topics will be covered in this class allowing students to identify positive and negative traits in health that affect the human body. This class will be offered to coincide with Physical Education/Health.

Prerequisite: None

### 08051G05020: Health II\*

(9-12) 1 semester 1 credit

Public, family, and personal health issues will be applied to individual knowledge, values, and morals. This class will require a lot of classroom discussion and participation while covering units from Drugs to Child Development.

Prerequisite: None

\*\*\*CPR: Graduating seniors, beginning with the year 2013, are required by the State of Iowa to receive CPR certification. This certification will be honored for 2 years.

## Language Arts Department Philosophy

The English program at St. Mary's High School fosters the emotional, spiritual, intellectual, and social growth of each student. Literature, writing and oral studies shape our culture, mirror humanity, and offer creative support of our human values. Through the integration of Catholic Christian values with all aspects of the program, each student learns to function in today's society.

### Language Arts Courses \*= Graduation requirement (8 credits)

#### **01001G10001: English I\***

(9) 1 year 2 credits

This course will introduce students to various styles of writing. The major literary genres will be discussed, identified, explained, and analyzed throughout this course. Utilization of correct grammar, both written and orally, will be communicated in this course.

*Prerequisite: None*

#### **01002G10002: English II\***

(10) 1 year 2 credits

This course will further develop the major literary genres learned in English I; there will be a stronger emphasis on analysis and use of critical thinking skills. This course will also require the students to refresh their grammar skills.

*Prerequisite: English I*

#### **01054G10000: English III - Literature (American)**

(11-12) 1 year 2 credits

This required course examines various forms of literature by American authors. A chronological approach is used to relate pieces to events in American History. Students explore author techniques, how they were used to accomplish a desired effect, how events of the time influenced the writing and how these all relate to form society's thoughts and opinions.

*Prerequisite: English II*

#### **01058G10000: World Literature**

(11-12) 1 year 2 credits

World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is an integral part of literature courses, and written compositions are often required.

#### **01151G05000: Communication\***

(9-12) 1 semester 1 credit

This course takes a holistic approach to communication. Listening skills, verbal and nonverbal language is studied, with emphasis on interpersonal communication and public speaking. Students will learn to communicate effectively, practice speaking before formal and informal audiences and write various styles of speeches. Some styles of speaking covered include persuasive speaking, expository speaking, presentations and improvisational speaking. A minimum of six students is required to conduct this class

*Prerequisite: None*

#### **01104G05000: Creative Writing**

(11-12) 1 year 1 Credit

The writing process is reviewed and applied to a variety of creative styles of writing rather than more academic-style essays. The primary focus is on word choice and description. Grammar skills are reviewed.

*Prerequisite: English II*

#### **01061G05000: Literature of a Genre**

(11-12) 1 sem. 1Credit

Students in this course will study and reflect upon themes presented in the movies and television shows. Students will develop analysis skills as they reflect upon the lessons to be learned from each section watched. Movie making components are also studied. Discussion is an integral part of this course and some written compositions are required.

*Prerequisite: None*

#### **01103G05000: Composition**

(10-12) 1 semester 1 credit

High School Composition courses focus on students' writing skills and develop their ability to compose different types of papers for a range of purposes and audiences. These courses enable students to explore and practice descriptive, narrative, persuasive, or expository styles as they write paragraphs, essays, letters, applications, formal documented papers, or technical reports. Although composition courses may present some opportunities for creative writing, their focus usually remains on nonfiction, scholarly, or formal writing.

**01103C05010: Composition I**

(11-12) 1 semester 1 credit

ENG 105: This is a college level course. This course focuses on the process of writing expressive and informative prose, incorporating oral, visual and electronic modes. It introduces research skills and critical thinking skills. (3 ICCC College Credits) Students will need specific ACT and/or Iowa Assessment Test scores to register. (SM Tuition fee required).

**01103C05020: Composition II**

(11-12) 1 semester 1 credit

ENG 106: This college level course is a continuation of ENG-105 with advanced work in research techniques.

*Pre-requisite: ENG105 Composition I with a "C" grade or better. (SM Tuition fee required). 3 ICCC College Credits*

**01066G05000: Strategic Reading(Test Prep)**

(11-12) 1 semester 1 credit

Strategic Reading course are intended to improve a student's vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note-taking or for understanding and evaluating the important points of a text.

**01203G05000: English—Test Preparation**

(9-12) 1 semester 1 credit

English—Test preparation courses provide students with activities in analytical thinking and with the skills and strategies associated with standardized test taking. Topics covered include vocabulary, reading comprehension and writing strategies, as well as time management, scoring procedures, and dealing with stress. Course materials may include ACT, SAT, and PSAT review materials, current assessment software programs, and previous standardized examinations.

**01053C05000: Intro to Literature**

(11-12) 1 semester. 1 credit

This course includes training in understanding the forms of imaginative literature: short story, drama, poetry, and novel. Attention is given to personal and social values as they appear in selected readings.

This course is an introduction to the reading and interpretation of literature. It is necessary to READ in order to meet the course objectives. The course covers short fiction, poetry, novel, and drama genres and will incorporate terminology within each unit.

*(3 ICCC College Credits-SM Tuition fee required). Scores Required.*

**01054C05000: American Literature**

(11-12) 1 semester 1 credit

This course emphasizes the vast spectrum of authors writing in different genres by focusing on a particular theme in American literature. An intensive study of a few authors will be used to represent the full spectrum. Students will be expected to read and respond to the literature through essay and objective test questions.

*(3 ICCC College Credits-SM Tuition fee required). Scores Required*

**01151C05000: Public Speaking**

(11-12) 1 semester 1 credit

This course is designed to develop the basic skills of speech communication by studying the process from invention through delivery. Emphasis is placed on the preparation and delivery of presentations.

*Prerequisite: ENG 105 w/C or above (3 ICCC College Credits) Scores Required*

## Mathematics Department Philosophy

It is the aim of the Math Department at St. Mary's to provide courses which allow each student to start at his or her own level in mathematics and move forward at an appropriate pace. Through such a program of courses, students will acquire specific skills in general math, algebra, geometry, and advanced math topics. These skills will enable the students to continue their math education at a post-secondary level and/or to become critical thinkers, creative problem-solvers, and self-directed learners who can communicate mathematical ideas clearly, produce quality work, and work effectively with others throughout their lives.

### Math Courses \*= Graduation requirement (6 credits)

#### **02157G10011: Consumer Math**

(11-12) 1 semester 1 credit

Students will first review basic math skills that will be used in their roles as workers and knowledgeable consumers. Students will then learn how to handle their money wisely, so they can use their income to meet day-to-day living expenses and still save and invest part of their income for use in the future. Units are gross income, net income, checking accounts, savings accounts, cash purchases, charge accounts and credit cards, loans, auto transportation, housing costs, insurance and investments, and record keeping.

*Prerequisite:* Two years of High School Math

#### **02154G10000: Business Math**

(11-12) 1 semester 1 credit

This course is the second semester of Consumer Math. Students will apply business mathematics to actual business practices. They will explore eleven different departments of one business and learn how Math is used in each department and how each department contributes to the entire operation of the business. Units are personnel, production, purchasing, sales, marketing, warehousing and distribution, services, accounting, accounting records, financial, and information management.

*Prerequisite:* Two years of High School Math

#### **02052G10000: Algebra 1\***

(8-12) 1 year 2 credits

The following topics will be studied: Real numbers and operations, equations in one and two variables, linear equations, linear systems, functions, and variation, polynomials, factoring, algebraic fractions and operations, ratio and proportion, fractional equations, percent, mixture and work problems, exponents, and scientific notation, inequalities in one and two variables, absolute value, rational and irrational numbers, radical expressions, and quadratic equations.

*Prerequisite:* Teacher Recommendation

#### **02051G10000: Pre-Algebra**

(9-12) 1 year 2 credits

Pre-Algebra courses increase students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities. *Prerequisite:* Teacher Recommendation

#### **02072G10000: Geometry**

(9-12) 1 year 2 credits

The following topics will be studied: Points, lines, planes, angles. If-then statements, converses, contra positives, deductive reasoning, direct and indirect proof. Parallel lines and planes. Congruence and similarity. Triangles, quadrilaterals, polygons, circles, prisms, pyramids, cylinders, and cones. Area and volume.

*Prerequisite:* Algebra 1

#### **02056G10000: Algebra 2**

(10-12) 1 year 2 credits

A college preparatory mathematics class. The following topics will be studied: real numbers and operations, complex numbers and operations, equations in one and two variables, inequalities in one and two variables. Functions, relations, polynomials, rational expressions, variation, proportion, matrices and determinants, statistics, and probability. Linear, rational, quadratic, and some higher degree polynomial equations and functions. Analytic geometry including distance, midpoint, conic sections, and systems, triangle trigonometry, sequences, and series.

*Prerequisite:* Geometry

#### **02110G10000: Pre-Calculus**

(11-12) 1 year 2 credits

A college preparatory mathematics class. Students will do more detailed and in depth work with functions and relations, polynomials functions, rational functions, trigonometric functions, parametric functions, conic sections, polar equations, sequences, series, mathematical induction, and the binomial theorem.

*Prerequisite:* Geometry/Algebra 2

**02121C05011: Calculus I** (02121C05012)

(12) 1 semester 1 credit

MAT 210: This college credit course is offered at Storm Lake Public through Iowa Central Community College. This is a first course in integrated calculus and analytic geometry. The concepts of analytic geometry are studied as they apply to calculus. The calculus concepts covered include the rate of change of a function, limits, derivatives of algebraic, logarithmic, trigonometric and inverse trigonometric functions, applications of the derivative and an introduction to integration. See Counselor for information.

Pre-requisite: *Pre-Calculus + Proficient score ALEKS test. . (3 BVU College Credits)*

**02121C05011: Calculus II** (02121C05012)

(12) 1 semester 1 credit

MAT 216: This college credit course is offered at Storm Lake Public through Iowa Central Community College. This is the second course of the calculus sequence. It includes the study of techniques and applications of integration, infinite series, polar equations and graphs, and vectors in two and three dimensions and vector-valued functions.

Pre-requisite: *MAT 210 with "C" grade or better (3 BVU College Credits)*

**02201C05000: Statistics**

(12) 1 semester 1 credit

MAT 156: This college credit course is offered at Storm Lake Public through Iowa Central Community College. This is the first course in basic probability and statistics which includes the study of frequency distributions, measures of central tendency and dispersion, elements of statistical inference, regression and correlation. This course satisfies a college general education requirement in the Math/Science area

Pre-requisite: *Proficient score on Iowa Assessments or the ALEKS test. (3 ICCC College Credits)*

## Science Department Philosophy

The science department's role in the education process is to assist students in becoming informed individuals who can think critically and logically when needed and better understand the natural and scientific phenomena of the world that they live in. The Science program helps students do this by teaching them how to collect, analyze, interpret, apply, and communicate data and other scientific information.

### Science Courses \*= Graduation requirement (6 credits)

*All science courses will have a Lab Fee: \$15.00*

#### **03159G10000: Physical Science\***

(9) 1 year 2 credit

This course covers the structure of the earth and the dynamics of our planet. Topics include: physical and chemical properties of the layers of the earth, plate tectonics, the geologic time scale, earthquakes, volcanoes, mapping, weather and continued practice with the metric system.

*Prerequisite: None*

#### **03051G10000: Biology\***

(10) 1 year 2 credits

Biology is the study of life, living things, and life's processes. This course examines the basic principles of biological science in several units: The Nature of Life, Cell Biology, Genetics, Evolution, Ecology, and Plants. Understanding of these principles is necessary for further study in biological sciences.

*Prerequisite: None, freshmen must have administrative approval to take this class.*

#### **0362G10000: Conceptual Biology \*** NOT AVAILABLE '18-'19

(10-12) 1 year 2 credits

This course provides students with a basic understanding of living things. Topics covered may include ecology and environmental problems such as overpopulation and pollution as well as cells, types of organisms, evolutionary behavior, and inheritance.

*Prerequisite: Instructor permission*

#### **03052G10000: Advanced Biology**

(12) 1 year 2 credits

Usually taken after a comprehensive initial study of biology, Biology—Advanced Studies courses cover biological systems in more detail. Topics that may be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms.

*Prerequisite: 3 years of science and permission from the instructor .*

#### **03053G10000: Anatomy and Physiology**

(11-12) 1 year 2 credit

Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.

*Prerequisite: Biology and instructor permission*

#### **03101G10000: Chemistry\***

(11-12) 1 year

This course will prepare students for college level Chemistry. Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

*Prerequisite: A "B" or above in Algebra I, Geometry, Physical Science and Biology (or Administrative/Instructor permission).*

#### **03105G10001: Conceptual Chemistry \***

(11-12) 1 year 2 credits

Conceptual Chemistry courses are practical, non quantitative chemistry courses designed for students who desire an understanding of basic chemical concepts and applications.

#### **03151G10000: Physics**

(12) 1 year 2 credits

This course is offered through the public school. Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

*Prerequisite: Algebra 2 or Administrative/Instructor permission.*

## Social Sciences Department Philosophy

Realizing the ever-changing pressures placed on our youth by society, the social studies department at St. Mary's High School will enable students to gain knowledge of the importance of their position in the global community. We should guide our students into an understanding of cultural differences that exist in both local and global communities. We must show that these differences are important in our society. To become responsible citizens, students need information provided by all the social fields. Values and attitudes, shaped by Christian tradition, need to be developed and expressed. Knowledge of past events and current affairs need to be presented so an understanding of society is developed. This will encourage social participation by students in their society.

### Social Sciences Courses \*= Graduation requirement (6 credits)

**04001G05010: World Geography I\*** (9) 1 semester 1 credit

The focus of this required course is the regions of the world. Students will study the Geography of Europe and the Americas; (Canada and Greenland, the United States, Mexico and Central America, the Caribbean Islands, South America, and Europe). Topics include the physical environment, the political landscape, the relationship between people and the land, economic production and development, the movement of people, goods and ideas, and overall culture.

*Prerequisite: None*

**04001G05002 World Geography II** (9-12) 1 semester 1 credit

The focus of this required course is the regions of the world. Students will study the Geography of Africa and the Eastern World; (the Middle East and North Africa, Africa South of the Sahara, Northern Eurasia, Central and Southern Asia, Eastern and Southeast Asia, Australia and the Pacific Islands). Topics include the physical environment, the political landscape, the relationship between people and the land, economic production and development, the movement of people, goods and ideas, and overall culture.

**04053G10000: Modern World History\*** (10-12) 1 year 2 credits

Students will delve into the historical highlights of world events and how they relate to the United States. Beginning with an overview of ancient history then moving on to an understanding of the Renaissance and continuing through the present time exploring political, economic, social, religious, military, scientific, and cultural developments.

*Prerequisite: Geography*

**04101G10000: Modern U.S. History\*** (11-12) 1 year 2 credits

Students explore the highlights in events, people, and ideas of the United States beginning at 1865, and going to the present time. Opportunities for research, hands-on experiences, and compare/contrast of the past to the present will be included. Students will explore political, military, scientific, and social developments.

*Prerequisite: Modern World History*

**04151G05000: U.S. Government\*** (12) 1 semester 1 credit

The basic structure and function of government in the U.S. is covered. Students will understand the basic rights and responsibilities of citizens, the structures of other forms of government around the world, the Constitution of the United States, and the role of the President, Congress, and Supreme Court. Students will also discuss lobbying and influences of outside sources on the government.

*Prerequisite: Modern U.S. History*

**04106G05010: Contemporary Issues (Current Events I)** (11-12) semester 1 credit

Students will learn about current news events through weekly article research, writing and discussion. Students will also learn background and developments on overlying national and world issues themed on society, culture, education, morality, the law, politics, and international relations.

**04106G05002: Contemporary Issues (Current /Events II)** (11-12) semester 1 credit

The course will be a continuation of current even discussion and weekly research, writing, as well as new, contemporary topics for classroom lecture and discussion. Though different first semester, the topics will continue to revolve around society, culture, education, morality, legality, and international relations.

**04259G05000: Particular Topics in Sociology (Holocaust)** (11-12) 1 semester 1 credit

These courses examine a particular topic in sociology, such as culture and society or the individual in society, rather than provide an overview of the field of sociology. The student will develop an understanding of the rise in anti-Semitism, the Nazi party, Adolph Hitler, and the holocaust. Recent genocide will be examined and other world issues resulting in potential genocide.

**04254C05000: Psychology**

(11-12) 1 semester 1 credit

This is a college course taught on the St. Mary's campus by a visiting professor. This course includes the tools for the study of psychology, basic psychological processes, personality and social behavior, contemporary knowledge of motives, intelligence, learning and emphasis on the language of modern psychology. (Scores Required) (Tuition fee required).

*Prerequisite: Permission of School Counselor (Scores Required)*

**04258C05000: Sociology**

(11-12) 1 semester 1 credit

This is a college course taught online. This course is a concise study of human behavior from the perspective of Sociologists. It will examine the ways in which social interaction, social processes, and social institution comprise our sociological imagination. The course will also explore the ways that personality, status, role, class, gender, age, race, and ethnicity affect human interaction and institutions.

*Prerequisite: Permission of School Counselor (Scores Required)*



## Theology Department Philosophy

The theology program at St. Mary's High School assists students in experiencing God's presence in their lives by providing a thorough understanding of basic Catholic teaching, nurturing spiritual growth, and providing formation in moral decision-making and scriptural knowledge in a historical context, so that students will integrate their personal commitment to Jesus Christ into their decision-making and entire lifestyle.

### Theology Courses \*= Graduation requirement (8 credits)

**07001G10000: Catholic Religious Foundations\*** (9) 1 semester 1 credit

This introductory course surveys the teachings, practices, and beliefs of the Catholic Church - exploring topics including God the Father, Jesus, Holy Spirit, Mary, prayer, Sacraments, Scripture, traditions, and the Church. The course begins by looking at the personal identity of each student - helping them to answer the question, "Who am I?" and then applying what they believe about themselves to the Church. This course is a basis for future theology courses taken.

*Prerequisite: None*

**07001G10000: Christology & Sacraments\*** (9) 1 semester 1 credit

This course explores the nature of the seven Sacraments in light of Scripture, Church History and tradition, and contemporary Church teachings. Students are allowed to explore how God is present in the world, in the Church, and in people, and how we celebrate that presence through symbols, sign, words, and ritual.

*Prerequisite: Catholic Religious Foundations*

**07005G10000: Scriptures\*** (10) 1 year 2 credits

This survey course explores the content, themes, and structure of Hebrew (Old Testament) and Christian (New Testament) Scripture, demonstrating how faith in one God developed and was experienced by the Hebrew people from the time of Abraham until shortly before the birth of Christ and how the life of Christ led to the development of our Christian faith as a result of the missionary work and writings of the early church. This course attempts to help the student understand how our faith in God is based on the Hebrew Scriptures and the life of Christ, which enlightens for us the mission of the Church and our own faith. Students in this course will participate in the Parish Confirmation Program.

*Prerequisite: Religious Foundations and Sacraments*

**07008G10000: Comparative Religion & Church History\*** (11) 1 semester 1 credit

Beginning with the models of the Church, this course explores the development of the Church from the time of St. Paul to the Present. This course explores how the Church has affected and has been affected by world history, how it has grown, struggled and survived two thousand years of history, and how this history affects us and our world today. Students will also receive an overview of the belief systems of the world's major living religions; Judaism, Christianity, Islam, and Hinduism. *Prerequisite: Scriptures*

**07008G10000: Ethics & Morality\*** (11) 1 semester 1 credit

This course explores the Catholic Christian approach to personal morality in order to help the student understand how to make good personal moral decisions by understanding the definition of morality, conscience formation, relationship with ourselves, others, and with God.

*Prerequisite: Church History*

**07014G10000: Justice, Peace and Faith\*** (12) 1 semester 1 credit

This course helps the student to realize that the essential message of Scripture, and thus every Christian's duty is to respond to social issues - especially the needs of the less fortunate and the injustices of the world. Study includes understanding the Church's social justice teaching in order to understand how our actions and attitudes affect not only ourselves and the people around us, but all people of the world and how we can apply Church teachings to current social issues, such as poverty, hunger, sexism, racism, and war.

*Prerequisite: Ethics and Morality*

**07014G10000: Christian Lifestyle\*** (12) 1 semester 1 credit

This course begins with the fundamental understanding of ourselves as human persons who are called by God to live in relationship with God, with others and with ourselves whether married person, as a priest, brother, sister, or as a single adult. To whichever vocation we are called, we are called to a life of "lifelong loving" of God, others, and self. This course attempts to pull together the students' theological studies to help the student understand how he or she can practically live out a life based on the teachings of Christ.

*Prerequisite: Justice Peace and Faith*

# Elective Activities

This subject area can encompass courses that do not concern a particular subject field or discipline. All courses taken in a particular subject area outside of the **required courses** are considered **elective** courses.

## Elective Courses--3= Graduation requirement

**05154G: Creative Art—Comprehensive** (9-12) 1 semester 1 credit  
**Art 2D and Art 3D** are prerequisite courses for enrollment in other courses in the art area. The course is a sequential study of the basic elements of art: line, shape, value, form, texture, color, and space. Fundamental techniques will be employed in the study of the basic elements and will include a general knowledge of the visual arts.  
These initial courses cover the language, materials and processes of a particular art form and the design elements and principles supporting a work of art. This course is a pre-requisite for any other art courses at public.

**19998G10000: Teacher Aide I & II** (11-12) 1-2 semesters 1 – 2 credits  
Teacher aide courses provide students with the opportunity to assist teachers with classroom related duties. Opportunities will include preparing student materials, correcting papers, providing individual remedial assistance to students, reading to/with students, and assisting with the supervision of student activities.  
*Prerequisite: Permission of School Counselor*

**22151G10000: Job Shadowing** (11-12) 1 semester 0.5 credits  
*Prerequisite: Permission of School Counselor*

**01097G05000: Independent Research/Honors Project NOT AVAILABLE '18-'19** (11-12) 1 year 2 credits  
This independent research class is an Honors Course This course is organized as a mentorship with a teacher to enable students to conduct investigations related to their field of interest. Students must have a cumulative GPA of 3.50 or above and must be a junior or senior in order to participate in this class. Projects include  
*Prerequisite: Permission of Instructor*

**18001G: Intro to Agriculture and Natural Resources NOT AVAILABLE '18-'19** (10-11-12) 1 semester 1 credit  
Intro to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.

### PUBLIC SCHOOL ELECTIVE OFFERINGS

The following courses may be options as electives for students interested in these subject areas.

**05101G: General Band** (9-12) 1 year 2 credits  
General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of non-specified band literature styles (concert, marching, orchestral, and modern styles).

**05105G: Orchestra** (9-12) 1 year 2 credits  
Orchestra courses are designed to develop students' abilities to play brass, woodwind, percussion, and string instruments, covering a variety of string and orchestral literature styles.

**05154G: Creative Art—Comprehensive** (9-12) 1 semester 1 credit  
**Art 2D and Art 3D** are prerequisite courses for enrollment in other courses in the art area. The course is a sequential study of the basic elements of art: line, shape, value, form, texture, color, and space. Fundamental techniques will be employed in the study of the basic elements and will include a general knowledge of the visual arts.  
These initial courses cover the language, materials and processes of a particular art form and the design elements and principles supporting a work of art.

**05156G: Creative Art---Drawing/Advanced Drawing** (9-12) 1 semester each 1 credit  
This course is an introduction to the fundamentals of the drawing process. Students will develop visual skills and an understanding of pictorial problems. Emphasis is placed on the examination of expression using a variety of media and tools. Students will explore the physical characteristics of line through the use of pencil, pen and ink, charcoal, and so on. The class will increase the understanding of the expressive as well as representational properties of line as it relates to shape, value, texture, color and space.  
*Prerequisite: Art 2D or Art 3D*

**05157G: Creative Art – Painting/Advanced Painting** (9-12) 1 semester each 1 credit

Students enrolled in this course will gain skills in the use of oil, watercolor, and acrylic paints.

Students will develop an understanding of various painting techniques as well as an appreciation of paintings, both past and present. Research in art history will be applied to each project. Projects include the subject matter of landscapes, still life and choice exploration. Color Theory is an emphasis in each project

**05167G: Creative Photography** (11-12) 1 semester 1 credit

This course is an introduction to camera selection and handling, the capabilities of various lens, lighting and processing. It will include theories of photography, photographic history, and digital imaging and manipulation. Students can furnish their own SLR camera if desired. If a student does not have a camera, the art department provides cameras available for checkout. Students should not elect this course unless they are prepared to spend additional time outside of class and during the school day in lab activities. Areas of photography explored are portraiture, nature, architecture, action shots and photojournalism.

*Prerequisite: Art Survey 2D or 3D*

*Concurrent Enrollment through ICCC(Photography I –ART 184 – 3 hours college credit)*

**05162G: Graphic Design I, II** (11-12) 1 semester each 1credit

This course will be a general survey of graphic design concepts and techniques. Students will study and apply the elements and principles of design as they pertain to page layout and communication. Students will learn to create effective logos, t-shirts and other communication media for a specific targeted audience. The tool of choice will be the computer, but will not be the only tool used in the course.

*Prerequisite: Art Survey or 3D; for Graphic Design II = Graphic Design I.*

*Concurrent Enrollment through ICCC (Graphic Design –ART 115—3 hours college credit)*

**05159G: Ceramics/Pottery/Advanced Pottery** (10-11-12) 1 sem. each 1-2 credits

This course will introduce the basic methods of designing, forming glazing, and firing clay. Students will develop knowledge of good design and composition as it pertains to form and expression through the exploration of projects that are both functional and non-functional. Using the techniques of pinch, coil, slab, and wheel throwing to create a variety of projects, students will achieve an understanding of the historic and cultural significance of this art form.

*Prerequisite: Art 2D or 3D*

**13003G: Industrial Arts –Foundations of Construction Technology** (9-12) 1 semester 1 credit

These courses expose students to the tools and machines that they may encounter in manufacturing-related occupations and enable them to develop the skills they need to use these tools in various applications.

This is an exploratory course designed to provide instruction in how to design and construct a house. Students will be involved with the fundamentals of construction design, fabrication and career exploration. Activities will include designing a house to include detailed floor plans, wall details and rafter plan and detail. Students will be exposed to the tools and machines that they may use.

**13054G: Wood Processing/Production – Woods I, II** (10-12) 1 semester 1 credit

Wood Processing/Production courses include studying the properties of woods and composites made from woods and using these materials to construct usable products. **Woods I** is a course designed to provide students with the introductory skills and knowledge needed to correctly perform woodworking operations using hand tools and stationary power equipment. Activities will include design and fabrication of a woodworking project. **Woods II**, is designed to provide students with advanced skills and knowledge needed to perform upper level woodworking operations using power equipment. It will also provide an introduction in the use of the wood shaper, pneumatic fastening systems, the plastic laminating process, and spray finishing techniques. Activities will include a raised panel door, advanced Computer Numerical Control activities, and a large-scale project.

*Prerequisites: Foundations of Construction Technology*

*Prerequisite for Woods II: Woods I*

**13003G: Industrial Arts—Foundations of Manufacturing Technology** (9-12) 1 semester 1 credit

These courses expose students to the tools and machines that they may encounter in manufacturing related occupations and enable them to develop the skills they need to use these tools in various applications.

Manufacturing Tech is an exploratory course designed to teach construction skills. This class teaches students how to sagely use hand tools and power equipment commonly used in the construction trade. Students will learn how to read blueprints as well as construct small buildings.

**21103G: Drafting- Architectural---Foundations of Engineering and Architectural Design & Advanced Architectural Draft and Design** (9-12) 1 semester each 1 credit

Drafting Architectural courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from architectural applications. They are also intended to help students develop general drafting skills but place a particular emphasis on interior and exterior residential design, site orientation, floor plans, electrical plans, design sketches, and presentation drawings.

-- Foundations of Engineering and Architectural Design is an exploratory level course designed to introduce the learner to the tools and techniques used in the drafting/design industry. Activities include mechanical architectural problems, and CAD exercises Utilizing Chief Architect 10.

--Advanced Architectural Drafting and Design is designed to further refine the skills already developed. Activities stress board and CAD skills and the development of architectural presentation. Commercial design experiences will be gained through the design team process. Teamwork, cooperative learning strategies, problem solving approaches to design problems, and employment experience opportunities will be provided. This course will continue to emphasize math, science, and language arts concepts with experiences in specialized applications.

*Prerequisite: Foundations of Constructions*

*Prerequisite for Advanced AD/D: Foundations of Engineering and Architectural Design*

**13207C: Beginning Welding I**

(11-12) 1 semester 1 credit

**Beginning Welding I** offers students instruction in flat and horizontal position welding. The welding process covers Shielded Metal Arc Welding (AC-DC), Gas Metal Arc Welding (MIG), Oxy-Acetylene Cutting and Welding, braze welding, plasma arc cutting, and Gas Tungsten Arc Welding.

*Prerequisite: Successful completion of*

*Foundations of Manufacturing Tech with a "C" or better and Guidance Approval*

*Concurrent Enrollment through ICCC (Beginning Welding – WEL 122—2 college credits)*

# .ST. MARY'S CATHOLIC SCHOOL -- FOUR YEAR EDUCATION PLAN

**Student** \_\_\_\_\_  
**Graduation Year** \_\_\_\_\_  
**Career Interest** \_\_\_\_\_  
**Career Cluster** \_\_\_\_\_

**Student Signature** \_\_\_\_\_  
**Parent/Guardian Signature** \_\_\_\_\_  
**Counselor Signature** \_\_\_\_\_  
**Post-Secondary Plans** \_\_\_\_\_

*\* Indicates required courses and generally at grade level indicated.*

<b>Grade 9</b>		<b>Grade 10</b>	
1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester
*English 9	*English 9	*English 10	*English 10
*Physical Science	*Physical Science	*Biology	*Biology
*Math--	*Math--	*Math--	*Math--
*World Geography	*Basic Computer	*World History	*World History
*Career /PE	*21 <sup>st</sup> Century Skills/PE	*Health I	*Health II
*Spanish I	*Spanish I	*Spanish II	*Spanish II
*Theology (CRF)	*Theology (Sacraments)	*Theology (Scriptures)	*Theology (Scriptures)
* Communications		*PE/SH	*PE/SH
<b>Grade 11</b>		<b>Grade 12</b>	
*American Literature-English III	*American Literature-English III	*English--	English--
*Science—Chemistry	*Science-- Chemistry	*Government	*Economics
*Math--	*Math--	*Theology—(JPF)	*Theology (Christian Lifestyle)
*American History	*American History	*PE/SH	*PE/SH
*PE/SH	*PE/SH	Elective	Elective
*Theology (Church History)	*Theology (Ethics/Morality)	Elective	Elective
Elective	Elective	Elective	Elective
Elective	Elective	Elective	Elective

<b>St. Mary's Graduation Requirements—total of 50 Credits</b>	
8 Credits English (1 per semester)	1 Credit Economics
1 Credit Communications (Counts towards English Credits) (1 per semester)	1 Credit Study Skills / Career Ed. (.5 + .5 = 1 per year)
6 Credits Social Studies (1 Credit World Geography/Government) 1 semester each.	1 Credit Basic Computer (1 semester)
6 Credits Science (1 per semester)	2 Credits Health (1 per semester)
4 Credits Foreign Language (1 per semester)	8 Credits Theology (1 per semester)
4 Credits PE (1 per year)	3 Credits Electives (1 per semester)
6 Credits Math (1 per semester)	
<b>*These graduation requirements MAY be taken during another year, but are typically taken at the grade level suggested.</b>	

**CORE CLASSES:**

The following courses are considered core classes in determining the RAI or meeting the entrance requirements for 4-year colleges. (.5 points for each semester)

**English:**

- English 9, 10
- American Literature
- Communications
- Creative Writing
- College English I and II
- Media as Literature

**Science:**

- Physical Science
- \*Biology
- \*Chemistry
- \*Physics
- Advanced Chemistry
- Anatomy and Physiology
- Advanced Biology
- Life/Physical, Other Science

\* = 2 of these 3 required for entrance into UI and ISU  
 \*Physics required for entrance into the College of Engineering at UI and Nursing Program.

**Social Science:**

- World Geography I, II
- World History
- American History
- Government
- Consumer Economics
- Sociology
- Psychology

**Foreign Language:**

- \*Spanish I,
  - \*Spanish II
  - Spanish III
  - Spanish IV
- \* = Required for entrance to UI; ISU-to the college of Liberal Arts and Sciences, and College of Engineering. Exit requirements will vary depending on the chosen major/minor. For UNI—exit graduation requirement fulfilled by 2 years HS Foreign Lang. with minimum of C-.

**Math:**

- Algebra I, II\*
  - Geometry\*
  - Pre-Calculus\*\*
  - Calculus I, II, III
  - Principles of Statistics
- \*Required for entrance into the 3 Regents Universities.  
 \*\*Required for entrance into the College of Engineering at UI

Computing your RAI Score: (For Entrance to the Regent Universities). _____(2 X ACT Composite Score) ±_____ (1 x Percentile High School Rank) +_____ (20 X high school GPA) +_____ (5 x NUMBER OF HIGH SCHOOL CORE COURSES) <hr style="border: 1px solid black;"/> =_____ <b>Regent Admission Index Score (RAI) at least 245 for automatic admission/+ required courses in math, science, and FL.</b>
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St. Mary’s College Prep graduation requirements meet most college admission requirements; however, always check with your chosen post-secondary institution to be sure. Be sure, also, to check on college **exit** requirements when you are looking at Foreign Language requirements. Admission and Exit requirements may vary.