

Magnet Course Description 2010 – 2011

CATHOLIC YOUTH LEADERSHIP 20L

This course is designed to help students develop the skills necessary to be faith leaders in their school and parishes by working along side faith mentors from their school and parishes. The course will consist of both in-class instruction and out-of-school practica. The goals of the program are: to have students learn to prepare liturgies of the word, liturgies of the Eucharist and a curriculum-based retreat for their high school; and to both learn and use the skills necessary to take leadership of a parish-based ministry (e.g. youth ministry, liturgy, ecumenism, children's liturgy.) The course is open to students in grades 10, 11 and 12 and will be offered over 2 semesters outside of regular schools hours. Students will be able to obtain 1 secondary level credit in the elective area. There is an application process to take this class.

SPANISH 10

The Spanish 10 course of study will enable students to communicate effectively, within realistic limits, in Spanish. Students should develop an appreciation and understanding of the Hispanic culture. This class may enable them to take advantage of vocational and leisure opportunities. The course uses the communicative approach; therefore, students will begin speaking Spanish from day one. Spanish 10 is open to grade 10, 11, and 12 students.

SPANISH 20

**Prerequisite – Spanish 10*

The Spanish 20 course of study is a continuation of the Spanish 10 course. Students will increase their ability to communicate in Spanish both orally and in written form.

SPANISH 30

**Prerequisite – Spanish 20*

This class will be the enhanced level in the Spanish program. Emphasis will be on fluency in oral and written language skills. Special attention will be given to the grammar components of the language. Areas of culture and lifestyle will also be included.

SPANISH 30 AP

**Prerequisite – Spanish 20*

Grade 12 students will be invited to prepare and challenge the Spanish 30 AP exam. Lunch study sessions will be made available to those choosing to challenge the Spanish AP exam. **To be eligible for this class, students must complete an AP application form and have a teacher recommendation.**

CAREER & WORK EXPLORATION 10/20

This 2-credit course consists of in-class and workplace learning that offers the students the opportunity to access career development information in a school and workplace setting. Career and Work Exploration 10/20 focuses on career awareness and explores the stages of the career development continuum. Students engage in a variety of interactive classroom activities relating to career planning, portfolio development, employability skills, transferable skills, and labour and safety issues as they apply to young workers in a workplace setting.

CAREER & WORK EXPLORATION A30/B30

This 2-credit course consists of in-class and workplace learning that allows students to make transitions to work, apprenticeship and post-secondary programs. Career and Work Exploration A30/B30 maximizes opportunities for students to access the workplace and to experience career choices. Topics such as WHMIS (Workplace Hazardous Materials Information System), Labour Standards, Workplace Ethics, and Equity will be discussed. Students may gain entry level skills to employment, refine skills in a designated trade, or establish career pathways in a workplace setting.

COMMUNICATION PRODUCTION TECHNOLOGY 20/30 NEW MEDIA COMMUNICATIONS

**Prerequisite – Communication Production Technology 10*

In the first part of the course, students will learn to create multimedia presentations and interactive websites using *Director* and *Photoshop*. Skills such as frame-by-frame navigation, classical and tweening

animation and image manipulation will be incorporated into presentations and electronic portfolios. Students will use a combination of audio, video, and graphics to create multimedia presentations for a portfolio. The course is designed to develop technical skills for employability and further program opportunities relating to Communication Production Technology. The second part of the course will have students creating interactive interfaces using a variety of software such as *Flash*, *Dreamweaver*, *Photoshop*, and *Director*. Students will create their own videos and enhance them with visual effects to incorporate into their assignments. Students will begin to develop a portfolio to include videos, multimedia presentations, and interactive websites. Students will explore opportunities in job related fields such as web design, graphic arts, advertising and multimedia. Post-secondary program options at SIAST and the University of Regina will be explored.

PAA SURVEY A30 APPLIED TECHNOLOGY NEW MEDIA COMMUNICATIONS

**Prerequisite – Communication Production Technology 20/30 New Media*

Students enrolled in this course will create multimedia presentations through the design of interactive websites and presentations using *Director* and *Photoshop*. Students will enhance the frame-by-frame navigation, classical and tweening animation and image manipulation with the use of their own audio, video and multimedia presentations and incorporate electronic portfolios.

PAA SURVEY B30 APPLIED TECHNOLOGY NEW MEDIA COMMUNICATIONS

**Prerequisite – Communication Production Technology 20/30 New Media*

Students refine interactive interfaces using a variety of software. Students will create their own videos and enhance them with visual effects to incorporate into their assignments. Students will refine their electronic portfolio to include the development of their own videos, multimedia presentations, and interactive websites with the use of *Flash*, *Dreamweaver*, *Photoshop*, and *Director* software. Students will explore opportunities in job related fields such as web design, graphic arts, advertising and multimedia. Post-secondary program options at SIAST and the University of Regina will be explored.

ACCOUNTING 10

This first accounting course introduces students to the purposes and practices of accounting. Topics include accounting careers and concepts, starting an accounting system, journalizing business transactions, posting, developing a work sheet with financial statements, adjusting and closing entries, and accounting for a sole proprietorship. Emphasis is on individualized work with a number of practical simulations.

ACCOUNTING 20

Prerequisite: Accounting 10

Basic accounting principles are expanded to include the preparation of the Worksheet, Income Statement, and Balance Sheet for a merchandising firm. Analytical ratios are used to interpret financial statements and make managerial operating decisions. Topics include an accounting system with special journals, uncollectable accounts, and end-of-period financial statements for a partnership.

ACCOUNTING 30

Prerequisite: Accounting 20

This course is designed to review basic accounting concepts, principles and practices with a more advanced treatment of accounting theories and practices. Emphasis is on preparing financial statements for large corporations with shareholders. Statements are analyzed for the purposes of making managerial operating and capital investment decisions. Learning activities in all three accounting courses are directed toward developing the students' knowledge and skills for the workforce and/or college accounting classes.

COMPUTER NETWORKING 10

This course is designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer networking field. Instruction includes safety, networking, network terminology and protocols, network standards. Students completing the 10, 20 and 30 courses in computer Networking may be eligible to write the CCNA exam and receive CCNA certification in addition to high school credits.

COMPUTER NETWORKING 20

Prerequisite: Computer Networking 10

This course is designed to provide students with classroom and laboratory experience in current and emerging networking technology that will allow them to enter employment and/or further education in training in the computer-networking field. Topics of instruction include safety, networking, network terminology, and protocols, network standards, LANs, WANs, OSSSI models, Ethernet, Token Ring, Fibre Distributed Data Interface, TCP/IP Addressing Protocol, dynamic routing, routing, and the network administrator's role and function. Additional topics from the following will also be included, as time permits. Advanced router configurations, local area network (LAN) switching, virtual LANs, LAN Design, interior gateway routing protocol (IGRP), access control lists (ACL), Novell, IPX, and network management. Students will begin a Threaded case study, where they will design and document a hypothetical network. The remainder of these topics will be included in the Computer Networking 30 course. Particular emphasis

COMMERCIAL COOKING 10

This course combines theory and 'hands on' experiences when preparing foods on a larger scale. Learning how to use commercial food equipment and tools is necessary to assure safety on the job. Learning how to handle food safely and prevent food poisoning is equally as important. Students also have the opportunity to obtain a Food Handler's Certificate. Students will prepare soups, arrange salads, assemble sandwiches, and bake muffins, cookies and quick breads. Some careers in foods may include: a chef, dietician, working in test kitchens 'testing' recipes or becoming an entrepreneur. The nine units covered include:

- Unit One: Food Industry Careers and Jobs
- Unit Two: Safety and Sanitation
- Unit Three: Tool and Equipment
- Unit Four: Kitchen Organization and Food Preparation
- Unit Five: Stocks and Soups
- Unit Six: Vegetables and Fruits
- Unit Seven: Sandwiches
- Unit Eight: Starches-Rice and Potatoes
- Unit Nine: Cookies and Quick Breads

COMMERCIAL COOKING 20

**Prerequisite* – Commercial Cooking 10*

From the basic knowledge and skills learned at the Commercial Cooking 10 level, a minimum of 70% of the time will be spent in the commercial kitchen setting. Students will make white and brown stock; prepare sauces such as Hollandaise for Eggs Benedict, make fruit and custard pies and bake and ice different types of cakes. Creating apple birds, fancy mushroom caps and carrot flowers are not only fun to do but add eye appeal to any meal. Breakfast preparation for large groups is an addition to this course. The students make eggs over easy, crisp bacon, and fluffy pancakes for the staff and student body. After cleaning the grill, deep fryers and freezers, the students can enjoy their breakfast for free. The ten units covered include:

- Unit One: Safety and Sanitation
- Unit Two: Tools and Equipment
- Unit Three: Kitchen Organization and Food Preparation
- Unit Four: Stocks, Sauces, and Soups
- Unit Five: Vegetables and Fruits
- Unit Six: The Pantry
- Unit Seven: Starches

Unit Eight: Baked Goods and Dessert
Unit Nine: Egg Cookery and Breakfast Preparation
Unit Ten: Work Study and Follow- up Activities

COMMERCIAL COOKING 30

**Prerequisite* – Commercial Cooking 20*

Students can learn to become a gourmet cook and caterer. In this 30 level course, students will cook Chicken Cordon Bleu, Roast Beef with Yorkshire pudding, and fabulous dishes such as Sushi and Fajitas from other countries. Desserts could include Crème Caramel, Chocolate Mousse or a French Silk pie. Students will also learn cake decorating techniques, how to make bread, croissants, cinnamon buns and pastas from scratch. Entertaining with food includes learning how to make a special meal with all the trimmings. After completing this course, students can challenge the apprenticeship exam in food services, which is equivalent to the first year in cooking school. Food careers, other than food services, include a food technologist, food scientist, dietician, a corporate chef, and 'recipe testing' kitchen personnel. Units eleven covered include:

Unit One: Safety and Sanitation
Unit Two: Tools and Equipment
Unit Three: Kitchen Organization and Food Preparation
Unit Four: Stocks, Sauces, and Soups
Unit Five: Vegetables and Fruits
Unit Six: The Pantry
Unit Seven: Starches
Unit Eight: Baked Goods and Desserts
Unit Nine: Meats, Poultry, and Seafood
Unit Ten: Food Presentation and Garnish and Decoration
Unit Eleven: Careers in Food Service

CONSTRUCTION & CARPENTRY 10/ 20/ 30 **Prerequisite* – Const 10 for Const 20, Const 20 for Const 30*

Construction and Carpentry classes are designed to create an appreciation of the industry and to develop entry level skills within the construction trade. There are many hands on opportunities to develop skills for personal use and/or make a smooth transition from school to the workplace. Students learn by experience and by completing wood projects that they can keep.

Construction 10 units covered include:

Unit One: Introductory Safety
Unit Two: Wood Theory
Unit Three: Lay Out and Hand Tools
Unit Four: Portable Power Tools
Unit Five: Stationary Power Tools
Unit Six: Fasteners and Adhesives
Unit Seven: Construction and Careers
Unit Eight: Introduction to Cabinet Making

Construction 20 units studied include:

Unit One: Workshop and Construction Site Safety
Unit Two: Advanced Portable Power Tools
Unit Three: Advanced Stationary Power Tools
Unit Four: Structured Framing and Sheathing
Unit Five: Roof Framing
Unit Six: Cabinet Making
Unit Seven: Building Layout

Construction 30 units covered include:

Unit One: Review of Safety
Unit Two: Intermediate Wood Theory

Unit Three: Advanced Wood Theory
Unit Four: Advanced Cabinet Making
Unit Five: Concrete

COSMETOLOGY 10/ 20/ 30 **Prerequisite* – Cosmo 10 for Cosmo 20, Cosmo 20 for Cosmo 30*

Cosmetology refers to the study and practice of beauty culture. It is a practical, 'hands on' class that is recommended for students who have an interest working with hair, nails and make-up. In addition, this class provides a strong basis of understanding for students considering careers as hairdressers, aestheticians, make-up artists, theatrical make-up artists, aroma- therapists, massage therapists, nail technician, fashion designer, herbalist, image consultant, fashion editor, fashion trend forecaster, fashion buyer, perfumer, Feng- Shui consultant or a homeopathic practitioner.

Cosmetology 10 covers the following modules:

Module 1: Introduction to Cosmetology
Module 2A: Salon Housekeeping
Module 3A: Basic Shampoos and Rinses
Module 4A: Basic Hairstyling
Module 5A: Nail Care
Module 6A: Skin Care

Cosmetology 20 covers the following modules:

Module 2B: Salon Housekeeping
Module 3B: Intermediate Shampoo and Rinses
Module 4: Hair Care
Module 4B: Intermediate Hairstyling
Module 5B: Nail Care
Module 6B: Skin Care

Cosmetology 30 covers the following modules:

Module 2C: Salon Housekeeping
Module 13: Scalp Care
Module 5C: Advanced Nail Care
Module 14: Hair Shaping
Module 17: Permanent Waving
Module 16: Salon Management
Module 19A: Client Services
Module 6C: Advanced Skincare

MECHANICAL AND AUTOMOTIVE STUDIES 10

In Mechanics 10, students will develop a general knowledge of the operations and functions of tools, equipment, cooling and exhaust systems. They will learn the regular maintenance tasks required in keeping an automobile running smoothly. Students will also develop a full understanding of the safety procedures and practice safe work habits while working in the shop.

The seven units covered include:

Unit One: Introduction to the automobile and careers
Unit Two: Health and Safety
Unit Three: Tools and Equipment
Unit Four: Small Engines
Unit Five: Buying New and Used Cars
Unit Six: Service and Maintenance

MECHANICAL AND AUTOMOTIVE STUDIES 10 (female class)

This is a class especially geared toward young women who want to learn how to maintain a vehicle, how an automobile works and explore career opportunities for women in the Auto Industry. The six units of study include:

- Unit One: Introduction to the automobile and careers
- Unit Two: Health and Safety
- Unit Three: Tools and Equipment
- Unit Four: Maintenance
- Unit Five: Small Engines
- Unit Six: Buying a Car

MECHANICAL AND AUTOMOTIVE STUDIES A20 **Prerequisite* – Mech 10*

In Mechanics A20, students will develop specific knowledge of the operations and functions of brake systems, drivelines and electrical systems. They will also be given a full understanding of the internal combustion engine (multi-cylinder). The five units covered include:

- Unit One: Safety Review
- Unit Two: Engine Removal, Disassembly, and Inspection
- Unit Three: Engine Repair, Assembly, and Installation
- Unit Four: Brake System Operation, Diagnosis, and Repair
- Unit Five: Drive Line Design, Operation and Repair

MECHANICAL AND AUTOMOTIVE STUDIES B20 **Prerequisite* – Mech 10*

In Mechanics B20, students will gain specific knowledge of the operation, function and service of fuel systems. They will also gain specific knowledge of clutches, manual transmissions, transfer cases, and automatic transmissions. The six units covered include:

- Unit One: Safety Review, Tools, and Fasteners
- Unit Two: Fuel Systems
- Unit Three: Clutches
- Unit Four: Manual Transmissions
- Unit Five: Transfer Cases
- Unit Six: Automatic Transmissions

MECHANICAL AND AUTOMOTIVE STUDIES 30 (A & B - 2 credits) **Prerequisite* –Mech 10*

This class includes both an in school portion and a work-study component. In the school portion, the emphasis is placed on developing knowledge and skills in the areas of electrical and electronic diagnosis and repair, as well as emission control systems and drivability issues. The work-study component introduces students to the day-to-day operation of an automotive service shop where they will be directly supervised by a service manager, technicians and their teacher. The four units covered include:

- Unit One: Safety, Tools and Fasteners
- Unit Two: Chassis Electrical Systems
- Unit Three: Charging and Starting Systems
- Unit Four: Work Study

WELDING 10

Welding 10 introduces students to welding shop practices, equipment and safety. Students learn how to use all shop tools associated with cutting, grinding, drilling, threading and welding. Students spend the majority of class time learning how to arc and gas weld. Projects are produced for both arc and gas welding components. The five units covered include:

- Unit One: Shop Safety
- Unit Two: Shop Tools

Unit Three: Arc Welding
Unit Four: Oxy- Acetylene Welding
Unit Five: Project Work

WELDING 20

**Prerequisite* –Welding 10*

Welding 20 introduces students to vertical and horizontal position welds using both Arc and MIG welding. Students are also introduced to the cutting process using a gas torch and a plasma torch. This course offers exposure to new equipment and techniques. Students spend the majority of class time designing and producing their own projects. The eight units covered include:

Unit One: Safety
Unit Two: Terminology
Unit Three: Basic Metallurgy
Unit Four: Arc Welding
Unit Five: MIG Welding
Unit Six: Oxy-Acetylene cutting
Unit Seven: Plasma Cutting
Unit Eight: Projects

WELDING 30

**Prerequisite* –Welding 20*

Welding 30 is designed to allow students to continue to develop skills in producing advanced positional welds using MIG, Arc and Gas Welding. Further exposure is given to specialty welding processes and equipment. The majority of the course is spent in a hands-on learning environment with students designing and producing their own projects. The eight units covered include:

Unit One: Safety
Unit Two: Electrodes
Unit Three: Welding Symbols
Unit Four: Oxy-Acetylene Welding
Unit Five: Oxy-Acetylene Cutting
Unit Six: Arc Welding
Unit Seven: MIG Welding
Unit Eight: Projects