



# Program of Studies

## Athol Murray College of Notre Dame

**Introduction:** The Athol Murray College of Notre Dame offers a classroom environment that is supportive and rigorous, and that provides excellent preparation for post-secondary programs. Athol Murray once said that “To him who does what in him lies, God will not deny his grace”. Bearing that in mind, our mandate is to provide our students the means by which they can fully develop their academic potential. The instructional staff is committed to providing students every opportunity to achieve optional academic success. This is achieved by providing small instructional groupings, in order to facilitate positive student-staff relationships. Notre Dame teachers offer regular extra help sessions to assist students in their efforts to master the concepts critical to each of their courses. In addition, teachers are committed to motivating each student to give their best academic effort. Students graduating from Notre Dame obtain a Saskatchewan high school diploma and tend to earn course credits in excess of the 24 credit minimum required. Please refer to our online course selection handbook for detailed course descriptions and prerequisite requirements.

### Course Offerings 2010-2011

#### Grade 9

- \*English Language Arts 9:** A full year study of mythology, Shakespeare (*Romeo & Juliet*), debating, and book talks.
- \*Math 9:** A full year course that stresses logic, reasoning, and computation skills necessary for future math courses.
- \*Science 9:** A study of chemical principles, fluids & pressures, heat energy, electricity and the diversity of life.
- \*Social Science 9:** A focus on the many ways ancient cultures have influenced and contributed to the way of life in Canadian society.
- \*Christian Ethics 9:** A course that will deal with an expanded treatment of God’s plan of Salvation and a historical study of *The Story of Pere Athol Murray* and Notre Dame College.
- \*Physical Education:** A course providing students with an appreciation of physical fitness and allows for participation in activities that allow students to achieve physical well-being.
- \*\*French 9:** A core French course that will allow students to expand their awareness of the French language.
  
- Visual Art:** An exploration of drawing, painting, sketching, print-making, and sculpting. Students will also study Art History
- Keyboarding 9:** An introduction to the basics of computers, word processing programs, and an extensive keyboarding
- Choral (vocal music):** Opportunities in singing, musical instruments, and performances.

\* required course

\*\* French speaking students are not eligible to take the core French courses due to the strengths of their French language skills.

#### Grade 10

- \*English Language Arts A 10 :** A theme based course studying literature dealing with journeys and discoveries, opportunities and obstacles, and the unknown.
- \*English Language Arts B 10:** An issue based course focusing on action and apathy, environment and technology, and equality.
- \*History 10:** A course focusing on the development of political organizations, economic organizations, development of nations states, imperialism, and the structure of ideologies.
- \*Math 10:** A course covering linear equations, inequalities, problem solving, lines and line segments,



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- angles and polygons, ratios and trigonometry, linear functions, relations and lines, and lines/variations and sequences.
- \*Math 20:** A course covering irrational numbers, probability, polynomials and rational expressions, quadratic equations, quadratic functions, congruent triangles, similar polygons, areas, volumes, and circles.
- \*Science 10:** A course focusing on the study of life sciences, chemistry, physics, and environmental science.
- \*Wellness 10:** A course focusing on physical fitness, nutrition, fitness training, and the development of team and individual sports.
- \*Christian Ethics 10:** A study of the articles of the Apostles Creed and an introduction to the Sacraments of the Catholic Church.
- Information Processing 10:** The course focuses on the following skills and programs: keyboarding, word processing, spreadsheets (Excel), databases, internet research techniques, e-mail and e-mail etiquette, Adobe PhotoShop, and mail merge.
- Visual Art 10:** The objective of this class is to provide students with the instruction, tools, and support to produce hands-on art in one, two and three dimensional media. Studies in drawing, colour, design, painting, and ceramics are used to achieve the course objectives.
- \*\*French 10:** The core French 10 course focuses on communication, culture, general language information and linguistic language components.
- Choral 10:** A course focusing on aural skills, musical literacy, interpretation, vocal technique, and attitudes/values.
- Arts Education 10:** The four strands of the Arts Education program are drama, music, dance, and visual art. The focus will be placed on music and drama.
- \*** required course  
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## Grade 11

- \*English Language Arts 20:** Students will study short stories, poetry, and plays focusing on the themes of recollection and anticipation.
- \*Creative Writing 20:** Students will be asked to use their creativity, imagination, and technical writing ability to further develop an understanding of the writing process.
- \*Christian Ethics 20:** Grade eleven Christian Ethics tackles the main topic of Christian morality. Here the students will look at Christianity and the philosophies that differ from Christianity but no doubt influence our culture.
- \*Math 20:** A course based on irrational numbers, probability, polynomials and rational expressions, quadratic equations, quadratic functions, congruent triangles, similar polygons, areas and volumes, and circles. This is a grade 11 math course that is requires grade 10 math as a pre-requisite.
- Math A 30 :** This math course is the first of the grade 12 math courses often taken in grade 11 (at Notre Dame) after Math 20 is completed (or an equivalent grade 11 math course).

### A minimum of one of the following is required:

- Biology 20:** Students will study cell theory, ecological relationships, population studies, a survey of major kingdoms, immunity and disease, and botany.
- Chemistry 20:** Students will study matter, stoichiometry, mole calculations, properties of gases, and introductory organic chemistry. A minimum of 60% in grade 10 math is recommended.
- Physics 20:** Students will study the principles of light, heat, sound, and optics. A minimum of 60% in grade 10 math is recommended.

### A minimum of one of the following is required:

- Economics 20:** The intent of this course is to develop an understanding of economic policies nationally and internationally.
- History 20:** The course focuses on global issues of the 20<sup>th</sup> century.
- Law 30:** A course designed to engage students in an exploration of the Canadian legal system. Students will study the foundations of the Canadian legal system, criminal law, and civil law.
- Psychology 30:** The focus of this course is human development. Students will learn about human growth and changes in behaviour associated with age.



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**Social Studies 30:** A Canadian studies course focusing on change, culture, economics, governance, and globalization.

## Grade 11 Electives Continued

**Physical Education 20:** This course is designed to provide students with a wide range of recreational and sporting activities with the purpose of achieving a personal level of success and confidence to pursue these activities on their own.

**Computer Science 20:** A computer programming course focused on computer systems, Q basic, and the HTML language.

**\*\*French 20:** The core French 20 course is designed to provide learners opportunities to expand their awareness of the French language.

**Arts Education 20:** Students will study the history of jazz music, popular trends, changes in music and technology, as well as, the impact music has on society.

**Choral 20:** A course focusing on aural skills, musical literacy, interpretation, vocal technique, and attitudes/values.

**Visual Arts 20:** Students will study drawing, colour theory, and painting.

\* required course

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## Grade 12

**\*English Language Arts A 30** A course focused on Canadian Literature and society

**\*English Language Arts B 30** An issue-oriented course that is organized around human concerns in a global society.

**\* Christian Ethics 30** Students will study the life and times of Pere Murray, world religions, and Christian lifestyles and vocations.

**\*History 30:** This course is a historical study of Canadian History.

## Grade 12 Electives

**Math A 30:** This math course is the first of the grade 12 math courses often taken in grade 11 (at Notre Dame) after Math 20 is completed (or an equivalent grade 11 math course).

**Math B 30:** This course continues the examination of complex numbers and quadratic equations, polynomial and rational functions, exponential and logarithmic functions, probability, matrices, and data analysis.

**Math C 30:** This course is an introduction to trigonometry, applied trigonometry, conic sections, and mathematical proof. Math A 30 and B 30 are prerequisites.

**Calculus:** This course is an introduction to the concepts of calculus with an emphasis in functions, derivatives, and integrals. Math C 30 and Calculus may be taken concurrently.

**\*\*French 30** The core French 30 course will include 3 components: communication, culture, and general language formation and linguistic language.

**Computer Science 30** Students will be exposed to Turbo Pascal, C++, HTML, and JavaScript.

**Information Processing 30** I. P. focuses on gaining competence in the more advanced functions in Microsoft Office (word processing, spreadsheets and databases).

**Physics 30:** A math-oriented course that explores units in kinematics, mechanical energy, electricity, magnetism, electromagnetism, and nuclear physics.

**Biology 30** Students will study biochemistry, bioenergetics, cell structures and functions, evolutionary theory, and genetics.



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<b>Chemistry 30</b>	Students will study solutions, reaction types, energy, kinetics, equilibrium, acid/base theory, redox reactions, and electrochemistry.
<b>Economics 30:</b>	This course develops an understanding and appreciation of the international economy and its interrelationships with the Saskatchewan and Canadian economies.
<b>Law 30:</b>	A course designed to engage students in an exploration of the Canadian legal system. Students will study the foundations of the Canadian legal system, criminal law, and civil law.
<b>Psychology 30:</b>	The focus of this course is human development. Students will learn about human growth and changes in behaviour associated with age.
<b>Visual Art 30:</b>	Students will hone their hands-on skills in a variety of media, developing an awareness and appreciation for the role of visual art in society.
<b>Arts Education 30:</b>	Students will focus on reading and writing musical notation, playing a musical instrument, and learning about music from a variety of cultures.
<b>Physical Education 30:</b>	This course is structured so students will be introduced to lifestyle activities that will encourage the continuation of the activities when making positive lifestyle choices.

## Grade 12 Enrichment Courses (a minimum of 85% in the pre-requisite course):

Advanced Placement (AP) courses are enriched grade 12 courses that prepare students for the challenging curriculum in university.  
AP courses provide an opportunity to stand out in the university application process. The AP courses may be recognized for transfer credit at many Canadian and American universities. Students taking AP courses are required to write the May AP exam.

<b>AP English A 30 &amp; B 30:</b>	AP English 30 is an enriched version of our English 30 course. AP English is a two semester course with the rigor of a first year university course. Students must write the May AP English Literature exam.
<b>AP Chemistry:</b>	AP chemistry is an enriched version of our chemistry 30 course. The AP chemistry course includes content and lab work from first year university chemistry courses to prepare for the May AP chemistry exam. Students must write the AP exam.
<b>AP Physics:</b>	AP physics 30 is an enriched version of the physics 30 course that includes first year university content and additional lab work. Students must write the AP exam in May.
<b>AP Psychology:</b>	AP psychology is an enriched version of the psychology 30 course.

\* required course

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## Specialty Courses:

<b>AAA Hockey Physical Education:</b>	All students selecting physical education are enrolled in the traditional physical education courses at Notre Dame. After the conclusion of AAA boys (midget and bantam) and girls (midget) tryouts, students making the AAA teams are transferred into the AAA hockey phys. ed. course with the rest of their team. The hockey phys. ed. courses are part of the regular school day. The one credit course runs over both semesters.
<b>Goalie Physical Education:</b>	Goal tenders not on a AAA team in grade 10, 11, or 12 may select a one semester course that encompasses the physical education curriculum and over 80 hours of goalie specific training.
<b>Girls Basketball Physical Education:</b>	A physical education course that encompasses the physical education curriculum and specific basketball skill development. This course is only open to female athletes.
<b>English as an Additional Language (EAL):</b>	This program is designed to provide specific and appropriate language training for English as an Additional Language speakers who intend to proceed to post-secondary study. EAL courses deal with practical English skills in reading, writing, speaking and listening. Students may take 2 courses to count towards their graduation diploma.