

COURSE DESCRIPTIONS

Grade 12

2009/2010

ADA4M – Drama (university or college preparation)

This course requires students to experiment with forms and conventions in dramatic literature, and to create/adapt and present dramatic works. Students will do research on dramatic forms, conventions, themes, and theories of acting and direction from different historical periods, and apply their knowledge of these in analysing and interpreting dramatic literature, including Canadian works and works from various cultures in the late twentieth century. Students will also examine the significance of dramatic arts in various cultures. Auditions may be required to enrol in this class depending on the total number of students interested. (Prerequisite: Dramatic Arts, Grade 11, University/College Preparation or Open)

Text: *None*

AMU4M - Instrumental Music (university or college preparation)

This course emphasizes the appreciation, analysis, and performance of music from the romantic period and the twentieth century, including art music, jazz, popular music, and Canadian and non-Western music. Students will concentrate on developing interpretative skills and the ability to work independently. They will also complete complex creative projects.

This course is designed to broaden students' knowledge and skills in performance, composing and arranging, listening and analysis, music in society, and music and technology. Students concentrate on developing their skills through the performance of complex technical exercises and repertoire, composition and arrangement of their own music, listening and analysis of live and recorded music, and complex creative projects completed through the use of technology, as well as conventional methods. This course is performance-based. (Prerequisite: AMU3O or AMU3M)

Text: *The Enjoyment of Music-Shorter Version* (Norton)

AVI4M - Visual Arts (university or college preparation)

The senior arts program is a stimulating and comprehensive course. Students will continue to develop the technical skills that they have learned in previous years in a variety of studio assignments. There is more emphasis on self-initiated work than in previous courses. Students will also gain an appreciation for art history by working through the course textbook. At the end of the year the students' artwork will be exhibited in a public art show. (Prerequisite: AVI3M)

Text: *None*

BOH4M – Organizational Studies (university or college preparation)

This course focuses on ways in which organizations deal with issues affecting their competitiveness in a changing technological and global business environment. Students will analyse various leadership techniques and study various issues such as ethics in business, social responsibility, management of group dynamics, uses of information technology, workplace stress and conflict, motivation of employees, and globalization. Students will also investigate the management of diverse workforce within an organization and the importance of strategic planning. (Prerequisite: Any university preparation course in business studies or Canadian and world studies)

Text: *Management Fundamentals Canadian Edition* (Wiley)

CGW4U – Canadian and World Issues (university preparation)

This course draws on geographic concepts, skills, methods, and technologies to analyse significant issues facing Canadians as citizens of an interdependent world. Students will examine the challenges of creating a sustainable and equitable future through the study of a range of topics, including economic interdependence, geopolitical conflict, regional disparities in the ability to meet basic human needs, and protection of the planet's life-support systems. (Prerequisite: Any university preparation course in Canadian and world studies, English, or social sciences and humanities)

Text: *On the Threshold* (Gage)

CHY4U – World History: The West and the World (university preparation)

This course investigates the major trends in Western civilization and world history from the sixteenth century to the present. Students will learn about the interaction between the emerging West and other regions of the world and about the development of modern social, political, and economic systems. The skills and knowledge developed in this course will enable students to understand and appreciate both the character of historical change and the historical roots of contemporary issues. (Prerequisite: Any university preparation course in Canadian and world studies, English, or social sciences and humanities)

Text: *Legacy: The West and the World* (McGraw Hill)

CLN4U – Canadian and International Law (university preparation)

This course explores elements of Canadian law and the role of law in social, political, and global contexts. Students will learn about the connections between the historical and philosophical sources of law and issues in contemporary society. They will also learn to analyse legal issues, conduct independent research, and communicate the results of their inquiries in a variety of ways. (Prerequisite: Any university preparation course in Canadian and world studies, English, or social sciences and humanities)

Text: *Canadian and International Law* (Oxford)

ENG4U – English (university preparation)

This course emphasizes consolidation of literacy, critical thinking, and communication skills. Students will analyse a range of challenging texts from various time periods, countries, and cultures; write analytical and argumentative essays, a major paper for an independent literary research project, and apply key concepts to analyse media works. An important focus will be on understanding academic language and using it coherently and confidently in discussion and argument. (Prerequisite: ENG3U)

Texts: *The Mayor of Casterbridge* (Penguin)
Hamlet (Oxford)
Genesis & Revelation (NIV Bible)
Brave New World (Flamingo)
The Screwtape Letters (Spire)

EWC4U – English Writer’s Craft

This course emphasizes knowledge and skills related to the craft of writing. Students will analyze models of effective writing: use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers. (Prerequisite: ENG3U)

Text: *The Writer’s Craft* (Harcourt)

FSF4U – French (university preparation)

This course draws on a variety of themes to promote extensive development of French-language skills. Students will consolidate their oral skills as they discuss literature, culture, and current issues. They will read a variety of texts and will write a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course. (Prerequisite: FSF3U)

Texts: *Discovering French (Rouge)* (Heath)
Le Petit Nicolas (Longman)
Rue Deschambault (Boréal)
Situations (Addison-Wesley)

HSB4M – Challenge and Change in Society (university or college preparation)

This course examines the theories and methodologies used in anthropology, psychology, and sociology to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will analyse cultural, social, and biological patterns in human societies, looking at the ways in which those patterns change over time. Students will also explore the ideas of classical and contemporary social theorists, and will apply those ideas to the analysis of contemporary trends. (Prerequisite: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies)

Text: *Transitions in Society* (Oxford)

HZT4U – Philosophy: Question and Theories

This course addresses three (or more) of the main areas of philosophy: metaphysics, logic, epistemology, ethics, social and political philosophy, and aesthetics. Students will learn critical-thinking skills, the main ideas expressed by philosophers from a variety of the world’s traditions, how to develop and explain their own philosophical ideas, and how to apply those ideas to contemporary social issues and personal experiences. The course will also help students refine skills used in researching and investigating topics in philosophy. (Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.)

Text: *Philosophy: Questions and Theories* (McGraw Hill)

ICS4U - Computer Science (university preparation)

This course enables students to further develop knowledge and skills in computer science. Students will use modular design principles to create complex and fully documented programs, according to industry standards. Student teams will manage a large software development project, from planning through to project review. Students will also analyse algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, areas of research in computer science, and careers in the field. (Prerequisite: Introduction to Computer Science, Grade 11, University Preparation ICS3U)

Text: *None*

MHF4U – Advanced Functions (university preparation)

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs. (Prerequisite: MCR3U or MCT4C)

Text: *Advanced Functions 12* (McGraw Hill)

MCV4U – Calculus and Vectors (university preparation)

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields such as science, engineering, economics, and some areas of business, including those students who will be required to take a university-level calculus, linear algebra, or physics course. Note: The new Advanced Functions course (MHF4U) must be taken prior to or concurrently with Calculus and Vectors (MCV4U).

Texts: *Calculus & Vectors 12* (McGraw Hill)

MDM4U - Mathematics of Data Management (university preparation)

This course broadens students' understanding of mathematics as it relates to managing information. Students will apply methods for organizing large amounts of information; apply counting techniques, probability, and statistics in modeling and solving problems; and carry out a culminating project that integrates the expectations of the course and encourages perseverance and independence. Students planning to pursue university programs in business, the social sciences, or the humanities will find this course of particular interest.

(Prerequisite: MCR3U)

Text: *Mathematics of Data Management* (McGraw Hill)

PSE4U – Exercise Science (university preparation)

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sports, and the factors that influence an individual's participation in physical activity. The course prepares students for university programs in physical education, kinesiology, recreation, and sports administration. (Prerequisite: Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 open course in health and physical education)

Text: *Exercise Science: An Introduction* (Thomson)

Exercise Science: An Introduction Workbook (Thomson)

SBI4U – Biology (university preparation)

This course provides students with the opportunity for in-depth study of the concepts and processes associated with biological systems. Students will study theory and conduct investigations in the areas of metabolic processes, molecular genetics, homeostasis, evolution, and population dynamics. Emphasis will be placed on achievement of the detailed knowledge and refined skills needed for further study in various branches of the life sciences and related fields. (Prerequisite: SBI3U)

Text: *Biology: Life on Earth* (Prentice Hall)

SES4U – Earth and Space Science (university preparation)

This course focuses on the Earth as a planet, and on the basic concepts and theories of Earth science and their relevance to everyday life. Students will examine the Earth's place in the solar system and, after a general introduction to Earth science, will explore in more detail the materials of the Earth, its internal and surficial processes, and its history. The course draws on astronomy, biology, chemistry, mathematics, and physics in its consideration of geological processes that can be observed directly or inferred from other evidence. (Prerequisite: SNC2D)

Text: *Earth Science: Geology, Environment and the Universe* (McGraw Hill/Glencoe)

SCH4U – Chemistry (university preparation)

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, energy changes and rates of reaction, chemical systems and equilibrium, electrochemistry, and atomic and molecular structure. Students will further develop problem solving and laboratory skills as they investigate chemical processes, at the same time refining their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in daily life, and on evaluating the impact of chemical technology on the environment. (Prerequisite: SCH3U)

Text: *Chemistry 12* (McGraw Hill)

SPH4U – Physics (university preparation)

This course enables students to deepen their understanding of the concepts and theories of physics. Students will explore further the laws of dynamics and energy transformations, and will investigate electrical, gravitational, and magnetic fields; electromagnetic radiation and the interface between energy and matter. They will further develop inquiry skills, learning, for example, how the interpretation of experimental data can provide indirect evidence to support the development of a scientific model. Students will also consider the impact on society and the environment of technological applications of physics. Mathematical competence is expected and students usually find MGA4U to be a helpful co-requisite. (Prerequisite: SPH3U)

Text: *Physics 12* (Nelson)

The Yorkland School reserves the right to alter at any time the course selections described herein by adding, or deleting courses or by revising the timetable to meet changing circumstances. Textbooks are also subject to change.