

June, 2023

Dear Centre First-Year Student,

It is a pleasure to welcome you as a Centre student!

This document is designed to provide you with important information you need to choose your fall term classes. **Please read this entire document.** After carefully reviewing this information along with the math and second language placement results sent to you earlier, you should be ready to choose your fall term courses.

The usual first-year class schedule for the fall term consists of four academic courses. In your first fall term, students cannot take more than four 3 or 4 credit courses. There are some one-hour course options that you can take in addition to four courses (more about that later in this communication).

One of your four courses will be Doctrina Lux Mentis: The Craft of Writing 110 (DLM 110), **a course that all first-year students take in the fall term.** This represents the instructor's academic division. Students take DLM 110 in the fall and DLM 120 in the spring. DLM 110 and 120 courses provide a small-group learning environment that provides an intensive intellectual experience to develop your collegiate academic skills—how to read critically, how to think logically, and how to communicate effectively. The DLM 110 course emphasizes writing skills, while the DLM 120 emphasizes speaking skills.

In choosing your other three courses, keep in mind the following:

1. Be open-minded as you begin the course selection process, and review all of your options before making your course choices. Be sure to take at least one course in an area that you are particularly interested in and/or passionate about. Subjects that you may have studied in high school are often quite different at the college level, and getting a start on a possible major or minor can give you greater flexibility in your schedule down the road. Major requirements are listed in the online catalog under "Programs of Study": <https://centre.smartcatalogiq.com/en/catalog-and-handbooks/catalog/>.
2. Mathematics: If you were placed in MAT 110 *Mathematics in our Society*, you need to take this course or MAT 130 *Introduction to Statistics* in order to fulfill the mathematics general education requirement. If you choose to take MAT 110, you are encouraged to take this course this fall because normally only one section is offered in the spring, and **because you cannot take certain introductory science courses until you complete this course.**
3. Second Language: If you need to fulfill the second language requirement, you will need to take one second language course if you were placed above the introductory level (language courses numbered 200 or higher) or the two-course sequence in an introductory language if you do not have introductory skills. This requirement should be completed by the end of the sophomore year.
4. Science: Normally, students are advised **not** to take two science courses in the fall as all science courses include a three-hour lab in addition to three hours of class each week.
5. Other Course Choices: Additional important information to help you choose specific courses is listed below including course descriptions.

If you have **any** questions about what courses you should take, you are encouraged to call Centre during advising call-in sessions. We are offering a series of three advising call-in sessions where you can speak with a faculty advisor about your course choices. The schedule for the call-in sessions are:

Tuesday, June 27, 11:00 a.m. - 4:00 p.m. Eastern Time
Wednesday, June 28, 11:00 a.m. - 4:00 p.m. Eastern Time
Thursday, June 29, 4:00 p.m. - 8:00 p.m. Eastern Time

The number to call is 859-238-5900.

If you cannot call at any of the times above, you can call the Registrar's Office directly for advice, any time Monday through Friday between 9:30 a.m. and 4:30 p.m. The number to call is 859-238-5360.

After reviewing all these materials, including speaking with a faculty advisor or someone in the Registrar's Office if you choose, you should be ready to register online in CentreNet for you fall courses. More detailed instructions for registering online will be sent to you in additional email message in the next few weeks. Online registration will occur during the period July 10-13.

Your course registration is subject to review and adjustment by the Registrar's Office. Your final course registration will be confirmed around the beginning of August. However, it is important to know that this schedule is not "set in stone." As part of orientation in August, you will discuss your registration with your academic advisor. Changes to your schedule of classes can be made at that time.

We look forward to working with you as you begin your career at Centre. In the meantime, we wish you the best for a pleasant, relaxing, and productive summer.

Sincerely,

Thomas Manuel
Registrar

Jacob Johnson
Assistant Registrar

Katie Clemons
Academic Records Coordinator

DESCRIPTIONS OF COURSES AND SCHEDULING ADVICE FOR FIRST-YEAR STUDENTS

DOCTRINA LUX MENTIS

Doctrina Lux Mentis 110 is the first course in a two-course core requirement for all first-year students. **First-year students are required to take DLM 110.**

DLM 110 The Craft of Writing

This first-year course builds foundational college skills: how to read critically, think logically, and communicate effectively. Instructors select the theme or topic(s) around which a DLM course is built. DLM 110 courses strengthen student skills in written communication, visual communication, and information literacy.

You must register for a section of DLM 110. You will receive more information regarding the DLM topics in a subsequent email.

MATHEMATICS

If you wish to take a math course in the fall, you will need to start in the course you were placed in based on your placement test results and other factors. The one exception is that you can take MAT 130 in place of MAT 110, MAT 165, MAT 185, or MAT 230 to fulfill the requirement. Below is a list of math courses available for first years based on placement.

MAT 110 Mathematics in Our Society

An introduction to applied mathematics devoted to solving contemporary problems from diverse disciplines. This course helps students develop logical thinking skills and improve quantitative skills, particularly with linear equations (in the context of decision-making) and with exponential and logarithmic models (in the context of finance).

MAT 130 Introduction to Statistics

An investigation into the mathematical techniques for analyzing and interpreting data with the goal of understanding our world and facilitating informed decision-making processes. The course includes the study of random variables, descriptive statistics, basic probability theory, and inferential statistics. Specific topics include confidence intervals, hypothesis testing, regression, analysis of categorical data, and analysis of variance.

MAT 165 Modern Calculus-I

An intuitive introduction to mathematical modeling and differential and integral calculus with an emphasis placed on scientific computing. Topics include: functions as models of data, differential calculus of functions of one and several variables, optimization, integration, dimensional analysis, estimation techniques, and linear approximations. Applications are selected from various areas such as biology, chemistry, economics, and physics. Prerequisite: MAT 110 or placed in MAT 165 or higher.

MAT 185 Modern Calculus-II

A study of integral and differential calculus of several variables, including numerical methods. This course focuses on developing the computational tools, techniques, and theory of multivariable calculus to solve problems in mathematical, natural, and social sciences. Topics include: differential equations, integration techniques, partial derivatives, gradients, contour plots, constrained and unconstrained optimization, Taylor polynomials, optimization of multivariable functions, multiple integration, polar coordinates, and limits. Prerequisite: MAT 165 or placement.

MAT 230 Calculus-III

An extension of the concepts of function, limit, derivative, and integral to three-dimensional space and vector spaces. Topics include vector algebra, elementary differential geometry of curves and surfaces, limits, continuity, partial derivatives, directional derivatives, multiple integrals, line integrals, surface integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. Prerequisite: Placement at entrance.

SECOND LANGUAGE

The ability to communicate in a second language, a deeper understanding of cultural differences, the advantages of international study, and a global vision are key ingredients of the college experience. Second language learning deals with enlarging your perspective and relates to numerous areas of expertise: appreciation of a different culture and literature, world history, international relations, diplomacy, and international business.

Centre offers courses in the following languages: Arabic (ARB), Chinese (CHN), French (FRE), German (GER), ancient Greek (GRK, one year only), Japanese (JPN), Latin (LAT), and Spanish (SPA).

If you study a second language, the specific course that you take will depend on the results of your placement test and/or your interests. You may take a language different from the one you tested in. If you are starting a new language or feel you are still close to a beginner level, you are encouraged to study a second language in your first year. All beginning language courses are numbered 110, with

the exception of ancient Greek which is numbered GRK 111. It is possible to wait until the sophomore year to take a second language, but if you think you might be a major in a second language, international studies, or plan to take advantage of certain off-campus study opportunities, it is helpful if you study language in your first year. Please note that first-year second language study involves two, four-credit courses, one in the fall and one in the spring. Normally, you cannot start beginning language study in the spring, only in the fall.

If you wish to take a course in the language that you tested in, you must register for the course noted in your placement test results.

ARTS & HUMANITIES

To fulfill general education requirements, all students must take two Arts & Humanities Exploration courses and the courses must be in different disciplines. There are many courses that count toward this requirement in the disciplines of African and African American Studies, Arabic, Art History, Asian Studies, Chinese, Classics, English, Film Studies, French, German, Latin American Studies, Linguistics, Music, Philosophy, Theatre, and Studio Art. For the upcoming fall 2023 term, the following courses will count toward the Arts & Humanities Exploration courses: ARH 260, ARS 110, ARS 131, ARS 210, ARS 233, ARS 240, ARS 250, CLA 212/LIN 212, CLA 231, ENG 274, FLM 205, MUS 116, MUS 120, MUS 233, PHI 135, PHI 171, PHI 173, PHI 221, THR 117, THR 133, THR 160, and THR 330. Below is a list of course descriptions for the courses listed above. **Please note that there are a limited number of seats available in some of these courses.**

ARH 260 Survey of Western Art-I

This course is an introduction to the language and processes of Art History. We will ask the questions: What does art do? What has art meant to people throughout human history, and how has it contributed to ideas of the “West”? What kinds of messages can art convey, and how do we in the present day interpret meanings in images and objects made long, long ago. Focus will be placed on an understanding of historical periods—their social, political, and aesthetic values—through the interpretation of the visual arts. Our emphasis this semester is on the art of the prehistoric world through the European Middle Ages. While the focus is mainly on “Western” art, we will look at contemporaneous visual arts production in “non-Western” contexts as cross-cultural points of comparison and contrast.

ARS 110 Introduction to Drawing

This course requires no previous instruction in art. It emphasizes drawing from direct observation, concentrating on still life as a subject. The primary materials used are charcoal and graphite. The aim is to give students proficiency in the fundamentals of proportional measuring, perspective, modeling form with light and shade, and composition. Students will learn the history and methods of drawing by copying master drawings. As students gain proficiency, more complex subjects will be introduced, including on-site drawing of interior spaces or landscape. Regular group critiques introduce the language and methods of criticism and visual analysis.

ARS 131 Ceramics: Hand-Building

An initial studio experience in hand-built ceramics which includes art theory and ceramic history. Processing, forming, and firing are studied in concert with an aesthetic consideration of the articulation of form and surface decoration.

ARS 210 Introduction to Oil Painting

Students enrolling in this course should be proficient in drawing but need not have any experience in painting. Oil painting methods will be introduced through the study of still life from direct observation. Students will learn the materials and tools of oil painting; how to depict light and form through color; and how to develop a

composition. The course incorporates both drawing and oil painting, moving back and forth between the media to emphasize their interdependence. Prerequisite: ARS 110. (ARS 210 is not available fall term unless have previous credit for ARS 110.)

ARS 233 Ceramics: Wheel-Throwing

An initial studio experience in wheel-thrown ceramics which includes art theory and ceramic history. Processing, forming, and firing are studied in concert with an aesthetic consideration of the articulation of form and surface decoration. Prerequisite: ARS 131 is recommended, but not mandatory.

ARS 240 Hot Glass-I

From traditional vessels to sculptural forms, students learn the fundamental techniques of glass blowing and coldworking. Attention is given to the history of glass and to the formulation of personal expression through the creation of glass objects. Shared, weekly studio time is assigned at the beginning of the term and it is during this time that students practice demonstrated skills and develop creative art projects. Three succinct projects along with several other assignments including a research presentation are due throughout the term.

ARS 250 Introduction to Photography

This course provides an introduction to the art, history, and theory of photographic practices as well as digital photographic production processes. Students will explore the expressive power of light and a spectrum of aesthetic and conceptual possibilities. Technical demonstrations will be combined with presentations of the work of photographic artists and group critiques of photographic assignments. Technical skills will include capture from digital cameras, use of software for managing, editing, and processing files, and output for the screen and for digital printing systems.

CLA 212/LIN 212 Medical Terms: Greek & Latin Roots

Approximately 95% of English medical terms are derived from Ancient Greek or Latin. This course develops understanding of medical terminology and the Greek and Roman healing practices in which much of this terminology developed. We will learn spelling, pronunciation, abbreviations, how to analyze words based on roots, prefixes, and suffixes, while investigating ancient Greek and Roman conceptions of health, the body, and medicine.

CLA 231 Greek and Roman Mythology

This course will provide an introduction to the major myths of Greece and Rome—including the creation of the cosmos, Olympians and other deities, and human heroes and their exploits—both as they appear in Greek and Roman literature and art and as they are represented in modern art, music, and film. We will also learn several theories about the purpose and function of myth because myth is more than just a set of stories or symbols, it is a complex and nuanced system of representation.

ENG 274 Asian American Literature

Who is Asian American? What is Asian Americanness? In this course, we will examine the category—"Asian American"—as a historical product rather than an immutable truth. We will read both sides of this hyphenated identity; tracing its creation and ongoing progress through the literature produced by Asian American authors. We will interrogate the external historical pressures like immigration legislation, decolonization, racial segregation, and language politics that created Asian American as a racial category as well as how individual authors and their communities responded to and transformed these pressures through their writing. The readings will include writers with origins in various parts of the world—Vietnam, India, Japan, Myanmar—and we will examine both the rich literary traditions that these authors draw on and what it means for all these diverse cultures to be brought under the umbrella of "Asian American." The course will read "Asian American Literature" as

an ongoing body of work that is constantly defining and redefining what it means to be Asian American.

FLM 205 Introduction to Film

This course traces some of the major movements in film history with an emphasis on film's response to- and anticipation of-societal issues and concerns. Topics include a basic vocabulary for film study, the relationship of art and life, notions of authority and resistance, the attractions of genre, and the place of film in the digital era.

MUS 116 Foundations and World Views of Music

This class targets aspiring music majors or minors, or students with an interest in the fundamentals of music. Basic materials of music, theory, history, and stylistic differences between the Western European tradition and other cultures are the core aspects of the class. Students learn how to construct, analyze, and critically examine music within different cultures as well as the social and civic impact of the musical arts.

MUS 120 Materials and Structure of Music-I

A beginning-level music theory course, designed to develop your inner ear, musical imagination, personal musical style, and an understanding of the expressive grammar of music through composing and analysis. **Basic music reading ability is required, along with basic knowledge of scales, keys, and chords.**

MUS 233 Contemporary Improvisation

This course is designed to improve your ability to improvise on your instrument or voice. Whether you play rock, jazz, classical, gospel, or anything else, developing the art of improvisation will help to add naturalness and fluidity to your playing and will help you to develop your ear and your individual voice. We will also explore the richness and variety of some of the world's best improvisational traditions, including jazz, rock, African, Indian, and Middle Eastern traditions. Prerequisite: Some musical experience is required.

PHI 135 Philosophy of Science

This course is a philosophical inquiry into the origins of Western science. Analyzing the primary sources in the tradition reveals how philosophers have interacted with and defined the practice of science from its origins with the Greeks in 6th century BCE to contemporary pragmatist and feminist critiques.

PHI 171 An Introduction to Ethical Thinking

An introduction into how to develop ethical thinking into a properly philosophical and theoretical enterprise. By taking up such controversial topics as circumcision, cannibalism, vegetarianism, animal and human experimentation, abortion, the right to die, environmental ethics, genocide, and others, students will seek deeper understanding of the challenges of ethical problems and the ways in which philosophers try to solve them through the major ethical theories. Along with an understanding of the primary ethical theories, students will gain an appreciation for the everyday practicality of philosophy.

PHI 173 Issues in Ethics

This course has significantly the same aims and content as PHI 171, Introduction to Ethical Thinking, but some time in the course will be dedicated to business ethics. NOTE: Students may not take both PHI 171 and PHI 173.

PHI 221 Ancient Philosophy

A survey of ancient Western philosophy from the Pre-Socratics to Aristotle. This course concentrates on the origin and development of basic concepts and problems which have become permanent

ingredients of our philosophical tradition. Some of these are reality and appearance, permanence and change, form and matter, causality, knowledge and belief, and the good.

THR 117 Acting-I

An introduction to the basic theory, techniques, and history of European and American ensemble training for the actor, from the work of Constantin Stanislavski to the present. The course begins with exercises designed to improve performance technique, progresses to character analysis and development, and finally focuses upon scene rehearsal and performance. Students read and analyze texts, learning to evaluate them as compositions for performance.

THR 133 Foundations of Drama and Theatre-I

This class is a survey of primarily (but not only) Western theatrical dramatic literature and history from pre-historic origins to the 18th century. Dealing with the parallel tracks of literature and history as they reflect the progress and development of theatre as an art form. We will engage historical events and dramatic works through the lens of their unique place in time, and in conversation with contemporary theatre practices. In addition to exposing students to key canonical literature, this class will also develop tools for reading and analyzing play scripts as theatre practitioners, focusing on the specific challenges of understanding and communicating a script to a production team, cast, and audience.

THR 160 Introduction to Design

This course will introduce students to the fundamental concepts and skills of theatrical design. The course will actively explore these concepts by engaging in the basic visual communication skills of the various design fields within the theatre: Drafting (hand drawing and CAD, sketching, color rendering, digital imaging, scale models, etc.)

THR 330 Playwriting

This class is a study of playwriting processes and tools, focusing on canonical and contemporary dramatic structures through a variety of playwriting exercises alongside the interrogation of noteworthy dramatic texts. Through experimentation with forms of drama and styles of playwriting, and reading the work of exceptional playwrights, students will be encouraged to find their unique voices as theatrical storytellers.

SOCIAL STUDIES

To fulfill general education requirements, all students must take two Social Studies Exploration courses and the courses must be in different disciplines. There are many courses that count toward this requirement in the disciplines of Anthropology, Economics, Education, Environmental Studies, Gender Studies, History, International Studies, Politics, Religion, and Sociology. For the upcoming fall 2023 term, the following courses will count toward the Social Studies Exploration courses: ANT 110, ANT 120, ANT 347, ECO 110, ENS 210, HIS 111, HIS 117, HIS 127, IST 110, POL 120, REL 102, and SOC 110. Below is a list of course descriptions for the courses listed above. **Please note that there are a limited number of seats available in some of these courses.**

Students with social studies related professional interests should note the following:

- 1. PreLaw and PreBusiness Preparation.** Students interested in law or business professions can begin study in any of the first-year offerings in social studies listed below. The majority of these courses all serve as introductions to majors useful in both law and business professions.
- 2. PreInternational Preparation.** Students interested in professions involving international fields can begin study in any of the first-year offerings in social studies below. Students should also evaluate

their second language skills and consider building on those skills with additional language courses. Students interested in the international studies major are advised to take IST 110.

ANT 110 Culture and Human Experience

This course introduces students to cultural anthropology, a discipline that studies what it means to be human. We start by investigating the incredible diversity in human culture, and identifying methods we can use to study how different people make sense of their worlds. We address many aspects of human culture and experience, including language, ways of relating to the environment, race and structural racism, and the variation in gender, family, social organization, politics and economics, religion, arts, and folklore across cultures. Finally, we explore how cultures and societies change within a globalized world.

ANT 120 Human Biological and Cultural Origins

An introductory course in human evolution. It provides an exploration of major facts and concepts in physical anthropology and prehistoric archaeology. Core topics include grounding in evolutionary theory, examination of the comparative biology of the primates, and study of the fossil evidence for primate and human evolution. The course introduces key archaeological findings such as the origins and development of stone tool traditions and art, the dispersal of early foraging groups, and subsequent cultural transitions that ultimately lead to the onset of the Anthropocene. The course seeks to foster a better understanding of what part of our world (in space and time) our human community occupies.

ANT 347 Language, Culture, and Power

Communicating with language is a defining characteristic of being human. The simple fact that combinations of sounds reliably cause ideas to arise in other people's minds is remarkable, yet we often forget its uniqueness. Linguistic Anthropologists, for their part, also appreciate that language is a crucial part of creating and maintaining culture every day. This course surveys the field of Linguistic Anthropology to explore the many junctures between communication, culture, and power.

ECO 110 Introduction to Economics

An introduction to economic theory with attention given to the construction of simple economic models which deal with consumer behavior, production, pricing, distribution, monetary theory and national income determination. At the end of the course, students will be able to analyze the behavior of various markets in the economy, the reasons markets fail, the role of the government in cases of market failure, and analyze the performance of an economy in the short run and/or the long run.

ENS 210 Introduction to Environmental Studies

A survey of human impacts on our environment, including the ecological bases for, and the ramifications of, these impacts. Includes a consideration of policies that would protect our environment for the long term while incorporating cultural, political and economic realities. A variety of views are discussed, and the policy implications of differing values are considered.

HIS 111 Emperors to Republics

This course examines the long term global transition from monarchical governments to modern political systems. We will focus on cultural assumptions across different communities at different points in history, specific examples of intercultural exchange, and the development and evolution of various ideologies. Topics include: dynastic systems from Europe to the Middle East to East Asia; the Enlightenment; the Industrial Revolution; and orientalism and scientific racism.

HIS 117 History of Concentration Camps

This course explores the history of the idea and practice of concentration camps throughout the nineteenth and twentieth centuries. Areas of conversation will include the origins of modern

concentration camps and their uses and outcomes during the Spanish-American War, the Anglo-Boer War, the Gulags, and the Second World War.

HIS 127 Reconstructing U.S. Democracy

This course chronicles the major transformations to American society and politics from the end of the Civil War to the eve of the conservative revolution of the 1980s. Students will explore how the aftermath of the Civil War brought the promise of a broader conception of what it meant to be an American and how this conception was contested over the century that followed. Students will track how conceptions of the role of government, of where Americans lived and worked, of who belonged in the country changed over time as a part of the contested process that began with Reconstruction.

IST 110 Introduction to International Studies

This course will introduce students to interdisciplinary inquiry as an approach to addressing complex global challenges such as migration, health, or climate change. It draws on history, politics, economics, religion, and culture as perspectives that compete, interact, and intersect in the context of these global challenges.

POL 120 Political Ideologies and Issues

An introduction to major political ideologies and their relevance in contemporary political discourse. Students learn the beliefs and history of such ideologies as conservatism, liberalism, socialism, libertarianism, environmentalism, etc. The foundations of these views are traced through classic political texts and modern manifestations. The current versions of these ideologies are investigated by applying the ideologies to issues and politicians of today. Students learn the basic contours of today's political beliefs, values, conflicts, and debates.

REL 102 Introduction to Christianity and Christian Traditions

An introductory study of Christian thought in relation to its intellectual and societal context from its beginnings in the Apostolic Period to the present day, with an emphasis on certain individuals and movements in the ancient church, the Middle Ages, the reformations of the 16th century, and the Enlightenment, and with an assessment of their contributions to the present positions of Christian thought.

SOC 110 Introduction to Sociology

A survey of sociological concerns, including explorations of social solidarity and social conflict at the macro and micro levels, through classic texts and field research.

SCIENCES & MATHEMATICS

To fulfill general education requirements, all students must take two Science & Mathematics Exploration courses and the courses must be in different disciplines, including one laboratory course. There are many courses that count toward this requirement in the disciplines of Biology, Chemistry, Environmental Studies, Mathematics, Natural Science, Physics, and Psychology. For the upcoming fall 2023 term, the following courses will count toward the Science & Mathematics Exploration courses: BIO 110, BIO 210, CHE 131, CHE 135, ENS 215, NSC 110, PHY 110, PSY 110, and PSY 111. Below is a list of course descriptions for the courses listed above. **Please note that there are a limited number of seats available in some of these courses.**

NOTE: If you were placed in MAT 110, you will have to complete MAT 110 before you can take BIO 110, BIO 210, ENS 215, PHY 110, PSY 110, or PSY 111.

Following is a brief description of the majors offered in the division of science and mathematics:

Biochemistry and Molecular Biology. The study of life at the cellular and molecular levels, including chemical reactions, cellular structure, and the central role of DNA.

Biology. The study of living organisms at all levels of organization from cellular structure to ecological interactions.

Chemistry. The study of matter and the changes that it undergoes. Major topics include the structure of matter, reactivity patterns, and the synthesis and analysis of chemical species. Laboratory work is extensively used to develop and illustrate theoretical concepts.

Computer Science. Computer science teaches you timeless skills like how to problem-solve, design technical solutions to challenging problems, and how to create and deploy solutions in computer programs.

Data Science. Data science is an emerging, interdisciplinary academic field that sits at the intersection of computer science, statistics, and mathematics. At its heart, data science is the process of transforming raw, unorganized data into useful information and then presenting that information in a clear, concise way.

Mathematics. Development of quantitative and analytic problem solving skills in a wide range of disciplines. The study of mathematics provides a setting for the development of clear, logical, and creative thought processes.

Chemical Physics. A study of the fundamental aspects of chemical reactions. Concepts studied include energetics of chemical reactions, interaction of radiation with matter, and the relationship between molecular structure and reactivity. Chemical physics is, therefore, central to the understanding and control of chemical reactions.

Physics. The study of the structure, properties, and interactions of matter and energy. Physics seeks the fundamental laws which allow a unified understanding of our universe, from the smallest particles to the largest cosmological scales. Physics has important applications to other sciences as well as engineering, medicine, and other applied fields.

Behavioral Neuroscience. The study of the biological bases of behavior. This includes the role of the nervous and endocrine systems in behavioral expression of humans and other animals as well as the ecological and evolutionary foundations of behavior.

Psychology. The study of behavior and mental processes as they are affected by learning, social environments, motivation, gender, personality, and development.

Students planning possible majors in one of the sciences should note the following guidelines when selecting science courses for their first year:

1. **PreHealth Profession Preparation.** Students preparing for professional schools in medicine, dentistry, or pharmacy should take one of the following courses in the fall: BIO 110, CHE 131, CHE 132, CHE 135, or PHY 110. See course descriptions for additional advice about which course to take. NOTE: Because preparation for these professions requires more chemistry than biology and physics, many students begin their college-level science study with chemistry (either CHE 131 or 132 or 135). If a specific area is a likely major, follow the advice below.

2. Potential majors in **Biochemistry and Molecular Biology (BMB)** should take CHE 131 in the fall or spring of their first year (or CHE 132 or CHE 135 in the fall).
3. Students planning a major in **Biology** should take one of the following courses in the fall or spring of their first year: BIO 110 or CHE 131 or CHE 132 or CHE 135 (fall only).
4. Potential majors in **Chemistry** should take CHE 131 or 132 or 135 in the fall or spring of their first year.
5. Potential majors in **Chemical Physics** should take CHE 131 or CHE 132 or CHE 135 or PHY 110 in the fall.
6. Students considering a major in **Physics** should take mathematics and physics courses as early as possible in order to meet upper-level prerequisites in a timely manner. If possible, MAT 165 (or higher) should be taken in the fall of the first year; PHY 210 and MAT 185 (or higher) should be taken in the spring of the first year. PHY 110 is also highly recommended in the fall of the first year for students not yet confident in their physics or calculus proficiency.
7. Possible majors in **Psychology** or **Behavioral Neuroscience** should take PSY 110 or BIO 110 in the fall or spring of their first year.
8. Potential majors in **Computer Science** should take CSC 170 in the first year, either fall or spring term.
9. Potential majors in **Data Science** should take CSC 170 and MAT 165 in the first year, either fall or spring term.
10. Possible majors in **Mathematics** should complete MAT 171 or MAT 185 by the beginning of the sophomore year.

BIO 110 Biodiversity, Evolution, Ecology (four credit hours)

An introduction to biology through the integrating theme of evolution. The first third of the course is a phylogenetic survey of the biodiversity which forms the bases of biological study. The second third introduces the unifying principles of evolution responsible for the origin of this diversity. The course concludes with an exploration of the ecological processes that govern the organization of populations, communities and ecosystems. Laboratory work is required. Prerequisite: MAT 110 or placed in MAT 165 or higher.

BIO 210 Introduction to Genetics

A survey of the basic principles of genetics. In this course, students will be introduced to all areas of genetics: Mendelian patterns of inheritance, molecular genetics and population genetics. A weekly laboratory is required. Prerequisite: MAT 110 or placed in MAT 165 or higher; BIO 110 or CHE 131 is strongly recommended.

CHE 131 General Chemistry-I (four credit hours)

An introduction to modern ideas of atomic and molecular structure. Topics to be studied include the electronic and nuclear structure of the atom, chemical bonding, the periodic properties of the elements and their compounds, and experimental methods for determining atomic and molecular structure. Laboratory work is required. \

CHE 135 Accelerated General Chemistry (four credit hours)

An accelerated coverage of general chemistry for students with strong high school chemistry

preparation. Many topics, such as stoichiometry and gas laws, are only briefly reviewed. Topics treated in more detail include atomic and molecular theory, chemical bonding theories, kinetics, equilibrium processes, acids and bases, and chemical thermodynamics. Laboratory work is required.

NOTE: CHE 135 is designed for students interested in majoring in chemistry or in other natural science majors. Most CHE 135 students have completed at least two years of high school chemistry, including at least one year of AP or IB, if available. Although we do not require students to have exam scores for placement into the class, we have found that those who have scored a 4 or a 5 on an AP exam are well-prepared for CHE 135. This score typically translates to a 5 or higher on the IB exam.

ENS 215 Introduction to Environmental Science (four credit hours)

Consider the air quality impacts of cooking fires, the life cycle of electricity generation, or the challenges of water quality in Flint, Michigan. This course promotes the understanding of the value of and limitations of the natural sciences in solving environmental problems. Students examine how science is used to manage natural resources to promote a sustainable society. More specifically, students use the natural sciences to investigate multiple domains of environmental science including water and air quality; biodiversity; food and soils; climate; and energy. Laboratory work is required. Prerequisite: MAT 110 or placed in MAT 165 or higher at entrance.

NSC 110 Big Bang: Developing the Evidence (four credit hours)

An integrated treatment of the major physical principles of the natural world. The course explores the evolution of scientific thought from its origins through the scientific revolution to its prominent role in modern society. Tracing the historical development of topics including observational astronomy, mechanics, energy, light, thermodynamics, and atomic theory, the class builds the evidence needed to understand some of modern cosmology and the big bang. Laboratory work is required.

PHY 110 Introduction to Physics (four credit hours)

An introduction to college physics not requiring calculus. Topics include mechanics, gravitation, oscillations, fluids, and thermodynamics. Laboratory work is required. Prerequisite: MAT 110 or placed in MAT 165 or higher.

PSY 110 Introduction to Psychological Science (four credit hours)

A comprehensive survey of the basic concepts involved in the study of behavior and applications of psychological principles. The course examines concepts and theories in neurological processes, consciousness, perception, cognition, human development, learning, memory, personality, and disorders. This course includes a laboratory section, and is a requirement for those interested in the Psychology or Behavioral Neuroscience major or minor. Prerequisite: MAT 110 or placed in MAT 165 or higher.

PSY 111 Introduction to Psychology

A survey of the basic concepts involved in the study of behavior and applications of psychological principles. This course uses scientific foundations to study the major domains of psychology (biological, cognitive, developmental, social and personality, and mental and physical health) and integrates cross-cutting themes of social and cultural diversity, ethics, and variations in human functioning. This course does not include a laboratory section and is intended for those interested in Psychology and Behavioral Neuroscience who are not planning to major or minor in either program.

OTHER COURSES OPEN TO FIRST-YEARS

ANT 372 Anthropology of Global Sport & Diversity

This course takes a four-field anthropological approach to exploring how sport influences human lives across the world and over time, with a particular focus on intersectionality and how sport shapes and

is shaped by global diversity. Core themes that will be discussed include the body, language, history, citizenship, globalization, race, and gender.

ARH 371 Global Surrealisms

The Surrealist movement began in early-twentieth century France as a revolutionary proposal to re-assess the foundations of Western knowledge and shatter the barriers of artistic expression by claiming the visible, observable world was a lie. Relying on the teachings of Sigmund Freud as a launching point, artists working in a Surrealist mode found inspiration and redemption in the West's most profound "Others" and explored the depths of the subconscious to seek an alternative to the mechanized, murderous, malevolent substructure of industrialized society. While "Surrealism" did not last long as a cohesive ideology, "surrealism" as an idea transcends the limits of those European discontents by influencing subsequent artistic movements and modes of expression across the globe, as well as positioning indigenous, "non-Western" forms of knowledge as counterpoints to dominant ways of thinking. Students will engage deeply with these cultural intersections and creative cross-currents to probe the extensive histories, vast potentialities, and practical limitations of surrealist worldviews.

BUS 260 Financial Accounting

A study of accounting fundamentals leading to an analysis of how accounting data is created and used. Particular emphasis is placed on the integral structure between income statements, cash flow statements, and balance sheets. Students learn the language of business and how to read and interpret financial statements.

CLA 231 Greek and Roman Mythology

This course will provide an introduction to the major myths of Greece and Rome—including the creation of the cosmos, Olympians and other deities, and human heroes and their exploits—both as they appear in Greek and Roman literature and art and as they are represented in modern art, music, and film. We will also learn several theories about the purpose and function of myth because myth is more than just a set of stories or symbols, it is a complex and nuanced system of representation.

CRW 270 Creative Writing on Nature and the Environment

What is "environmental creative writing?" How do we know when we've read it, or written it? How do we ourselves write about nature, ecology, science, and place in ways that are both thoughtful and creative? In this class we'll explore these questions, reading a variety of authors, ranging from some environmental classics (Wendell Berry, Annie Dillard, Rachel Carson, Mary Oliver, Edward Abbey, and others) to the contemporary and strange (Julianna Baggott, Forrest Gander, Edward Hoagland, Carol Frost, Elif Batumen, Amy Clampitt, Sarah Lindsay, Jennifer Atkinson, Joy Williams, environment in creative works of our own. Interaction with the environment and nature will be encouraged as part of the class. An interdisciplinary class: students with a passion for nature and/or science are welcome even if they have taken no creative writing classes before.

CSC 170 Programming and Problem Solving

An introduction to computer programming with an emphasis on learning how to write programs to solve problems. Problems will be taken from a wide range of disciplines. Prerequisite: MAT 110 or placement in MAT 165 or higher or permission of the instructor.

DSC 230 Statistical Modeling

A study of applied regression analysis, emphasizing fundamental statistical concepts as well as applications and interpretations. Topics include probability with a focus on conditional probability, model building, variable transformations, residual analysis, and logistic regression. A strong emphasis will be placed on statistical computing in R as well as developing the ability to professionally

communicate findings to audiences of varying levels of statistical understanding. Prerequisite: MAT 130

EDU 285 Voices of Diversity in Classrooms

While U.S. school populations continue to become more and more diverse, the books read in classrooms frequently represent the majority only. The focus of this class is on representations of traditionally underrepresented groups in school curriculum (including but not limited to those of African, Asian, Latino/a, Native American, and Middle Eastern origins) with classroom applications. The critical analysis of selected texts and illustrations in multicultural children's and adolescent literature will enhance students' ability to influence all children's and adolescents' reading of diverse representations of culture, ethnicity, socioeconomic status, religion, disability, gender, and sexuality. Strategies for incorporation of a diverse reading list in a multicultural curriculum will challenge students to explore the impact of book choices on classrooms. Concerns raised by parents and controversies such as book banning and their implications for students and classrooms also will be investigated.

ENG 237 The South in Literature, Music and Film

An interdisciplinary study of Southern culture via literature, film, and music. The literary layer will address such authors as Poe, Faulkner, Hurston, Warren, Welty, O'Connor, Gaines, and Trethewey. Music covered will range from Delta blues to Dirty South with a focus on the Memphis music that changed the world. Films screened will be drawn especially from adaptations such as *A Streetcar Named Desire*, *To Kill a Mockingbird*, *Winter's Bone*, and *The Autobiography of Miss Jane Pittman*.

ENS 235 Physical Geography of the Natural Environment

This course will address the patterns and processes of the Earth's physical systems including the atmosphere, tectonics and landforms, water and river systems, ecosystem dynamics, as well as human impacts on these systems. Upon completion of this course, students should be able to understand and appreciate the natural processes that occur every day or over every year. The basics of meteorology (study of the atmosphere and weather), climatology (longer-term trends in weather and its variation over the earth), biogeography (distribution of life on earth) and geomorphology (processes that shape the surface of the earth). Students will also understand the important properties of maps and students will use maps and digital mapping tools to explore spatial patterns on earth.

FLM 255 Iranian Cinema: Before and After the Revolution

In this course, students will focus on the history and cultural impact of Iranian film. The poetics of Iran's cinematic tradition draws deeply from modernist traditions familiar to artists in the west, as well as Iran's own cosmopolitan traditions—an intriguing double play that provides both counterdiscourse as well as a profound commonality for American audiences. Our focus in class will be on films from the post-revolutionary period, with particular focus on the late 1990s into the present. However, since Persian cinematic roots go back to the pre-imperial world, students will get a brief grounding in Persian imagery and early narrative traditions.

LIN 210 Introduction to Linguistics

An introduction to the fundamental principles and theories of linguistics, including sound systems, lexical systems, the formation of phrases and sentences, and meaning--both in modern and ancient languages and with respect to how languages change over time. We will explore the cognitive theories and scientific principles behind language use as a defining human activity, as well as the basic methods of linguistic analysis and the application of these methods to language data. Drawing upon students' experience with English and a broad spectrum of other languages, we will practice elementary analytic techniques and work with problem and data sets.

MUS 121 Musicianship-I

A skills lab for aural recognition (identification of intervals and chord qualities), sight singing, simple melodic dictation, keyboard harmony, and elementary improvisation. Group work is heavily supplemented by individual work using the department's computer facilities. NOTE: Students may enroll in MUS 121 without taking MUS 120.

MUS 217 The Grateful Dead

The Grateful Dead, arguably the greatest live improvisational rock band ever, were one of the most unique phenomena in American music history, both culturally and musically. Culturally, they were an icon of the 1960's counterculture, and the band and its music represented a spirit of freedom and experimentation that has influenced generations of obsessive fans known as "Dead Heads" to this day. The band's musical innovations were no less unique - combining rock and roll, folk music, jazz, classical, world music traditions and various other experimental and traditional musics. This class will explore the various strands that made this band so unique and successful. No musical experience is required.

MUS 224 World Music: Bali (one credit hour)

This course is a hands-on study of the magical percussion music from the island of Bali called gamelan. Students learn to play a variety of exotic xylophone-like instruments and gongs in the gamelan orchestra and explore the complex and interlocking rhythms of a fascinating region. This is great training for musicians of any level and style. Ability to read music is not required.

PHI 251 Nature and Reality

Students in this course read and think about different understandings of the world around us, nature, and what we mean when we talk about existence. Have you ever wondered what are the fundamental components of nature and reality? Is reality something we create or something of which we are a part? Readings incorporate main areas of contemporary philosophy, among them: scientific realism, time, laws of nature, and causality. Students engage the contemporary literature and answer some of the following questions: Do physics and chemistry give us the only real properties of nature or is there more than the material world? If all the properties that exist are the scientific ones (protons, electrons, neutrons, magnetic fields, etc.) then how do we understand or explain the every day objects we encounter, including ourselves and other human beings? What does it mean to say that something exists, and exists as we perceive it? Is there such a thing as time and if so, is it static or is it ever changing (for instance, the present)? What does it mean to say that the laws of nature hold by necessity? We seem to agree that scientific laws are explanatory, but what makes them explanatory?

PHI 381 Feminism and Philosophy

This course focuses on the intersection of feminist theory and philosophy. We will discuss issues in feminism and their import to areas of philosophy such as ethics, social philosophy, and theory of knowledge. Some of the questions we will ask are: What is sexism? What is gender? Is value gendered? Is knowledge gendered?

POL 130 Political Institutions

This course introduces students to different elements of political systems around the world. Case studies of countries are used to study political, economic, social, ideological, and regional factors. Through an exploration of various manifestations of these factors, including authoritarianism, totalitarianism, democracy, theocracy, capitalism, communism, secularism, this course employs the comparative method in an effort to make broad generalization and to uncover political, economic, and ideological patterns.

POL 205 Introduction to Political Analysis

A general introduction to the major techniques used for the critical evaluation and analysis of the political world. This includes both normative and empirical approaches. Emphasis is placed on the recognition, understanding, critique, and application of analytical approaches used in scholarly journals and the popular media. NOTE: May not be taken if credit has been received for POL 310 or is in progress.

POL 210 American Political Thought

An exploration of recurring themes and problems in American political thought. The course will draw on primary and secondary sources relating to the ideas and actions that have shaped American conceptions of freedom, democracy, equality, etc. from the Founding to the present day.

REL 244 Religion and Violence

An analysis of the major approaches to issues of violence, war, and peace in religious ethical teaching. The course examines the roots of Christian pacifism, Just War theory and Holy War as well as alternative theories on the origins of conflict. Students work to develop positive, practical strategies for conflict resolution informed by the rich resources available in biblical teaching, theological ethics, and Gandhian philosophy.

SLJ 210 Introduction to Social Justice

In order to develop an appreciation of the diversity within approaches to social justice, the course will examine social justice concepts and theories from a variety of disciplinary and cultural perspectives. The course will consider the following questions: What is social justice? Why does social justice matter? How are identities, experiences and systems of inequity intertwined with social justice? Particular attention will be paid to the intersections of class, race, gender, sexuality, age, ability, and other elements of social location. Students will critically engage a range of texts focused on inequality, justice, community building, activism and policy making. In addition to examining the varied structures understood by diverse groups as oppressive, the course will explore the adaptive capabilities and strengths of marginalized groups within effective social justice work. Finally, students will explore their own personal values, beliefs and behaviors that may limit or enable their ability to effectively apply social justice theory and practice.

ADDITIONAL ONE-HOUR COURSES OPEN TO FIRST YEARS

One-hour courses in applied music, music ensembles, and dance are available for students who wish to pursue an academic or personal interest in these areas. All of these courses are one credit hour courses and may be taken in addition to the normal load of four courses.

COURSES IN APPLIED MUSIC

NOTE: There is an extra fee of \$300 for registration in applied music (music scholarship holders pay \$150).

- MUS 140 First-Year Flute Lessons
- MUS 141 First-Year Oboe Lessons
- MUS 142 First-Year Bassoon Lessons
- MUS 143 First-Year Clarinet Lessons
- MUS 144 First-Year Saxophone Lessons
- MUS 145 First-Year Trumpet Lessons
- MUS 146 First-Year French Horn Lessons
- MUS 147 First-Year Trombone Lessons
- MUS 148 First-Year Euphonium Lessons

MUS 149 First-Year Tuba Lessons
MUS 150 First-Year Percussion Lessons
MUS 151 First-Year Violin Lessons
MUS 152 First-Year Viola Lessons
MUS 153 First-Year Violoncello Lessons
MUS 154 First-Year Bass Lessons
MUS 155 First-Year Harp Lessons
MUS 156 First-Year Guitar Lessons
MUS 157 First-Year Piano Lessons
MUS 158 First-Year Harpsichord Lessons
MUS 159 First-Year Organ Lessons
MUS 160 First-Year Voice Lessons
MUS 161 First-Year Composition Lessons
MUS 162 First-Year Bass Guitar Lessons
MUS 163 First-Year Jazz Piano Lessons
MUS 164 First-Year Fiddle Lessons
MUS 165 First-Year Music Production
MUS 167 First-Year Classical Guitar Lessons
MUS 169 First-Year African Music Lessons

MUSIC ENSEMBLES

MUS 183 Centre College Choir (non-auditioned choir)
MUS 184 Centre Singers (auditioned choir)
MUS 191 Centre Symphony Orchestra
MUS 193 African Drum Ensemble
MUS 194 Centre Fusion Ensemble
MUS 195 Centre College Chamber Ensemble
MUS 196 Kentucky Music Ensemble (auditioned ensemble)

There is no charge for participation in musical ensembles.

All applied music courses are taken for academic credit. Music ensembles are graded on a pass/unsatisfactory basis only. Students have the option of taking the other courses either on a regular letter-graded basis or on a pass/unsatisfactory graded basis.

Students choosing an applied music course will be contacted by the music department at the beginning of the fall term to set up a lesson time.

MODERN DANCE CLASS

The College offers a one-credit-hour modern dance class. There is no fee for the class which meets for an hour and a half on Mondays and Wednesdays, 5:30-7:00 p.m. The course may be taken in addition to the normal load of four courses.

THR 101 Beginning Modern Dance Technique (one credit hour)

An introduction to the study of modern dance. Classes include basic dance warm-up exercises designed to stretch and strengthen various muscles throughout the body, and simple movement combinations designed to improve balance, coordination, flexibility, and rhythm. The class is supplemented by the viewing and discussion of videotapes of works by modern dance choreographers.