



### FACULTY OF SCIENCE

#### **200: NATURE'S WONDERS: From Rocks to Plants to Fishes and other Animals**

##### ABSTRACT:

Nature hides its secrets well. Every day we take for granted the amazing natural world around us, as it quietly goes about its business - until we are forced to confront it. Then we have questions - about soils and fascinating rocks; plants and trees that we aren't familiar with; the strange world under the surface of the water; and animal habitats that seem to be in the wrong place. As landscapes change and habitat is lost, we want to know how it all works. In this course, a different environment on the University campus will be explored every day, through discussions, hands-on exercises, and group projects. Towards the end of the week we will bring all these experiences together to see how Environmental Science can help us better understand and respect the Wonders of Nature.

*Instructor: Prof. Brian Burns*  
*Department: ENSC*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **201: What is Evolution? Fact, fiction and fundamentals**

##### ABSTRACT:

2,600,000 years ago, human ancestors wandered through Olduvai Gorge in Tanzania, unaware that their skeletons would be priceless specimens to their descendants. In 1859, Charles Darwin, inspired by twenty years of exhaustive research, published *On the Origin of Species*. In 1925, John Scopes was brought to trial in Tennessee for teaching evolution in high school. Sometimes controversial, evolutionary biology informs us about the diversity and adaptedness of all organisms. Evolutionary theory also has many useful applications, ranging from crop and animal breeding to antibiotic resistance and cancer treatment. This course will outline the history of evolutionary thought, explain how evolutionary forces operate, retrace the evolutionary history of human beings and explore fantastic adaptations in the natural world. Discover how and why living things change!

*Instructor: William Hughes*  
*Faculty Advisor: Prof. Andrew Simons*  
*Department: Biology*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **202: Adventures in Mathematics**

##### ABSTRACT:

This course will explore a variety of math activities selected from such topics as: the nature of infinity, the mysterious properties of prime numbers, constructing geometrical objects, the mathematical art of Escher, the math behind random events (including casinos, lotteries and card games), paradoxes and problem-solving (both in math and in non-mathematical life).

*Instructor: James Bondar*  
*Faculty Advisor: Dr. Wayne Horn*  
*Department: Mathematics*  
*Grades 8-11, Ontario/Sec. 3-5 Québec*  
∞

#### **203: Web Ninja**

##### ABSTRACT:

We now live in a world where information is potentially unlimited. Data is cheap, but its meaning, (information) is expensive. Where is data and its meaning? World Wide Web collects lots of important data, and we understand the meaning of all this information through web applications. It is necessary for younger generation to understand this planet-wide media. They should learn about its past, to understand the present state and find the future of it. This course is all about World Wide Web. During this course, students become familiar with the history of World Wide Web, its importance and the tools they might need to investigate. They will become familiar with basic concepts in computer networks, web applications and many important topics in the cyber world such as security and privacy.

*Instructor: Abdolreza Shirvani*  
*Faculty Advisor: Prof. B. John Oommen*  
*Department: Computer Science*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **204: School of Rock! – An Introduction to Earth Science**

##### ABSTRACT:

Ever wonder why the Earth has volcanic eruptions and earthquakes? Or how fossils are used to study the age of the Earth? Are you curious about how diamonds were found in the far north of Canada? Why are mineral deposits important to your everyday life? The answers to these questions are found through the study of earth science. We will use field trips, interactive lectures, and a wide variety of laboratory activities and experiments to help you understand and appreciate the complexities of planet Earth. The week will include a guided tour of the Talisman Energy Fossil Gallery at the Canadian Museum of Nature, and an outdoor field trip to Hogs Back Falls.

*Instructors: Ann Timmermans and Wenzhe Lu*  
*Faculty Advisor: Prof. Claire Samson*  
*Department: Earth Sciences*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **205: Natural Disaster Hollywood Blockbusters: Fact or Fiction?**

##### ABSTRACT:

Ever wonder if we could have a sudden climate change that sends us into a new ice age? Or what would happen if the Earth's core stopped spinning? Can volcanoes create lakes of acid that corrode metal boats? We will learn the basic processes, and present real-life case studies of natural disasters. Together, we will view and explore the earth science behind these natural disaster blockbusters. You may be shocked at what you learn!

*Sensitivity: Rated PG-13 for intense disaster related elements and brief strong language.*

*Instructors: S. Katie Ploeger,*  
*Faculty Advisor: Prof. Claire Samson*  
*Department: Earth Sciences*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## **206: Chance, Confidence, Certainty, Cancer, Causality, Correlation**

### ABSTRACT:

What are my chances of getting a six on the next roll of a die? How likely would it be for the next card dealt to you to be a spade? What confidence can pollster place on his or her estimate of the probability that a particular candidate will win a riding in an election? Can a virus spread fast enough? From helping to win a card game to projecting economic growth, the uses of probability and statistics are virtually endless. We will take you on an exciting journey through the ABC's of probability and statistics, and show how the C's in the title may be connected by designing and playing your own games and experiments!

*Instructor: Ahmed Almusket*  
*Faculty Advisor: Prof. Ann Woodside*  
*Department: Mathematics*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## **207: Animating the World**

### ABSTRACT:

In this course we will learn how to make 2D and 3D animation using computer software and processing programming languages. "Processing" is a programming system especially created for digital artists -- artists can work inside it to get some computer help in making animations, graphics, and even artificial life. This course will cover computer animation principles and emphasize artistic and aesthetic creativity. Participants can know some recent trends in animation industry of the world. Some time will be spent on screening international animated for inspiration and to learn a variety of styles and techniques. This is a course that can be taken by anyone with an interest in making their own computer animations.

*Instructor: Hua Li*  
*Faculty Advisor: Prof. David Mould*  
*Department: Computer Science*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## **FACULTY OF ENGINEERING & DESIGN**

## **208: The Future is Now: Design Your Own Superhero!**

### ABSTRACT:

In this hands-on course, you will explore technological developments (such as e-paper, temperature sensitive plastics, micro-motors, and nanotechnology) and project your vision of a superhero! What devilish or delightful specimens can we expect? Are there any Canadian superheroes on the horizon? Classes will introduce you to the design process: brainstorm ideas, develop concepts through sketching, illustration, and storyboarding like a professional industrial designer would – all set in a design studio environment! The course will also introduce you to the importance of material and technology forecasting, form and color principles, and two-dimensional computer illustration. The week will conclude with a display, presentation, and discussion of student designs.

*Instructor: Prof. Won Joon Chung*  
*Department: Industrial Design*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## **209: Re-Making Your World: From Garbage to Goods!**

### ABSTRACT:

In this hands-on course, you will experience what it is like to design a new product. The challenge: this new product must begin its life

in the garbage dump. How can something new and exciting be made out of the stuff we throw away every day? Brainstorm ideas, develop new concepts through sketching and testing, and make models of your concept like a real industrial designer in a real design studio. The course will also introduce you to the values of sustainable design, the importance of market research and user needs, form and colour principles, two dimensional computer illustration, materials, and production processes. The week will conclude with a display, presentation, and discussion of student designs.

*Instructor: Prof. Won Joon Chung*  
*Department: Industrial Design*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## **210: Design Tools for the Digital World of the 21st century!**

### ABSTRACT:

We are living in a world surrounded by audio and visual media most of which are digitally produced. This mini-course will introduce students to digital media design through hands-on tutorials using computer software. Sessions will include Photo editing, 2D illustration and animation, video effects, basic 3D visualizations, green-screen effects, and a demo of the optical motion capture technology. Hence, students will get a sense of what it feels like to be a graphic or web designer, an independent filmmaker or video editor, an animator, etc.

*Instructor: Johnny El-Alam*  
*Faculty Advisor: Dr. Anthony Whitehead*  
*Department: School of Information Technology*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## **211: Humans in Space! – Past, Present and Future**

### ABSTRACT:

- What was the Space Race & how did it change our world?
- Who were the first living beings in space?
- What did astronauts leave on the moon?
- What critical things have Canadians done & what are we doing now?
- What is it like to live on the International Space Station today?
- What is the future for humans in space?
- How does one get to be an astronaut or a rocket scientist?

Come learn the answers to these questions and many more. Bring your own questions. This course will learn some history, what is happening today and a look to the future of human space flight. We will launch small rockets, design a moon base and there will be time to explore your favourite space topic and tour the Carleton Engineering labs. We'll learn about the space explorers from various countries and especially about the important roles that Canadians have played and are playing in space exploration.

*Instructor: Prof. Barbara Eade*  
*Department: Mechanical & Aerospace Engineering*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## **212: Embracing A Better Future through Biomedical Engineering**

### ABSTRACT:

Technology is continually changing and growing. When it comes to new medical gadgets, biomedical engineers are on the forefront of helping to improve existing equipment and create new devices. Learn how biomedical engineers apply their knowledge of science and math to medical problems to come up with exciting and innovative solutions. Imagine being able to control a game using nothing but your mind, predict heart attacks before they happen, or

perform surgery on someone thousands of kilometers away! These are the types of things that biomedical engineers help make possible. This mini course will focus on the types of tools that biomedical engineers use on a daily basis and allow for hands on experience measuring and manipulating biological signals.

*Instructor: Patrick Quesnel, Daphne Ong*  
*Faculty Advisor: Dr. Adrian Chan*  
*Department: Systems and Computer Engineering*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
 ∞

### **213: *Electronics Design in the 21st Century: From Producing Green Energy To Making Chips!***

#### **ABSTRACT:**

For a moment, imagine life without your electronics gadgets. Would that even be possible these days? Have you ever wondered how such devices are designed and made? Are you fascinated by the technology behind touch screens, Xbox Kinect, Wii Remote, or PlayStation Move? Would you like to know how your cell phone or digital camera captures images? You might be surprised to learn it's the same way solar cells power your house, NASA's satellites, and the International Space Station! It's all about electronics, and this mini-course gives you the opportunity to learn about various fields of electronics, from green energy production, to sensors, to microprocessors running your cell phones, tablets, or laptops. Join this mini-course to learn how all these devices are made! As a bonus, you will get to see Carleton's state of the art Micro Fabrication Facility where we make chips!

*Instructor: Ehsan Ghias Begloo*  
*Faculty Advisor: Prof Garry Tarr, and Prof. Niall Tait*  
*Department: Electronics*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
 ∞

## **FACULTY OF PUBLIC AFFAIRS**

### **214: *GOT LAW? An Introduction to Law and Sentencing***

#### **ABSTRACT:**

Ever wonder what two things are needed to make something a crime? If someone vandalizes twenty cars in one night is the punishment they receive going to be the same as if they vandalized only one car? What do sentencing judges look at before handing out punishment? What makes someone a youth offender? Ever wonder why 2 hockey players only get penalties when they fist fight on the ice and not jail time? What sort of law governs hockey players? Who can you sue if you get hit with a hockey puck in the face at a game? Can you sue? What is the difference between Facebooking and Facebook Bullying? Is it against the law to post a photo of someone on Facebook without their permission? Can you be given a ticket if you don't wear a helmet on your bike? What are your rights at 13 and 18 years of age? Are they different?

In this mini course students will learn a basic introduction to Canadian law and the Canadian legal system and laws around sentencing. Topics will be relevant to the age group of the students and how law affects and shapes their daily lives. They will visit the Supreme Court of Canada and have open discussions about some of the more famous cases tried there. They will visit the Ottawa Court House and see where real life legal proceedings take place. They will speak with a peace officer who has worked for the Ottawa Police service for over 15 years and get a real life account of what it is like to be a youth offender. What happens? How do the police treat youth offenders? What laws govern the police? Learning will come from keeping a reflective journal and by following legal stories cut right from the headlines. They will see documentary films which attempt to illustrate legal issues and odd cases and events. Social

media sites will be visited, along with YOUTUBE to look at the legal issues that present themselves to students on a daily basis. Finally, they will be guided through exercises and role play to show how grey some areas of law can be! Got Law? This is the course you need as you move forward into adulthood and perhaps a career in the Canadian judicial system!

*Instructor: Barbara Ann Vocisano*  
*Faculty Advisor: Prof. Alan Hunt*  
*Department: Law*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
 ∞

### **215: *Building a Great City***

#### **ABSTRACT:**

For the third year in a row, Money Sense Magazine has declared Ottawa the best city in Canada to live in. But what exactly is it that makes a city a great place to live? Through a series of group decisions, field trips, presentations, and debates this course will address that question. Students will be asked to critically examine the city in which they live. What do they like about it? What do they not like? How can it be improved? It is hoped that students will leave this course with a better understanding of how our lives (for better or worse) are shaped by the urban environments in which we live, as well as an understanding of how, through participation in community planning, we can build better cities.

*Instructor: Ben Dick*  
*Faculty Advisor: Prof. Chris Stoney*  
*Department: Institute of Political Economy*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
 ∞

### **216: *Between Reality and Dream: The United Nations Millennium Development Goals***

#### **ABSTRACT:**

Did you know that more than 1 billion people go to bed hungry every night? Did you know that across the world more than 1 billion people are living on less than \$1.25 a day? Did you know that millions of children drop out of school due to poverty? Given the severity of these issues, the United Nations (UN) member states agreed on the Millennium Development Goals (MDGs) in 2000 to "make the world a better place for all" by 2015. In this course, we will explore this UN initiative in an interactive class environment. Through a variety of in-class games, documentaries, role-playing, and many other entertaining learning tools, you will acquire an in-depth knowledge about the MDGs and learn about real country experiences.

*Instructor: Yelda Gulderen*  
*Faculty Advisor: Prof. Chris Stoney*  
*Department: NPSIA*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
 ∞

### **217: *Life in front of a camera: Image, Identity, and Celebrity Culture***

#### **ABSTRACT:**

Have you ever wondered why we know so much about celebrities today? Or why we care? This course will encourage students to actively engage with celebrity culture by teaching them how to think critically about popular culture, new media, and the connections between image and identity. Following a discussion of the Hollywood star system and the tradition of "packaging" celebrities, we will examine how the image of celebrity has changed over time. Topics will include the development of paparazzi photography since the 1950s, fan communities and identification with stars, the role of social media today (including Twitter and Facebook), the face of the fallen star, and the rise of the YouTube star.

*Instructor: Rebecca Elliott*  
*Faculty Advisor: Prof. Melissa Aronczyk*  
*Department: Communications*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### *218: Media, Memes, and Mashups: Taking Charge in New and Social Media*

#### ABSTRACT:

New and exciting possibilities for self-expression are opening up on the internet all the time. This mini-course will introduce students to the latest topics in new and social media, including;

1. Social media and privacy
2. Digital media and blogging, twitter, and video
3. Academic research and social media

Withdrawn

The instructor will offer short presentations and run discussions on a variety of topics. Students will be then encouraged to develop new media projects of their choosing, possibly including blogs, memes, twitter accounts, original videos or mashups to post to youtube, web petitions, etc.

*Instructor: Suzanne Waldman*  
*Department: Communications*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### *219: People for Sale? Understanding and Challenging Modern Day Slavery*

#### ABSTRACT:

You thought slavery was abolished more than 200 years ago? You were right. Yet there are about 27 million slaves in the world today. That's almost the population of Canada, living in situations of severe labour or sexual exploitation ... or both. Learn what it is like to be a slave in 2013, in Canada and around the world. Research the economic and social causes of trafficking in persons, a modern form of slavery. Become an international lawyer for a day and see what treaties say about modern slavery. Learn about the roles of law enforcement and social services in helping trafficked persons. And find out what you can do in your own community to stop human trafficking.

*Instructor: Prof. Christina Harrison Baird*  
*Department: Law*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### *220: Let's Discover Europe*

#### ABSTRACT:

Let's Discover Europe! Explore the diverse histories of the European Union from right here in Canada. From the lochs of Scotland and the Greek islands to the reindeer herds of Finland and the castles of France, the European Union contains within its borders a diversity of vibrant cultures. The 27 European Union (EU) member states are home to exciting foods, music and languages, as well as colourful personalities, from politicians Silvio Berlusconi and Angela Merkel, to leading celebrities such as David Beckham and Adele.

What is the background of the EU and why was it created? With the ongoing economic turmoil facing Europe today, how does this affect the EU and subsequently the world? How is the EU relevant for Canada? Does it benefit Canada to engage in a free trade agreement with the EU? We explore these topics and more in detail using a variety of activities and multimedia. Learn about exciting opportunities for travelling and working inside Europe.

The EU is a fascinating part of the world to visit, study, and work in. Here is an opportunity to examine and experience those opportunities. Join us on this adventure through the EU!

*Instructor: Julie Pickering*  
*Faculty Advisor: Prof. Joan DeBardeleben*  
*Department: European Studies*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### *221: Violence and Justice: Exploring Human Rights and Violent Conflict*

#### ABSTRACT:

The United Nations was created at the end of World War II to provide an international platform for dialogue in the hopes of preventing the future outbreak of war. This course is designed to give a brief introduction to human rights theory and practice and how they intersect with the realities of violent conflict, particularly in African contexts. Of special concern is how the human rights of vulnerable populations, women and children, are abused during periods of violent conflict. This course also explores how mass human rights violations perpetrated during these periods can be addressed and redressed. The topics of transitional justice and peacebuilding will focus on this problem. Throughout this course I will refer to fieldwork I have conducted in the eastern Democratic Republic of Congo. Mature and sensitive topics will be covered (genocide, child soldiers, rape as a weapon of war).

*Instructor: Holly Dunn*  
*Faculty Advisor: Dr. Augustine Park*  
*Department: Political Science*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

## FACULTY OF ARTS AND SOCIAL SCIENCE

### *222: "I'll see you on Facebook": What does it really mean to 'win friends and influence people'?*

#### ABSTRACT:

What makes an interesting status update, a much viewed profile or a fun friend comparison application? With more than half a billion active users, Facebook is currently the most popular social networking site in the world. Building on Marshall McLuhan's phrase 'the medium is the message,' communications scholar Neil Postman pointed out "[O]ur languages are our media. Our media are our metaphors. Our metaphors create the content of our culture."

In this fun course we will explore the theoretical roots of social networking sites such as Facebook and Twitter and examine how information exchanges that take place through 'texting', microblogging and image sharing are changing how we think, act and communicate with others. Other areas of interest include: how do conversations take place through status updates? Are Facebook friendships based on genuine understanding, or are we more driven to make friendships based on a need for recognition? Which applications, games and quizzes are the most popular and why? What were some of the historical reactions to elements such as Newsfeed and implications on self disclosure and privacy? Students will be asked to apply theoretical material taught in the lectures in fun group projects which they will present at the end of the course. As a special treat, this course will feature a 'mystery' guest speaker.

*Instructors: Devjani Sen*  
*Faculty Advisor: Brian Tansley*  
*Department: Psychology*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### **223: *The F-Word: Exploring Feminism in Society***

#### **ABSTRACT:**

Patriarchy got you down? Needing a little liberation in your life? If you have ever wondered what it takes to be a kick-ass feminist this is one is for you! In this course we will discuss different feminist points of view so you can figure out what kind of feminist you want to be. We will also look at how women and girls are portrayed in film, music and advertising to explore how this affects our self-image, relationships with others and roles in society. Think girls are no good at math? Think again! This and other gender myths will be presented and debunked. Come on girls and boys (you only need one X chromosome to get in) let's get our empowerment on!

*Instructor: Andrea Thompson*  
*Faculty Advisor: Dr. Connie Kristiansen*  
*Department: Psychology*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### **224: *Yo Dawg! Exploring Hip Hop and the Language of Resistance***

#### **ABSTRACT:**

Hip hop is about more than getting your next party thumping! Part of the fun is sharing beats, telling your story, and expressing your identity. But what is identity exactly, and how do we express it? What if the people around us don't want to know about it? Using hip hop as a contemporary example, explore ideas of identity and cultural performance and how it is used to resist marginalization, discrimination, and alienation in this hands-on course. You will be introduced to identity and the language we use to express it, as well as the political, economic, and cultural challenges identity faces in today's world. How do communities and individuals use their identity to gain recognition? Can identity be political? What about pop culture? We will answer these questions and more.

*Instructor: Greer Brabazon*  
*Faculty Sponsor: Peter Hodgins*  
*Department: Canadian Studies*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### **225: *How Can Psychology Catch A Criminal?***

#### **ABSTRACT:**

What makes a person commit a crime? How do the police use psychology to catch a criminal? Why do eyewitnesses make mistakes? This course will introduce students to the fascinating world of forensic psychology. A variety of topics will be explored throughout the week including police interrogations, eyewitness identification, criminal profiling, and jury decision-making. Students will learn about these topics through activities, discussions, videos, and lectures.

*Instructor: Prof. Julie Dempsey*  
*Department: Psychology*  
*Grades 8-11, Ontario/Sec. 3-5 Québec*  
∞

### **226: *Vampirology***

#### **ABSTRACT:**

Scary monsters from Dracula to Twilight, have frightened and delighted audiences for centuries. What scares teenagers today? Why do we like these films? This course will begin with a brief look at the original Vampires—silent films with creatures that glide about with pale skin and control the afterlife. We will do creative writing activities, where you can write your own scary films. We will create scary plots and characters, and discover our own inner talents at directing, acting, and designing the scariest stories ever. We will learn about what made people scared in the 1900's. How do you scare an audience in a silent film? We will look critically at different

eras of "gothic" films, and examine notions like capitalism, monsters, heroes, good, evil, underworlds, and fear. This course will challenge the way you watch cinema, and make you think about how real life is related to art!

*Instructor: Jessica Woodman*  
*Faculty Advisor: ???*  
*Department: Canadian Studies*  
*Grades 8-11, Ontario/Sec. 3-5 Québec*  
∞

### **227: *I Love Rock n Roll: Introducing a Popular Music Genre***

#### **ABSTRACT:**

Rock music is a popular genre with a long history. In this course we ask: What is rock music? How has it been represented in popular culture? How has it changed? We begin by unpacking the cultural and musical contexts in which rock music emerged. Then subsequent changes in rock sound and style are highlighted, with particular attention paid to the punk, alternative, and indie rock genres. Tracing the cultural and musical development of rock will involve: listening to songs; examining lyrics and writings about rock; and watching and critiquing the various media (e.g. television shows, Hollywood film, and music videos) that shaped the popularity of rock. Developing these critical strategies will change the way you think about popular music!

*Instructor: Michael Audette-Longo*  
*Faculty Advisor: Prof. Paul Théberge*  
*Department: Literature, Art and Culture*  
*Grades 8-11, Ontario/Sec. 3-5 Québec*  
∞

### **228: *How to Make a Real Man: Busting the Macho Myth***

#### **ABSTRACT:**

Have you ever wanted to build a "real man," but thought it was impossible? Think again! In this course, we'll be using a surprisingly simple formula to create our very own. To do so, we'll identify and follow rules that tell us what a man is allowed to eat, say, think, do, watch, read, wear, and even feel. To be sure that we don't make any mistakes, we'll also look at rules for creating other types of people – for example, women, "girly men," and "weirdo's" (we all know a few of those). We'll then compare our creation to examples from media, society, and personal experience to test how real the "real man" is. Will this myth be busted or confirmed? Sign up to find out!

*Instructor: Matthew Murdoch*  
*Faculty Advisor: Dr. Connie Kristiansen*  
*Department: Psychology*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### **229: *A Picture's Worth a Thousand Words: understanding the images around us.***

#### **ABSTRACT:**

From celebrity gossip magazines to Facebook profiles, images not only surround us constantly, but affect the ways we engage with the world and perceive of ourselves. While we are all used to glancing at such images without giving them any thought, they have, in fact been constructed and placed around us for specific reasons. This course will help students become active observers of the images that surround them by teaching them about the art historical traditions that popular images draw on. Students will demonstrate their new understanding of visual culture by curating their own online exhibition. Topics will include gender and identity, cultural and racial stereotyping, documentary photography, and official portraiture, among others.

*Instructor: Sheena Ellison*  
*Faculty Advisor: Prof. Ruth Phillips*  
*Department: Art History*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### **230: "Ceçi n'est pas une pipe": Thinking like an Artist**

#### ABSTRACT:

Finger-painting and drawing plastic fruit: If you think that's what art is about, think again. This highly interactive course will take a behind-the-scenes look at some of art school's most mind-expanding lessons that have little to do with artistic skill. From understanding René Magritte's "Ceçi n'est pas une pipe" theory of image representation, to the talent of appreciating mistakes and how to speak effectively, students will learn the value of thinking like an artist. This course teaches curious minds to look at reality beyond what they see, find flaws in polished logic, evaluate theories and create new knowledge by engaging in discussion, debate, reflection and, yes, some art-making. Go beyond the plastic fruit and you'll find much there's more to art than meets the eye.

*Instructor: Christina Dore*

*Faculty Advisor: Dr. Janna Fox*

*Department: Applied Linguistics & Discourse Studies*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **231: Globalization and Sustainability: Where does all my stuff come from?**

#### ABSTRACT:

Have you heard of globalization? How about sustainability? Have you ever wondered what these things are and how they affect you? How do these concepts relate to the environment, trade, politics and culture? In this course we'll examine key issues of globalization, and whether our current lifestyles are sustainable in the long term. We'll explore globalization by examining economics, technology, health, culture and gender. The course is designed to provide you with the skills to analyze the day-to-day choices raised by globalization in an increasingly interconnected world. Students will have the opportunity to calculate their ecological footprints, track their favourite foods, music and clothing across the world and create fun and interactive presentations at the end of the course.

*Instructor: Alana Conway*

*Faculty Advisor: Prof. Blair Rutherford*

*Department: Anthropology*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **232: Books on Film**

#### ABSTRACT:

So many great movies tell stories that are adapted from books. This course will explore the strong and longstanding relationship between film and literature by emphasizing that both these art forms have unique ways of telling a story. We will read short excerpts from books and watch clips of film adaptations in different genres such as literary classics, fantasy, comic books and graphic novels, science fiction, and short stories. Students will create storyboards inspired by a book they love and will learn to recognize how characters and surroundings are portrayed differently on page and on screen. We will also question if and how cinematic representation of literature influences the way we read books. If you want to learn more about the close connection between movies and books, you'll really enjoy this course!

*Instructor: Lina Shoumarova*

*Faculty Advisor: Dr. Sarah Brouillette*

*Department: Comparative Studies in Literature, Art, & Culture*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **233: Young Minds at Play**

#### ABSTRACT:

Play is essential to development because it contributes to the cognitive, physical, and emotional well-being of children. This course will deal with the early cognitive development of very young children by focussing on ways to support early brain development through structured play activities. For a baby, sensory inputs might at first appear chaotic and disorganized. It is through the integration of sensory-perceptual information that children are able to make sense of their world and develop new ideas. Part of this course will focus on the importance of structured play activities that can enhance such sensory-integration by fostering attentional, motor, and cognitive control. Another part will involve the manner in which children begin to acquire knowledge about concepts and categories (such as numbers, letters, and words).

*Instructor: Craig Leth-Steensen & Elena Gallitto*

*Department: Psychology*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **234: Bippity-Boppity-What? Jumping Down the Rabbit Hole of Classic Disney Movies**

#### ABSTRACT:

Ever wonder where the classic Disney animated movies came from? Want to know the origins of stories like Beauty and the Beast and Sleeping Beauty? This course examines Disney movies, their histories and the influence of folk tales in contemporary Western culture. We will explore topics like the start of the international Disney Princess phenomenon and look at their original folk tales and contrast how they are portrayed in the films. Gender, race and class are interrogated in the tales and films and students are encouraged to use their literature and pop culture critical thinking skills!

Do princes always save the day? Are step- mothers always evil witches? What kind of messages are in the tales and movies? Come and find out as we explore the origins of your favourite characters and their tales!

*Instructor: Sarah Spear*

*Faculty Advisor: Prof. Anne Trepanier*

*Department: Canadian Studies*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **235: Beyond "good" grammar: Language made unborring**

#### ABSTRACT:

Do the Inuit really have 200 words for snow? Can a language go extinct? Why do people have accents? Does a person's language affect how they see the world? R U ZZZ of EVRE1 saying that kids 2DAY can't spell?

In this mini-course we will look at language as it exists outside of your grammar textbook and discover how quirky it really is. We will debunk common language myths (Are some languages really better than others?), examine the assumptions our society has about language (Who says girl-talk is just gossip?), look at how and why words change their meanings over time (How can something be both awesome and wicked? Cool and hot?), and discover why text-speak is not an abomination of the English language.

*Instructor: Prof. Erin Bidlake*

*Department: Linguistics and Language Studies*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

**236: *Write by the River – Explore, reading, writing, travel, & life.***

**ABSTRACT:**

Part writing workshop, part creative inquiry into the possibilities of living, this course will take place in a window lined room beside water, and occasionally, on the banks of the lovely Rideau river. Together we will learn skills to help you read and write poetry, short stories, novels, personal essays, articles, blogs, musical lyrics, travel, humour and memoir writing. Students will view a thought provoking film, and write fun, stimulating writing exercises designed to unlock their great ideas and jumpstart their creative thinking. You will write a postcard story, and in groups of three write 3 chapter mini novels. Shared in class writing will be discussed and any previously written pieces you wish to bring along will also receive feedback and encouragement. You can look forward to a guest writer, homemade chocolate chip cookies, and other pleasant surprises.

*Instructor: Richard Taylor*

*Department: English*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

**237: *Breaking the Sound Barrier: Introduction to American Sign Language***

**ABSTRACT:**

We use a lot of body language to get messages across. You might be surprised to learn that you already have many of the skills needed to start communicating in American Sign Language, but imagine how much more you could express! In this course you'll take some of the skills you already have and discover how to transfer them into learning ASL. The course will focus on basic sign skills, learning about Deaf culture and the Deaf community, and dispelling misconceptions about Sign Language. We will use games, discussion, acting, and play to work towards a final video project. Explore a language that requires you to communicate using your hands, face, and body. Challenge the way you think about language and communication!

*Instructor: Josée-Anna Tanner*

*Faculty Advisor: Prof. Jon Kidd*

*Department: School of Linguistics and Language Studies*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

**238: *Wet and Wild! Exploring Ottawa's diverse wetlands and their ecology***

**ABSTRACT:**

Wetlands ecosystems connect terrestrial and aquatic worlds, and their unique attributes provide important habitat for many fascinating plants and animals, while helping in the regulation of water quality and climate. In this course, we will explore different types of wetland ecosystems found in the Ottawa area, their origins and their ecology, as well as the important services that they provide through classroom, laboratory, and field-based activities. We will visit several different wetland ecosystems in Ottawa and learn a variety of methodologies used to study these systems, and the data collected from the different sites will be analyzed and compared. If you love the outdoors and want to learn about ecology and how scientists study the natural world this is the course for you!

*Instructor: Meaghan Murphy*

*Faculty Advisor: Elyn Humpreys*

*Department: Linguistics and Language Studies*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

**239: *How To Win a War Without Weapons: Gandhi and his Ideas.***

**ABSTRACT:**

After almost two hundred years of British rule, when India was clamoring for Independence, Gandhi thrust himself at the forefront of the movement. He waged a war against the most formidable imperial power in the world and his weapons were non-cooperation and peaceful resistance. It was a hugely successful campaign and the British left India in 1947. Gandhi's extraordinary life and achievements inspired many people and movements around the world. Albert Einstein once said of Gandhi: "Generations to come will scarce believe that such a one as this walked the earth in flesh and blood." This course will focus on Gandhi's life and ideas including non-violence, social justice and service to humanity. We shall discuss how Gandhi's powerful ideas and strategies remain relevant even today.

*Instructor: Mayurika Chakravorty*

*Department: English*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

**240: *The Age of Heroes: Understanding Comic Books in Society***

**ABSTRACT:**

From the Yellow Kid to DC's New 52, from WW II propaganda to The Avengers movie, the last 100 years has been the century of the comic book. This mini-course will study the rise of this unique collaborative art form, its struggles with censorship and other challenges, and how it connects with each generation of readers. The aesthetics of comics will be examined through the Golden, Silver, Bronze, and Modern Age, and the influences of Underground Comix, manga, independent publishers, and increasingly sophisticated readers. We'll look at the best examples of the genre, and create our own comic together in class!

*Instructor: Miles Tittle*

*Department: English*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

**241: *"The L337 Pen: Narrative and Plot Constructs in Video Games"***

**ABSTRACT:**

This course will examine narrative and plot constructs in role-playing games (RPGs), and how this form of interactive media is developed. We will address the impact that various levels of storyline complexity have on the success or failure of RPGs to deliver a positive gaming experience. Writing workshops throughout the week will produce character sketches, dialogue scenes, plot construction, and game-world geography, mythology and history. Our week will include discussion, debate, gameplay and media presentations on topics such as Tolkien's *Lord of the Rings*, and *Dungeons & Dragons*. On the final day, the students, in groups, will present an outline for their own game using their newfound knowledge and insight. The games examined, such as the *Final Fantasy* series, will have age-appropriate ratings.

*Audience: All material (games, movies, & possibly documentaries) will carry an appropriate rating for the age group.*

*Instructor: Erica Leighton*

*Faculty Advisor: Prof. Brian Greenspan*

*Department: English*

*Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

#### **242: "Guerilla in the Midst": Considering Graffiti Art**

##### **ABSTRACT:**

Focusing primarily on the work of Banksy (UK) and Roadsworth (Montreal) this course looks at Graffiti Art. We will consider the history of Graffiti Art, engage with recent debates about public space and Graffiti Art in the museum, as well as consider the political and aesthetic implications of Graffiti. We will look at documentaries, magazines, newspaper articles, and web sites, as well as recently published books on both Banksy and Roadsworth in an attempt to understand this popular phenomenon. During the week, we will invite Graffiti artists from the area to speak with us, and hopefully guide us through a stencil workshop.

*Instructor: Anna Khimasia*  
*Faculty Advisor: Mitchell Frank*  
*Department: ICSLAC*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **243: The Great Global Land Grab!**

##### **ABSTRACT:**

The old song says that "this land is my land, this land is your land"... but whose land is it, really? Across the world, from Canada to the Congo, land is being rented or bought by big corporations in order to grow crops for food, or biofuels. Corporations say they can grow crops more efficiently than local people. But some communities say that companies have no right to buy 'their' land. The global land grab is big business but seems to cause big problems. Find out what it means for you, as a consumer of food from these countries, and as someone living in Canada, which is leasing land to big investors.

*Instructor: Chris Huggins*  
*Faculty Advisor: Professor Blair Rutherford*  
*Department: Geography & Environmental Studies*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **244: It's A Kids World: Exploring Social Development in Children**

##### **ABSTRACT:**

Have you ever wondered why children act in certain ways? Why do some kids play alone and others play in groups? Why do some kids stay close to their parents and others like to argue with them? Why are some fearful and others are brave? What are the differences between boys and girls and where do these differences come from? This course will explore the social world of child development. Through experiments, games, films, and discussions, we will examine how children learn to make connections with their worlds. Topics will include parenting, personality, siblings, friendships, gender, and culture. Learn a lot about yourself and gain an understanding of children in your life.

*Instructor: Amanda Bullock and Laura Ooi*  
*Faculty Advisor: Robert Coplan*  
*Department: Psychology*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **245: Movies and Turning Points**

##### **ABSTRACT:**

There are many critical moments in a person's life that may change his or her social standpoints and a previous life destination. The 'turning point' has always been a recurring topic in cinema. The portrayal of turning points in films helps us not only to identify these challenging moments in one's life but also to explore the social and psychological conditions that constitute these turns. In this course, we will examine a range of films that deal with characters and the turning points in their lives during the progression of the film's plot.

*\*Although none of the selected films contains strong adult themes, some may still be potentially controversial from certain angles. Students who take film related courses should be able to take a critical distance from what is shown. If this poses a problem, you need to talk to the instructor before taking the course.*

*Instructor: Moshen Nasrin*  
*Faculty Advisor: Prof. Andre Loiselle*  
*Department: Films*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **246: Art and Life**

##### **ABSTRACT:**

"Life imitates Art far more than Art imitates Life", said Oscar Wilde in 1889. Since the end of the nineteenth century, against traditional conceptions of art, artists have expressed the desire to reconcile art and life. If this utopian idea has its roots in the art movement called Art Nouveau, it seems to find its best expressions with "avant-gardes". This course approaches the most important artistic movements of the twentieth century through this idea. It focuses on notions of humour, experiment and subversion to understand their creative practices. It also pays attention to the materiality of works of art – from salvaged objects, to unusual materials such as the body – to highlight the bond woven by artists between creation and life. We want this course to be a lively travel into the past, and art to be our means of transport. Welcome to this adventure!

*Instructor: Pauline Goutain*  
*Faculty Advisor: Prof. Jill Carrick*  
*Department: Art History*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

#### **247: Sugar and Spice But Not Always Nice: Understanding the Social World of Girls – Registration is restricted to GIRLS only!**

##### **ABSTRACT:**

Have you ever wondered why girls who were your best friends last week are suddenly excluding you from their plans and telling malicious, hurtful rumours about you? Together we will examine this phenomenon called "social aggression" within the broader context of the dynamics of girls' social groups. We will discuss the role and forms aggression can take in girls' friendships and explore possible explanations for why aggression is kept underground in girls' groups. We will look at bullying and emotional abuse within close friendships. Our goal will be to generate effective strategies for dealing with conflict in close relationships and to explore ideas for enjoying friendships without fear or dread of what tomorrow might hold.

*Instructor: Prof. Tina Daniels*  
*Department: Psychology*  
*Grades 8-11, Ontario/Sec. 3-5 Québec*  
∞

#### **248: The Anthropology of Science Fiction**

##### **ABSTRACT:**

What does Star Trek, Twilight, Lord of the Rings and Zombieland have in common? Science fiction writers often use their writings as social commentaries on our own society. They offer an exploration of social issues such as racism, stereotypes, identities and other questions explored by social science. The anthropology of science fiction often presents ideas so bizarre and unusual that readers can explore issues in social sciences from a weird and wonderful world. This course will have fun exploring current issues in culture by examining science fiction, fantasy and horror from an anthropological perspective. We will also be participating in an Archaeological dig of an alien landing site!

*Instructor: Rodney Nelson*  
*Department: Canadian Studies and Anthropology*  
*Grades 8-11, Ontario/Sec. 2-5 Québec*  
∞

### **249: *Monster Mash: The History of the Horror Film***

#### **ABSTRACT:**

Horror films are among the most popular kinds of movies today. But where did they come from? Why have they struck such a chord with audiences – just what is so appealing about being scared? This class explores the history of horror movies from the beginning, touching on its major archetypes like the vampire, werewolf, ghost, mad scientist, Frankenstein's monster and King Kong. It will introduce some of the key critical approaches to the horror film, and students will have the opportunity to propose their own horror movies. We will have a guest appearance from Matthew Brulotte, editor of several horror films. Note: screening selections will avoid highly bloody and sexual material, but there will be fright imagery.

*Instructor: Murray Leeder  
Department: Film Studies  
Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **250: *It's a bird! It's a plane! It's a mini-course on Canadian cartoons and comic book characters!***

#### **Abstract:**

Is Superman Canadian? Is Wolverine Canadian? Is John A. MacDonald Canadian? What is a Canadian, anyhow? Beginning with an historical overview of political cartoons and comic books, this mini-course will introduce students to a range of Canadian superheroes, such as Nelvana of the Northern Lights, Capitaine Kébec, and Super Shamou. Course content will include films, articles on popular culture, activities, and discussions to encourage students to think critically about who we celebrate and how to read images. Students will discuss Canadian heroes, caricatures of politicians, and how to spot a Canadian in visual representations. Students will develop their own cartoons or comics based on current events and a (planned) visit to the Canadian Museum of Civilization "Face to Face" exhibit.

*Instructor: Amanda Murphy  
Faculty Advisor: Prof. André Loiselle  
Department: Canadian Studies  
Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **251: *"Do they know it's Christmas?" – Humanitarianism and Foreign Aid***

#### **ABSTRACT:**

Rock stars, royalty, super models and politicians spring on to our television and computer screens to plead for donations when a natural disaster strikes. Have these images ever inspired you to consider working or volunteering for a foreign aid agency? Or, have you ever wondered what happens behind the scenes when aid organizations scramble to help those in need? In this course we will consider film, music and other media to look at how groups like Doctors Without Borders, the Red Cross, Oxfam and others, gain support and deliver aid around the world. With the help of discussions in class, a research project and guest speakers we are going to look at Canadian and international efforts, both past and present. To have a preview of what we'll be looking at in class, see the 1980s supergroup BandAid who sang "Do they know it's Christmas?" on YouTube at [www.youtube.com/watch?v=6EJWEXrykDQ](http://www.youtube.com/watch?v=6EJWEXrykDQ)

*Instructor: Will Tait  
Faculty Advisor: Dr. Dominique Marshall  
Department: History  
Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

### **252: *Picture This! The Secret Language of Images***

#### **ABSTRACT:**

A picture may say a thousand words, but do you understand the language they speak? Images have a language of their own and when understood, can reveal coded information. In this course we will examine a number of images in order to learn the language of pictures and then work to decode their meanings. What can art tell us about historical events? Do images always tell the truth? How do advertisements influence what we buy and ultimately who we are? In this interactive environment, we will consider historical art, propaganda campaigns and contemporary media images and their multiple ciphered meanings. When you finish this course, you will have the ability to interpret the thousand words a picture says and understand the large number of images we encounter every day.

*Instructor: Brittney Anne Bos  
Faculty Advisor: Patrizia Gentile  
Department: Psychology  
Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

## **FACULTY OF SPROTT SCHOOL OF BUSINESS**

### **253: *Accounting – Not just for Bean Counters!***

#### **ABSTRACT:**

We'll take a tour of the financial statements of a small corporation and get acquainted with assets, liabilities and shareholders' equity. Get to know revenue and expenses. Should we invest a company? Or should we lend them money? Through group work, simulation and interactive course slides, we'll evaluate a company's financial position and answer these questions. We'll also create our own Ice Cream Sundae Making business and evaluate pricing, costing and other business decisions. By the end of the week, you will have expanded your business vocabulary and be able to provide some sage investment advice.

*Instructor: Prof. Patti Proulx  
Department: Sprott School of Business  
Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

## **FACULTY OF SCIENCE**

### **254: *The Brain: Delving into its mysteries.***

#### **ABSTRACT:**

From how we move to how we connect to our environment, right down to how we feel when we listen to a favourite song, all possible because of our brain. We will begin to unravel the exciting world of the brain by looking at both the general structure of the brain right down to the cell signaling in neurons. Fun activities will be used to help understand how our central nervous system works. We will go back in history and discover how neuroscience came about and discuss new techniques that are being used in the field of neuroscience to understand brain diseases.

*Instructors: Rim Khazall, PhD Student & Harry MacKay PhD Student  
Faculty Advisor: Prof. Alfonso Abizaid  
Department: Neuroscience  
Grades 8-11, Ontario/Sec. 2-5 Québec*

∞

- end -