# **Registration: Interim**

### Interim 2017

Art

This interim courses that will shepherd you through a repertoire of effective visual communications principles and practices. It consists of a knowledge base that can only be developed through a practical hands-on experience. The course covers eleven challenging exercises in Adobe Illustrator that focus on personal and conceptual thought processes with an emphasis on concept rather than on technique. Preference is given to individual so

reference, positive/negative relationships and cropping techniques, which engender innovative visual communication skills. This course may fulfill an elective for Art majors. 9:00 a.m. to noon.

This course will introduce the design, production, and publication of Artist Books, concentrating on the book as aesthetic object and medium of content. Physical and conceptual elements of the artist book unfold through time and space. Aesthetic problem solving therefore involves organizing conceptual, visual, physical, kinetic, and chronological transitions. Students will engage in developing content, three-dimensional construction, integration of image and text as well as harmonizing these elements in the execution of visually effective artist books. The study of hand made books from illustrated manuscripts to works of contemporary book artists will introduce students to both traditional as well as innovative materials and binding techniques. Students will investigate both high and low technologies of reproducing imagery for the purpose of execution and publication. Bookmaking will occur both individually and collaboratively. The class will produce several limited edition publications. The majority of class time is spent in studio activity generating a minimum of seven artist books. Teaching methodology includes illustrated lectures, demonstrations of materials and techniques, readings, critiques and field trips. An exhibition of works completed is anticipated.

entire ecosystems. Ecotoxicology is the study of the effects of environmental contaminants on aquatic and terrestrial organisms, including relationships between chemical effects on the biochemical and physiological levels to impacts individuals, populations, and ecosystems. Ecotoxicology examines the local and global fate and transport of environmental contaminants as well as current approaches for assessing toxicity and chemical risks. Ecotoxicology provides important data to inform the development of environmental policies that promote safe and sustainable of chemicals. Ecotoxicology is an important sub-discipline of environmental science and public health, and as such this course is intended to benefit students interested in these fields as well as ecology, natural resources, pharmacology, medicine, environmental chemistry, and environmental policy. This course may serve as an upper-level elective in the environmental science major, environmental studies program, public health program, biology program, biotechnology program, and biochemistry program. Prerequisites: BIOL 160 or 225, BIOL 161or 224, and CHEM 253 or 261. Please talk with the instructor if you have not had these or similar courses. 8:30 a.m. to noon.

### **Business**

healthcare workers. They should get the flavor for what it is like to live and work in a mission context. Students will also have field visits to a Nepali village, a psychiatric rehabilitation center, and a rehabilitation hospital for disabled persons. A key feature of this course is for students to be exposed to the Nepali culture and church. Students will learn the joys and challenges of living in a different culture and deepen their faith and compassion for others as

e will fulfill the CCE requirement. Course dates: January 2 - 27. Fee: \$3777. . . . . Off campus.

Our senses provide more than simply a means of interacting with the world. They can inspire joy, provide warning of danger, and stir up old memories, or they can mislead us as with optical illusions. This course uses a hands-on approach to explore the ranges and limits of our senses. Through daily activities such as making and tasting salsas with a collection of spices, simulating multiple forms of color blindness, comparing the range of sounds that are perceived, tasting food without the benefit of smell or sight, and observing aromas used in sales and marketing, students learn to fully engage their senses. Students also gain an appreciation of the current chemical and biochemical understanding of their senses. Evaluation is based on dass participation, daily blogs, and a final group project. This course assumes no prior knowledge of chemistry or biochemistry, though students who want to dig more deeply into the biochemistry of their senses will find plenty of resources to do so. Fee: \$30.

8:30 a.m. to noon.

major and minor. This course will fulfill the CCE requirement. This course is open to all students, but students having done prior course work in Dutch culture (esp. Dutch language) are given priority admittance to the course. Course dates: January 3

that provide room and board for nine nights. During the day, the group visits the different neighborhoods of Montreal and participates in various activities, ranging from museum visits, plays, concerts, guided walking tours to service learning, tubing/skiing in the Laurentian Mountains, skating, snowshoeing, and, if possible, a Canadiens hockey game. Once the homestay is completed, students travel to Quebec City for three nights where they explore French colonial history and cultural sites. The group returns to Montreal for two final nights in a downtown hostel before flying back to Grand Rapids. This course may fulfill an elective in the French major and minor. This course will fulfill the CCE requirement. Prerequisite: French 201. Course dates: January 4-21. Fee: \$ 2495.

. The second course in a three-course sequence of language study designed to meet the special needs of at-risk students. Materials are presented with an emphasis on understanding the nature of language. General language-learning skills are developed as specific foreign language goals are met. The course is open to students who are continuing from French 111 and expec

opportunity to observe the differences between Deaf culture and hearing culture in Jamaica. This course will fulfill the COE requirement. Course dates: January 4-22. Fee: \$ 3170.

. All of us have been forced to make decisions that impact our future economic well-being. What is the best type of loan to finance college? Can I afford to study abroad next semester? How will I pay for a car to get to my job? Personal finance is a specialized area of study focusing on individual and household financial decisions: How much should I save? How much should I spend? How much should I give? Do I need life and health insurance when I get out of college--what type would be best for me? How much do I need to save for retirement and when should I start? How do I decide what to invest in? Financial planning is a process of setting financial goals and organizing assets and making decisions to achieve these goals, in an environment of risk. This class will consider financial goals for Christians and will provide information and techniques to help students be good caretakers of what God entrusts to them. Topics covered will include: financial planning tools, goal setting

Jakarta and Jogjakarta, as well as Bali will provide diverse contexts for students to learn from Indonesian artists and leaders in business, religion, health care, and education and explore more about this this emerging country dedicated to unity through diversity. As we travel across Java and Bali, we will explore (1) mosques, temples, and Christian churches; (2) museums, performing arts centers, and artisan shops; (3) businesses, education, and health centers incorporating the arts; and (4) the extensive flora and fauna unique to Indonesian culture. The course includes readings in the history, culture, arts and issues particular to Indonesia. Added features of this course include engagement in a funded exploratory arts-based research project. The students will travel to research sites collecting data through field notes, film, interviews and journals. They will explore injustice and the powerful potentials afforded through the arts to engage in hope-filled reconciliation work. The project will culminate with 2 on campus days for completion of 6 arts-based research projects presented in the spring in venues to Calvin and the broader community. Open to 2016 sophomores in the Artists Collaborative, with preference to students involved in the arts or international development studies if room remains. This course will fulfill the CCE requirement. Course Dates: January 5 26. Fee: \$4150.

. For millennia fire, often of human origin, has played a role in

three historical periods dominated successively by 1) naturally occurring fires, 2) fire used by native human populations, and 3) fire control under European settlement. The course will examine the causes and dynamics of wildfire, adaptations of organisms to fire, ways in which fire structures communities in different biomes, and how human use of fire may have shaped signature natural landscapes of North America and other continents. The place of fire and fire policy in the sustainable stewardship of public lands like national forests, parks and wilderness areas will be studied. The use of fire in managing and restoring ecosystems will also be examined. The course will include lectures, laboratory exercises, videos and field trips. Prerequisite: One course in Biology. 8:30 a.m. to noon.

This course addresses the dynamic role of the internet, social media, big data, mobile devices and other digital technology in business today. Students will study and discuss the history of the Internet and the evolution of digital media, the types and functions of different digital media applications in the business context, the ethical implications of these tools, and their effect on relationships. Students will learn from experts in the field and develop their own digital media. This course may fulfill an elective in the Business minor. Prerequisite: Business 160.

8:30 a.m. to noon.

Fluorescence is a very important and practical phenomenon in science and every-day use. Fluorescent proteins have allowed the detection of gene expression in living organisms, and the discovery and application of green fluorescent protein was recognized with a 2008 Nobel Prize in chemistry. Both the 2014 Nobel Prizes in chemistry and physics have direct ties to fluorescent materials. Fluorescence has applications in chemistry, biology, geology, physics, medicine, engineering and technology. The primary course objective is to give you a better understanding of what fluorescence and biofluorescence is and how it is used. The course also addresses these key questions: what kinds of substances are fluorescent, what color do they emit, how can they be used in practical applications, and how is fluorescence different from other forms of luminescence, like phosphorescence and bioluminescence. Our primary mode of learning in the course will be hands-on activities investigating aspects of fluorescence, with some class discussion and visits to local laboratories that use fluorescence. Participants will get experience using a variety of scientific instrumentation, and they will also complete a fluorescence project of their own choosing. Students in any science and engineering field are encouraged to take this course. This may fulfill an elective in the Chemistry major or minor. Prerequisite: Chemistry 103 or one college science major course or permission of instructor. . 2:00 p.m. to 5:00 p.m.

As engineers, it is vitally important to be able to communicate thoughts and ideas effectively while using a variety of tools and mediums. This course is designed to aid those goals by helping

## Psychology

Among the atrocities of the 20th

century that aggravate the problem of evil for our times, the holocaust stands out. Among those who write and reflect on what an Auschwitz means for belief in God and humanity, and our future together, Elie Wiesel stands out. Elie Wiesel, the 1986 Nobel laureate, is aptly called the prophet of the holocaust, devoting his life to the remembrance of this horrific event in the attempt to discern and publish its moral lessons. This course traces the life, times, and ethical vision of Wiesel, particularly through his holocaust experience and subsequent quest to sustain faith in God and hope for humanity in its ever-elusive task to build a just and humane society. We journey with Wiesel by aid of documentary and film, but principally through his own writings, which include Night, The Trial of God, The Town Beyond the Wall, Twilight, and selections from his memoirs, All Rivers Run to the Sea (vol. 1),

influence the experience of violence. Students will learn about different forms of gendered violence, such as sexual assault, domestic violence, violence against LGBTQ individuals, and religious/cultural practices. The course will explore the ways in which individuals resist violence in the everyday enactment of their lives, through individual and collective action, sometimes through protest, performance, organizing, and coalition-building. Students will describe the role of social services, public policy, and faith communities in violence prevention and response. Students will examine these topics using a Reformed, Christian perspective to help understand the problem of violence and possibilities for restoration. This course may fulfill an elective in the sociology majd 612 792 cn. ecu97(n)- eR7(o)-Ve(e)4

focus on an overview of AAC. Part II will describe the AAC needs for persons with specific disabilities, and Part III will present AAC needs for specific environments. Students will develop an understanding of information related to concepts, strategies, techniques and issues that are unique to the field of augmentative and alternative communication. Assessment methods will include written exams, written reflections, problem-based learning, and group discussion. Open to SPAUD graduate students and SPAUD 4-year BA students.

8:30
a.m. to noon.

#### **Statistics**

A course in statistics with emphasis on the collection and analysis of data in engineering crequontexts. Topics include descriptive statistics, experimental design, and inferential statistics. The development of probabilistic models for describing engineering phenomena is emphasized. Statistical software will be used throughout the course. Prerequisite: Mathematics 172. 8:30 a.m. to noon.

### Study in Ghana

. A multi-disciplinary course taught in partnership

with Akrofi Christaller Institute during the month of January, this course will fulfill an interim requirement for students. This class will expose students to the richness of Ghanaian history, culture, and religion. Special emphasis will be placed on understanding the history of various Christian groups (mainline, charismatic, or traditional) in Ghana, where a majority of citizens profess to be Christians. The first half of the interim will be spent at the Akrofi Christaller Institute located in Akropong, Ghana. The second half of the interim will involve trips to the Gold Coast, Kumasi and Tamale. Fee: \$3800. Course dates: January 4-25.

or not the drug is legal to purchase and use. Then, students consider when the use of drugs shifts from being a blessing from God to potentially harming our bodies and our minds. What use of drugs is appropriate? Is it appropriate for us as Christians to take insulin, aspirin, Ritalin, coffee, tobacco, or marijuana? Readings taken from popular literature, public documents, and the Bible are used as a backdrop to assessing drug availability and use. Students reflect on, discuss, and write about drug use in various medical and social situations.

2:00 p.m. to 5:00 p.m.

How do Norwegians survive a winter above the Arctic Orcle? Why do I sleep more in winter? Will my faith-life be affected if I am depressed? Am I less tolerant of sin while working out a math

Indeed, holistic health assumes stability in each independent area. But, it is possible that each component of our existence influences the others, perhaps more than we anticipate. During this course students will examine the impact of physical environment on mood/personality, and the influence of these physical and emotive states on

modifier of human behavior. This reality will be leveraged with multiple field trips where students engage the current literature to, literally, change their lives. The application of physical activity, nature, reflection, and peer influence will all be employed during this time.

2:00 p.m. to 5:00 p.m.

. This course specifically will be based on readings from Greek and Roman Stoics, especially Zeno of Otium as seen in Ocero, Ocero himself, Seneca the Younger, and Epictetus. After establishing a basic understanding of Stoicism one of the most historically successful philosophies we will compare and contrast this philosophical perspective with the Oristian faith as revealed in the Holy Scriptures and summarized in the Reformed Confessions as well as certain Reformed authors like John Calvin and Theodore Beza. D. Noe. 2:00 p.m. to 5:00 p.m.

. Students in this class will study Artificial Intelligence (AI) from functional, philosophical, ethical, and cultural perspectives. We will learn about major AI paradigms including symbolic AI, genetic algorithms, neural nets, and machine learning through lectures and hands-on laboratories. We will discuss common issues surrounding AI and anthropology from philosophical, ethical, and Christian perspectives. We will also view popular movies in which AI plays a major role and discuss the portrayals of AI and their social and ethical implications.

2:00 p.m. to 5:00 p.m.

Students in this interim will study the creative process, apply it to create their own mobile applications and consider the implications of their work in the context of a Reformed perspective. This course is based on Applnventor, a development environment that enables students with no prior programming experience to design and build mobile apps such as location-aware systems, video games and doud services. For the course project, student teams will conceive of, design and build their own original applications. Students who own an Android-based device will be able to install and run their apps on their own device; others course is designed for students with no

previous programming experience. 8:30 a.m.to noon.

Students in this course will investigate a faith-filled view of disability. They will explore stereotypes of disability, definitions of disability, and historical responses to disability. In addition, course participants will develop a theology of disability and will describe a response to disability for both schools and worship communities This course is open to all students who wish to explore society's and their own perspectives and responses to individuals who live with disabilities.

8:30 a.m. to noon.

MTV Video Music Awards on Aug 25, 2014 came to a crescendo, her message was hard to miss. Behind her the stark white letters on a black background, with Queen Bey herself on the

breaking seven Video Music Awards in 2010, a video that Gaga explains is about can, in a metaphorical way, simulate human trafficking products being sold, the woman perceived as a

their claims to be feminists. Are such critiques true or are Lady Gaga and Beyoncé strong women unafraid to express their sexuality? Are their performances expressions of their strength and power as women or simply self-objectification? And in what ways do their fans use those representations to construct their own gender identities? In this class we will explore the ways in which systems of power are attached to female bodies. We will start with an analysis of female pop stars and then move into an analysis of the wa

ways music has been understood to carry political meaning. By examining several case studies from the 20th century onward, the course will probe the positive and negative social functions for music in political contexts, considering when and how music can be a tool for expression, teaching, solidarity, identity-formation, and satire,

North American labor movement (1920s and 30s), music in Nazi Germany and the Holocaust, Soviet music during the Cold War, the civil rights movement in North America, music during Apartheid in South Africa, censorship and regulation of popular music in the US (especially the Parents Music Resource Council), and uses for music by

probe theological and philosophical queries about music that arise out of these case studies: how can music be considered good or evil? how is music implicated in negotiations of power? and what factors allow it to act as a redemptive or oppressive force in society? No musical training required.

8:30 a.m. to noon.

Think of the myriad ways one engages with music through the course of a day. What needs in our lives does music fulfill? What needs in the world can be addressed by music? This course will explore the ways in which music can intervene in our lives, transforming us and reflecting

and a variety of musical styles, students will explore the questions, 1) What is music? 2) How does music make us human? and 3) How might different musical forms and practices contribute to the healing of a broken world? The

training is required, though students will have the opportunity to participate in group music-making experiences. 8:30 a.m. to noon.

This course will be a scientific and historical account of the progression of sunderstanding of the physical universe, from ancient history to the present. Important discoveries will be highlighted along the way, with fundamental scientific concepts introduced as needed in order to provide a dear picture explaining the popularity of the big bang theory. In addition, students will explore the varying Christian perspectives on the big bang theory, seeking to understand some of the conflicting interpretive ological legitimacy. This is not a

survey introduction to astronomy but will cover topics pertinent to understanding the big bang theory as a scientific model. It is designed to be accessible to anyone with a high school level education in science and a firm grasp of algebra.

2:00 p.m. to 5:00 p.m.

. This course presents controversies in education reform by reviewing the major reforms in the U.S public education since the publication of "A Nation at Risk" in 1983. These reforms include standardized testing, charter schools and other forms of school choice, No Child Left Behind, and

Biblical views on human nature and behavior, factors that determine our level of happiness, how cognitive processes impact our relationships, and why humans are predictable.

8:30 a.m. to noon.

. This course examines the expression of theological themes in select musical works and films. Compositions studied include works by Haydn (The Creation), Bach (St.

Amadeus. Where possible, the relevant libretto or screenplay is read prior to listening to or viewing the work in question. Prerequisites: interest in theology, the arts, and their intersection; readiness to listen carefully and watch discerningly; and willingness to engage in discussion.

2:00 p.m. to 5:00 p.m.

. This section is designed for students who wish to explore in greater theological depth various readings of the familiar "Creation/Fall/Redemption" paradigm so frequently employed at Calvin College in discussions of its educational mission and its Reformed world view. In particular, we will strive for

listening prowess. In this course, we will consider the power of listening to transform our interpersonal relationships and will practice engaged, supportive listening in our interactions with others. We will study the listening process, the variation in styles and types of listening; contextual factors, perceptual biases, attitudes, and behaviors that can undermine listening; and attitudes and behaviors that facilitate listening. We will also

listening in the current social context, seeking to understand the challenges of listening in our always-connected, multitasking world. Class activities will include observing listening in interpersonal interactions, fasting from technology and media for 24 hours, attending a listening-oriented worship service, experimenting with listening practices, and going on an overnight listening retreat as a class. Fee: \$10 (for retreat).

8:30 a.m. to noon.

John Muir once wrote that the Serra Nevada Mountains, often referred to as the range of light, open a thousand windows onto God. They also open a thousand questions about the Christian task of creation care. This DCM provides students with an introduction to Christian environmental stewardship and leadership. It starts in Michigan with lecture and discussion as well as with certification in Wilderness First Aid. The class then travels to Yosemite National Park and the broader Serra Nevada range to apply Christian environmental thought to the complex challenges of land and resource management as well as to hone their skills in wilderness adventure and recreational leadership. Fee \$1660. Course dates: May 22-June 9, 2017.

Off Campus.

largest population surge in history. Their presence, as well as their absence, is forcing the Church to think strategically about its Biblical mandate to pass on its faith to future generations. This class will review the historical and sociological factors that have shaped this generation, including the differences and similarities present across cultural and socio-economical lines. The spiritual profile of this generation will be surveyed through studies of the

Christianity emerged from a Jewish context. Yet for almost two thousand years, Christianity and Judaism have developed distinct religious and cultural traditions. Because of this, the Jewish