Registration: Interim

Interim 2013

Art

ART W40 Color, Image, Marketing & Design. Colors are everywhere. Humans are surrounded by uncountable numbers of colors and influenced by those colors unconsciously. This course is designed to help students understand the diverse dimensions of color that are derived from color's physical and emotional aspects; this course also investigates the effective use of colors for marketing and design. Students will learn how colors are tied to humans' emotions, how different cultural groups have different reactions to colors and how designers use colors in commercial spaces and items. The course's aim is to help students mature as culturally sensitive designers by offering students' necessary knowledge about the influence of colors on human emotions. This is a design studio. Students' performance in this class is evaluated based on quality of design projects, attendance, and participation in class discussions. This course may fulfill an elective for Art and Art Education majors. *Y. Ahn.* 8:30 a.m. to noon.

ART W60 The Creative Toolbox. This course shepherds students through a repertoire of principles and practices of effective visual communications. It consists of a knowledge base that can only be developed through a practical hands-on experience. The course covers a series of challenging exercises in Adobe Illustrator and Photoshop that focus on personal and conceptual thought processes with an emphasis on concept rather than on technique. Preference is given to individual solutions that lead to developing one's graphic design skills. Focus is on principles such as frame reference, positive/negative relationships and cropping techniques which engender innovative visual communication skills. Prerequisite: ENGL 101. *F. Speyers*. 8:30 a.m. to noon.

ART W80 Mixed Media Artist Bookmaking. This course will introduce the artistry of handmade bookmaking, concentrating on the book as aesthetic object. 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 conceptualizing content, three-dimensional construction incorporating movement, integration of image and text as visual phenomena, and harmonizing these elements in the execution of visually effective artist books. The study of handmade books from illustrated manuscripts to works of contemporary book artists will introduce students to both traditional and innovative materials and binding techniques. Students will investigate both high and low technologies of reproducing imagery for the purpose of execution and distribution. Bookmaking will occur both individually and collaboratively. Evaluation is based on successful completion of visually effective artist books integrating both form and content; completion of related studio projects and class participation. A juried exhibition of works completed during the course is planned. This course may fulfill an elective in the Studio Art, Fine Arts, and Art Education majors. Prerequisite: Arts 250 or permission of the instructor. Fee: \$150. A. Greidanus. 10:30 a.m. to noon and 2:00 p.m. to 5:00 p.m.

IDIS W49 African American Art. Fee: \$15. E. Van Arragon. 8:30 a.m. to noon.

Biology

BIOL W10 The White Plague - Poverty & Tuberculosis. Historically known as the White Plague, tuberculosis (Tb) is a highly contagious airborne disease. It is estimated that one third of the world's population is infected, and Tb accounts for 2 million deaths every year. Tb is often characterized as a disease of poverty since the poor and marginalized bear the heaviest burden. While this is true and the vast majority of Tb-related deaths currently occur in the developing world, Tb remains a significant public health concern worldwide. In fact, several developed countries continue to experience higher than expected rates of infection and some have even experienced a resurgence of Tb infections over the past decade. This class provides a historical perspective of the impact of Tb on human health, an analysis of past and present public health strategies used to control this disease, and explores what needs to be done to confront new challenges posed by Tb. Students investigate the biological, socio-economic and geo-political factors that contribute to shaping the current face of Tb, paying particular attention to how poverty impacts efforts to control Tb disease both within the United States and internationally. Students are responsible for specific reading assignments every day and classes largely revolve around discussions of the assigned readings and/or documentaries watched during class. Students are evaluated based on daily reflections on the assigned readings, participation in classroom discussions as well as a final project. An extensive understanding of biological concepts is not required for this class and students from a variety of academic backgrounds are encouraged to enroll. Y. Bediako. 8:30 a.m. to noon.

CANCELLED BIOL W60 Ecology on the Equator: The Serengeti (MAY). Located just south of the equator, the Serengeti in Africa is one of the most biologically unique and fascinating places on earth. Participants in this course travel to several different Tanzanian National Parks to spend time exploring and experiencing various tropical ecosystems. Students investigate the species diversity and natural history of the local flora and fauna as well as study some of the conservation efforts currently being undertaken to preserve these ecosystems. Particular attention will be given to the application of Reformed Christian principles of biological and economic stewardship as tools for assessing the current and future status of these important natural areas. Daily fieldwork combines plant and animal identification with an investigation of ecological processes and an evaluation of human impacts. Evaluation is based on a daily journal, active participation in course activities, and a written examination. Prerequisites: one biology course (high school or college) and permission of the instructor. Course dates: May 17 to June 3. Off campus. Fee: \$4470. *C. Blankespoor*. Off Campus.

BIOL W61 Mammalian Histology. Histology is the study of the structure and structure-related function of cells, tissues, and organs. The emphasis of this course is placed on identifying mammalian tissues and organs on the basis of microscopic cellular appearance and on identifying the functions of these cells and tissues based on their structural characteristics. Characteristics and functions of the four fundamental tissues (epithelial, connective, muscle, and neural) and how they make up organs with many different specialized functions are presented in daily lectures. Following each lecture is a laboratory period in which students study prepared tissue slides using microscopes and computer-based images. Evaluation is based on written tests on lecture material and on laboratory tests using microscopes and prepared tissue slides and/or computer images. Prerequisite: Biology 141, 224, or 205. *R. Nyhof.* 2:00 p.m. to 5:00 p.m.

STBR 310H Honors London-History of science, medicine and religion. London, one of the world's foremost cities, is a treasure trove of the history of religion, science and medicine, as well as all facets of culture. Throughout the Scientific Revolution and beyond, most scientists were individuals of significant Christian faith who perceived their work as both discovering the Creator's handiwork and worshipping God. Many struggled with apparent tensions between their discoveries and traditional teachings of the church. This course will utilize London and its surrounding environs to explore predominantly the history of British medicine, science, and religion but also British life and culture. On-site visits within greater London will include the British Museum, British Library, Buckingham Palace, Churchill Museum, Florence Nightingale Museum, Hunterian Museum, Imperial War Museum, London Museum, National Gallery, Natural History Museum, Royal Observatory, Royal Society, St. Paul's Cathedral, Tower of London, Victoria and Albert Museum, Westminster Abbey, and Windsor Castle. The course will include at least five day-long field trips to Stonehenge and Salisbury, Oxford, Cambridge, Downe, and Windsor. Class sessions will consist of lectures and discussions of assigned readings. Students will write a paper primarily on a prominent person in the history of science/medicine or religion, do brief on-site presentations related to their prominent person, maintain a journal, and engage in cross cultural reflections. Two pre-course meetings in fall, 2012, and pre-course readings and research required. This cours is a graded honors course and may be used to fulfill an honors requirement. Prerequisites: one course in the Natural World and one course in Religion, Philosophy or History, or permission of the instructor. This course will fulfill the CCE requirement. Course dates: January 3-24. Fee: \$3925. H. Bouma III. Off campus.

IDIS W16 Wildfire: A Natural and Cultural History. *R. Van Dragt, D. Warners*. 8:30 a.m. to noon.

IDIS W21 Eating Lower on the Food Chain. Fee: \$100. D. Koetje. 8:30 a.m. to noon.

IDIS W40 Harness the Wind: Learn to Sail. Course dates: January 2-19. Fee: \$2780. *J. Ubels.* Off campus.

IDIS W60 Galapagos-Amazonia. Course dates: January 3-23. Fee: \$4985. *C. Blankespoor, D. Dornbos*. Off campus.

SPAUD 343 Principles of Human Neuroanatomy. *E. Helder, P. Tigchelaar*. 8:30 a.m. to noon.

Business

IDIS W41 China, Business & Engineering. Course dates: January 3 - 23. Fee: \$3800. A. Si , L.Van Drunen. Off campus.

IDIS W42 Leadership in Africa. Course dates: January 3-23. Fee: \$4500. B. Arendt, B. Crow, M. Fackler, C. Jen. Off campus.

Communication Arts & Sciences

CAS W10 Impact FX Using After Effects. Lights! Color! Text! Graphics! Music! Animation! The dazzling world of visual effects is great for selling cars and toothpaste. But what if you have a deeper message to communicate — an emotion, a process, a complex layered story? Adobe After Effects is the première desktop application for creating motion graphics and video image processing. This course has two main learning objectives: the student will become efficient in the use of Adobe After Effects as a tool to produce visual effects for video, and the student will develop the skills to effectively communicate message and emotion using visual effects. Focus will be given to methods of directing and maintaining the viewer's attention. The student's performance will be evaluated on the basis of a series of short exercises, assignment projects and class participation. A working knowledge of Adobe Photoshop will be quite useful but not required. *D. Porter*. 2:00 p.m. to 5:00 p.m.

CAS W11 Producing Media for Worship. A study of electronic media worship aids with an emphasis on developing assessment criteria and production skills. Informed by readings in *Understanding Evangelical Media, Worship* magazine, and by critical deconstruction of exemplars, students develop a biblical definition of worship, assess the use of electronic media in worship settings, and work to create worship aids from digital photographs, moving images, and recorded music. Time-intensive projects—assessed by rubrics that focus on the fit of context, content, and form—constitute the majority of the coursework. Though CAS 190 and 249 are not prerequisites for the course, students who have had either may find the work easier. *B. Fuller*. 8:30 a.m. to noon.

CAS W40 Theatre & the Performance of Worship. Theatre in the UK is some of the best in the world, with the Royal Shakespeare Company, the British National Theatre, the Donmar Warehouse (where some of the best directors in both theatre and film get their start), many independent theatres and West End Musical theatres. On this interim students will see a spectacular array of theatre performances. Students will also spend some significant time studying the theatre of worship in churches (both traditional and contemporary) where communities are being transformed by a revival in worship traditions. In fact, London is experiencing a resurgence of worship in its alternative and ancient churches that is unparalleled in British history. What ties performance in the theatre and performance in worship together? This is a question that the class will explore, examining how we are fed and nourished by the communal experiences of live worship and live theatre. In this course, students will have the chance to see more than 18 theatre productions and attend worship at about 8 churches in London. Students will attend several theatre workshops and discuss theatre and worship with talented and inspiring theologians, pastors and actors. Through journaling, writing short papers, and giving oral presentations on their experiences, students will learn the art of critical reflection. This course may fulfill an elective for CAS majors. This course will fulfill the CCE requirement. Course dates: January 3 - 23. Fee: \$4100. S. Sandberg. Off campus.

CAS W41 English Language by Rail (MAY). Students explore the dialects of the English Language within a historical context. While in the United Kingdom, students travel by rail through different regions, collecting samples of English, Welsh, and Scottish dialects and visiting important linguistic sites. By collecting samples from each of these regions, students

learn about the history of English as it is spoken in the United Kingdom as well as in the United States. Students must complete readings on the linguistics of the regions, present on the features of the dialect samples they collect, and write three papers that summarize their readings, analyses of data, and interviews in each region. Students learn how to use the International Phonetic Alphabet to transcribe recorded samples. Students compare and contrast the speech sound features of common dialects in the United Kingdom, such as British Received Pronunciation, Cockney, Estuary, Scottish, and Welsh. Students also compare and contrast lexical usage among the various dialects. They describe key historical factors in the rise of the English Language, as related to local events in the United Kingdom. Students are evaluated on the quality of their papers, presentations, tests of readings, transcriptions, and participation in discussions. This course may fulfill an elective in the Speech Pathology and Audiology major. This course is a CCE optional course. Course dates: May 20 to June 7. Fee: \$4352. J. VanderWoude. Off campus.

CAS W42 Taming of the Shrew: On stage! This course will culminate in a new stage production of *The Taming of the Shrew*, by William Shakespeare. Students will build their knowledge and skills in theatrical production and performance while bringing this music-filled, fresh production of a classic comedy to the Calvin stage. Those interested in classic play adaptation, those with interest in music, improvisation, clowning, theatre, film, and multi-media production, and those interested in live performance will be well-served by this course. The cast and musicians for the production will be chosen by audition in mid-November, and all students in this course will be an integral part of the production of the play, whether assigned as creative writers focused on dramaturgical research, as members of the technical crew involved in the creation of the physical, visual world, or in acting or playing music on the stage. The play will be performed for the public January 31 - February 9, 2013, as part of the CAS Department's theatre season. All students in this course must commit to these two weekends for the performance of the play. Evaluation of student work will be based on individual involvement in the production process, as well as contribution to the overall artistic production community. This course may fulfill an elective for the theatre major. This course will meet in the afternoons with afternoon and evening rehearsals and performances. Some mornings may also be required, but no more than eight hours will be required on any given day. Some Saturday work calls and rehearsals will also be required. Students may also earn DCM credit, through a companion DCM section dedicated to this course, "DCM; Taming of the Shrew: On stage!" (See listing for "DCM: Taming of the Shrew: On stage!" under DCM courses, for more information.) K. Kirsten. 2:00 p.m. to 5:00 p.m. and 6:00 p.m. to 9:00 p.m.

SPAUD 343 Principles of Human Neuroanatomy. This course explores the structure and function of the brain and spinal cord and their link to various neurological and developmental disorders. Topics of study will include microscopic anatomy, blood supply to the brain and spinal cord, sensory systems, the cerebellum, and subcortical and cortical regions. Imaging techniques and discussion of neurological disorders, such as epilepsy and speech disorders, will also be covered. Students will gain an appreciation of the three dimensional structure of the brain and spinal cord as well as a basic understanding of its functional capacity. The course will consist of morning lectures and discussions. The student will complete an independent project. Field trips will allow exposure to brain imaging techniques and case studies in neuropathology. An assigned text is augmented by prepared handouts. Students will be evaluated

by class participation, performance on exams, and an oral presentation. Prerequisites include either Biology 115, 205, CAS 210 or Psychology 333 and consent of the instructors. Course is reserved for upper class Speech Pathology and Audiology concentrates. E. Helder, P. Tigchelaar. 8:30 a.m. to noon.

SPAUD 512 Augmentative and Alternative Communication. This course will introduce augmentative and alternative communication and the strategies used to improve the communication skills of individuals with limited or nonfunctional speech. Focus will include an in-depth review of the assessment process, as well as the AAC needs of individuals with developmental and acquired disabilities across the age continuum. Hands-on experience with various methods of AAC strategies and devices will provide a clearer understanding of AAC intervention. Part I will 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, problembased learning, and group discussion. Prerequisites: SPAUD graduate students. *H. Koole.* 8:30

IDIS W42 Leadership in Africa. Course dates: January 3-23. Fee: \$4500. B. Arendt, B. Crow, M. Fackler, C. Jen. Off campus.

a.m. to noon.

IDIS W50 Film Noir and American Culture. J. Bratt, W. Romanowski. 2:00 p.m. to 5:00 p.m.

IDIS W51 Gender Representation in American Film. S. Goi, C. Plantinga. 2:00 p.m. to 5:00 p.m.

Chemistry

CHEM W10 Sights, Sound, Flavors, & Fragrances. 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 class participation, daily blogs, and a final group project. This course assumes no prior knowledge of chemistry or biochemistry. Fee: \$25. *E. Arnoys, K. Sinniah.* 2:00 p.m. to 5:00 p.m.

IDIS W18 Bridge, A Card Game for Life. D. Vander Griend. 8:30 a.m. to noon.

IDIS W80 Fluorescence: Science & Uses. M. Muyskens. 2:00 p.m. to 5:00 p.m.

Classics

CLAS W40 Homer Goes to Hollywood: Classical World in Film. Even now in the 21st century the nearly 3,000 year-old epics of Homer and the 2,000 year-old empire of Rome continue to influence the way we tell stories, our conception of heroism and the nation-state, and our understanding of what it means to be human. From its inception (with films such as Quo Vadis and The Robe) to the present day (with films such as Gladiator and O Brother, Where Art Thou?) Hollywood has, time and again, tapped the ancient world for inspiration and narrative. In many ways, film is the best analogue we have to the ancient experience in the tragic theater or recital hall where the Greeks and Romans, as we do today, looked back upon their past and then wrestled, twisted, and shaped it into something new and relevant. This course will examine how the medium of cinema has told, retold, and repackaged the ancient Greco-Roman myths with a particular eye to the following questions: How does the "Homeric Hero" compare to the "Hollywood Hero" and what does this comparison tell us about the cultures that produced them. At what points in the history of Hollywood does the fascination with the Classical world go in and out of favor. Why. What elements of ancient understandings of "divine agency" or "fate" do Hollywood retellings keep or discard. Why do films change fundamental details of the ancient texts. Has Hollywood transformed ancient myth into new, distinct, modern mythologies. What does "Rome" symbolize or stand in for in film. How has Christianity developed its own myths in relation to its experience with the Roman Empire? Class time will be spent viewing and discussing several films as well as discussing readings of several seminal works from the Classical world. Students will be responsible for lively participation in class discussion, keeping a journal of reviews of both texts and films, reading guizzes, and a presentation of a film not viewed in class. This course may fulfill an elective in the Classics majors. J. Winkle. 2:00 p.m. to 5:00 p.m.

IDIS W43 Interim in Greece. Course dates: January 3-23. Fee: \$4384. K. Bratt, D. Noe. Offcampus.

<u>GREE 101 R Greek Review</u> (0 semester hours). *M. Williams*. 11:00 a.m. to noon or 2:00 p.m. to 3:00 p.m.

Computer Science

CS W60 Computer Forensics: Digital CSI. Computer forensics and digital investigation is a blend of art and science used to discover evidence of how a computer has been used. Computer forensics is used to investigate everything from computers infected with malware to computers used to facilitate a criminal activity. Students will learn proper forensic procedures to maintain the chain of custody, how to create digital images, and how to examine both live and static computers. They will use FTK (Forensic Tool Kit), a professional suite of tools that aids in forensic investigations. They will learn how to examine the file structure as well as the contents of a file, how to find and recover deleted files, how to examine the contents of the computer registry for evidence of files or computer activity, and how to open encrypted files. Student exercises are patterned

after real-life scenarios. Evaluation will be based on students' success in solving these exercises and writing reports on their solutions. This course is not a CS Upper-Level Elective, but upon completion of the course, the student will be eligible to take an exam to become an Access Data Certified Examiner (a widely recognized professional certification). Prerequisite: 2 or more hours in CS. *E. Fife.* 2:00 p.m. to 5:00 p.m.

IDIS W24 The Art(s) of Game Design. J. Nyhoff. 8:30 a.m. to noon.

IDIS W62 Creating Smartphone Apps. K. Vander Linden. 8:30 a.m. to noon.

Developing a Christian Mind (DCM)

Developing a Christian Mind (DCM) is a first-year core course that introduces students to the central intellectual project of Calvin College, the development of a Christian worldview, and a faith-based engagement with culture. All DCM sections include common readings and plenary lectures, which sketch out the broad contours. Each section then works out the implications of a Christian frame of reference in relation to an issue of contemporary relevance. Student evaluation is based on classroom participation, quizzes on the readings and lectures, writing assignments or presentations, and a final exam.

CANCELLED IDIS 150 01 DCM: Sustainable Development to Reduce World Hunger. Students identify the root causes of global hunger and its linkage with environmental health, economic health, and social justice issues from a reformed Christian worldview perspective. Twelve "myths" or partial truths are considered in a quest to identify the root cause of chronic hunger. Global hunger issues are considered from both the perspective of developed and developing societies. Students evaluate issues of our current food system on environmental, nutritional, economic, and social health criteria. Connection with developed country hunger issues is supported by engaging with the local food system through grocery and food pantry visits. Developing country issues are evaluated using Cambodia as a case study. Inspection of the goals and operations of a variety of "non-governmental organizations" like the Christian Reformed World Relief Committee (CRWRC), Research Development International (RDI), or International Development Enterprises (IDE) and others provide compelling evidence of best practices through which some in Cambodia are being empowered today. Having understood the current global situation from environmental, economic and social justice points of view in U.S. and Cambodian contexts, students then investigate ways they could serve as intentional and effective agents of redemption either as students today or eventually as Christian citizens. Students will be evaluated through completion of regular quizzes, short verbal reports, a final exam, and a written report. By the end of the course, students will be able to explain the root cause of global hunger, develop specific action plans to sustainably reduce chronic hunger in developed and developing country cultural contexts, and connect the major tenants of a reformed Christian worldview with a convincing rationale as to why and how all Christians can reduce these issues today in every vocational station. D. Dornbos. 8:30 a.m. to noon.

IDIS 150 02 DCM: Sustainability and Worldviews. Global environmental issues related to creating a sustainable future generate much debate in the public media, among policy-makers, and even on a personal level. What shapes our view of the natural environment? How do these views affect our response to environmental issues? The course examines how different worldviews play out in human interaction with the created world. In particular students study modern, post-modern, and some explicitly Christian worldviews with respect to our relationship to the natural world. Drawing on the Biblical themes of creation, fall, redemption, and sanctification and their implications for environmental stewardship, this course seeks to cultivate a mature Christian response to environmental issues, especially as these come to expression in issues related to the sustainability of modern civilization. Global issues relevant to the sustainability of human society include climate change, energy supply, biotic carrying capacity, environmental pollution, the carbon cycle, biodiversity, and water resources. The course will

feature videos, guest lectures, professorial presentations, discussion, and student presentations. Assessment will be based on attendance, quizzes on reading assignments, class tests, writing assignments, class participation, a project report, and final exam. *K. Piers.* 2:00 p.m. to 5:00 p.m.

IDIS 150 03 DCM: Leadership, Character & Virtue. "... Becoming a leader is synonymous with becoming yourself. It's precisely that simple, and it's also difficult. So let's get started" (Warren Bennis). There is a lot of talk about "character" but what does it actually mean and how can we relate it to the world in which we live, learn, and work? The Christian life we lead is in the present - but God also redeems our past and has plans for our future. If we are to understand this Christian life, with its responsibilities and particular callings, we must start by understanding ourselves - in Christ. Our character is a complex interaction between God's 'wiring' of our bodies and background, the contributions others make to our life, and our unique participation in cowriting our story with God. Leadership first rests on character and the importance of ethics and authenticity. In business, and in life, you can't lead others if you can't lead yourself. Students explore the scriptural basis and foundation for Christian "character" and "virtue." "Who" we are is critical in dictating our moment by moment actions and the impact we have on others. Following the study of current virtue taxonomies, students explore their Core Identity – starting with purpose and calling and using new assessment tools and processes (e.g., personality, values, character strengths). The course culminates with the development of a Core Identity statement consisting of virtues, values, passions, strengths, competencies (knowledge, skills, abilities, and personality), and their story. Evaluation is based on three exams, written reflections on assigned topics, an in-class group presentation, class participation, and an integrative paper that includes their Core Identity statement. B. Cawley. 8:30 a.m. to noon.

IDIS 150 04 DCM: Faithful Business Practices. Is business inherently evil, a sphere of activity that worships money, dehumanizes people, and destroys the earth? Or through God's grace can it be an avenue of redemptive activity, one into which the faithful are called to do His work? If the second, how do faithful men and women serve God in business? This is a daunting question. We address these questions in this course by examining Christian beliefs and practices to seek to understand how they may lead to faithful business practices. Students will develop their own understanding of how Christian practices can influence business practices based on observations, lectures, and readings. Evaluation will in part be based on reflection papers, cases, a project, and a final exam. *T. Cioffi, P. Snyder*. 8:30 a.m. to noon.

IDIS 150 05 DCM: Taming of the Shrew: On stage! *Taming of the Shrew* has always been considered a classic Shakespeare comedy, but what about the provocative reputation the play has gained in modern times? What may have been seen as normal behavior in the 16th century is seen as domestic violence, partner abuse or a skewed view of traditional gender roles today. Does this play, originally written as a comedy, require a different lens to bring it to life in the modern age? How do we represent a controversial story today and manage to help our audience understand it? Through this DCM course, students will consider the issue of evil in the world as seen in classic dramatic literature, and come to a personal understanding of its place in the Christian life, how one can learn and grow from such literature and how it can point, even from a very fallen point of view, to the human need for redemption and restoration. This DCM is offered in conjunction with the regular interim course, "Taming of the Shrew: On stage!" for

which students will participate either on stage or backstage in the play production, as well as complete DCM requirements through this additional course component. This dual-purpose course will meet in the afternoons with afternoon and evening rehearsals and performances. Some mornings and Saturdays may also be required for play production work, but no more than eight hours will be required on any given day. The final production of *The Taming of the Shrew* will be performed for the public January 31 - February 9, 2013 as part of the CAS Department's theatre season. All students in this course must commit to these two weekends for the performance of the play. Evaluation of student work for DCM credit will be based on successful completion of all readings, reflection papers and a final exam. (See listing for "Taming of the Shrew: On stage!" under regular CAS department interim courses, for more information.) *D. Leugs.* 2:00 p.m. to 5:00 p.m. & 6:00 p.m. to 9:00 p.m.

IDIS 150 06 DCM: Filmmakers Under Censorship. This course examines four different groups of filmmakers who have had to work under various types of censorship: the directors of American screwball comedies under the Hayes Code, Chinese directors during the 1980's and 90's, recent Indian filmmakers, and Iranian directors of the 1990's to the present. In each of these cases, filmmakers have managed to produce an excellent body of work despite (and possibly because of) the pressures of censorship. Students examine a variety of questions regarding this topic. Why in some situations (Cultural Revolution in China, Stalinism in Russia) does censorship produce propaganda movies while in other situations filmmakers seem to blossom? What do these groups of censors (Catholic/Christian, Communist, and Hindi/Muslim) have in common? Why would they more or less censor the same things (sex, violence, material critical of the government) as many American Christians would? Does having limitations actually benefit artists in some ways? Students will evaluate and describe films that have been produced under censorship in a variety of situations, reflect on the situation of artists under censorship, and write possible reasons many Christian censors fall into the same patterns as other religious or political censors. Evaluation is based on class participation, a film journal, short paper and a final exam. P. Goetz. 8:30 a.m. to noon.

CANCELLED IDIS 150 07 DCM: Theatre Faith & Identity. Theatre helps us understand what it means to be human on this earth. Who am I? Where do I belong? What is my purpose in this world? Theatre is "the stuff" of human behavior and human interaction. Theatre breaks down barriers by allowing us to understand why people like and unlike us fail, laugh at human foolishness, and weep with characters that are undone by circumstance. This course examines several plays that highlight how theatre helps us to understand identity and faith. This DCM course is based on a reading/viewing of six–eight American plays. During the course these plays will be analyzed and assessed against the theological material provided in *Engaging God's World* and the book *The Necessity of Theatre*. Students will present a final project on one of the interim plays. A Final exam will be comprised of an integrative essay as well as a multiple choice text on texts, lectures and plays. *D. Freeberg*. 8:30 a.m. to noon.

IDIS 150 08 DCM: This is my Flesh: Female Embodied Experience. How can women experience true humanity in a culture that idolizes the two-dimensional, airbrushed female form? What does being created in the image of God have to do with how we experience and view our own bodies? This course seeks to explore these and other questions related to spirituality and the experience of being embodied creations in conjunction with the core requirements of Developing

a Christian Mind. Personal memoir and spiritual theology texts including Lilian Calles Barger's *Eve's Revenge* will be read and discussed. Because the topic of embodiment lends itself to actual physical experience (and not simply reading and conversation), there will also be an element of movement to daily course content, as well as some outdoor activities, weather permitting. Students will write personal reflections, participate in artistic responses and collaboration, and eat together as part of their topic exploration. Assessment will be based on written assignments, class participation, and reading quizzes. *J. Lawrence*. 8:30 a.m. to noon.

IDIS 150 09 DCM: Redemption & the National Parks. This DCM is offered in a hybrid oncampus/off-campus format—with the majority of the learning happening off-campus. The subject of the course is the examination of the environmental history of the Everglades National Park. Water is currently being discussed as the 'new oil.' Sources of and care for freshwater will be paramount in the future. However, the growth of the consumer society has a significant impact on water quality. An exploration of the historical aquatic ecology, development's impact, and attempts at preservation are explored in this interim. This topic meshes ideally with the themes of DCM and will be presented in a creation, fall, redemption, vocation, and participation model. This course will provide a parallel dialogue regarding science and faith formation. Together, teachers and students will explore a) the basic themes of the Christian faith as interpreted by the Reformed tradition, b) the nature, aims, and tradition of a Christian liberal arts education, as well as, c) foster a sense of community investigation by providing a common fund of intellectual and tacit experiences. The learners in this course will also explore the bearings and implications of the historic Christian faith on human responsibility in creation stewardship. Students are assessed through a series of exercises and activities using the national parks and human relationships as the laboratory. Through engagement, service, reflection, and purposeful response students will demonstrate learning. This will encompass traditional activities such as essay/reflection papers and quizzes as well as non-traditional methods such as documentary photography. Off campus dates: January 7-16. Fee: \$1540. C. Tatko. Off campus.

IDIS 150 10 DCM: The New Monasticism. Ever wonder what life is like in a Christian monastery? Ever ask why Shane Claiborne urges serious followers of Jesus today to return to the past—to pay careful attention to early Christian monastic life and practices, and to adopt for themselves a "new monasticism?" This course will focus on what Christian monks, disciples strangely out-of-step with prevailing culture, can teach about staying in step with Jesus. Students will read (ancient and contemporary) books on Christian monastic life and practice and explore ways to implement them today . The course will conclude with a week-long stay at a tranquil Christian monastery, the Abbey of Gethsemane, spiritual home of Thomas Merton. Off campus dates January 14-18. Fee: \$400. *D. Cooper.* 8:30 a.m. to noon.

IDIS 150 11 DCM: C.S. Lewis. C. S. Lewis will probably stand forever as perhaps the most significant Christian writer of the twentieth century. He was a master of English literature and of literary criticism, a prolific author of Christian theology and apologetics that was at once popular and sophisticated, and a gifted creator of fantasy worlds for adults and children. He was both rationalist and romantic, combining razor-sharp thinking with enormous appeal to human longing. He was so alert an observer of God and of life under God that many of his published observations almost immediately achieved the status of aphorisms (God is good, but not safe; many valuable things come to us only if we do not try too hard for them; "it is wonderful what

you can do when you have to"). His command of the English language is legendary, and his deep simplicity in writing it has become a model of one of his own aphorisms: any fool can write learned jargon; the test of one's command is the vernacular. He imagined parallel worlds so fanciful and yet appallingly real that, once entered, stay forever in thought and feeling. He made a holy God believable. His reputation in the world continues to grow (his name, googled, yielded 14 million hits in September, 2011 and 15 million on February 1). For this reason alonebracketing everything else—Christian college students ought to know C. S. Lewis well. Course objectives for students are to become acquainted (or reacquainted) with the principal works of C. S. Lewis' apologetical theology, including The Screwtape Letters, The Great Divorce, and Mere Christianity; To see fairly deeply into some of the central claims of these works; for example, that evil is a parasite on good, that the road to hell is gradually sloped, that many human longings, undisguised, are longings for God; To let Lewis enchant us with several wonders of life with God; and to learn by observation and practice an elementary proficiency in writing with "deep simplicity," a Lewis trademark. Evaluation will be by way of brief reflection papers on central claims by Lewis, class participation, a notebook of memorable insights by Lewis, and several exercises in writing with deep simplicity. N. Plantinga. 2:00 p.m. to 5:00 p.m.

IDIS 150 12 DCM: Eugenics & Personal Genomics. Eugenics – the self-direction of human evolution through the promotion of desirable traits and the elimination of undesirable traits is a philosophy we most commonly associate with Hitler and Nazi Germany. Would it surprise you to know that eugenics programs were vigorously promoted in the United States well before Hitler by prestigious institutions such as the Carnegie Institute and the Rockefeller Foundation, and by notable persons such as H.G. Wells, Theodore Roosevelt, J.H. Kellogg, and Woodrow Wilson? Would it surprise you to know that the American eugenics movement, American funding, and American technology promoted Hitler's human extermination program? For obvious reasons, after WWII eugenics programs and their support fell into disfavor. But presently, the sequencing of the human genome coupled with advanced technology has again made directed modification of the human species probable. However, is the genetic modification or selection of embryos to prevent disorders an acceptable form of "treatment," as opposed to the drug therapies and surgical procedures used today? Is the unprecedented accessibility to data from your own personal genome (234 diseases and conditions for as little as \$100) leading us again down the slippery slope of hatred, discrimination, and devaluation of subsets of humanity similar to the original eugenics movement? What decisions go into obtaining and interpreting this genetic information, who should have access to it, and what values should guide our use of it? This course will evaluate the rise of eugenics, its original hopes, subsequent fall, and reinvigoration in the genomic era. Students will learn to recognize eugenics in all of its forms, and will evaluate its implications in political, socio-economic, moral, and religious contexts. Course field trip to Holocaust Museum requires \$20 student fee. Students will be graded on the basis of class participation/activities, reflection essays, reading quizzes, an exam, and a course paper. R. DeJong, S. Nelesen. 8:30 a.m. to noon.

IDIS 150 13 DCM: Lifehacking Practicing Smart Living. The term "lifehacking" means finding ways to get things done in smarter, unusual, or more efficient ways, whether by means of using technology better or going back to basics. The student will learn, practice, evaluate, and present various self-chosen and assigned lifehacking techniques, including memorizing faster, buying food cheaper, taking better notes, taking better pictures, keeping your computer clean,

learning how to do small talk better, how to save money better, listening better, etc. Lifehacking techniques will be investigated and evaluated from a biblical, Reformed perspective, including an investigation of the difference between "efficiency" and "effectiveness". Students will be evaluated on the thoroughness of their investigation of a lifehacking technique, level of class participation, their 2 in-depth presentations, and regular journal entries. *V. Norman.* 8:30 a.m. to noon.

CANCELLED IDIS 150 14 DCM: Know Why You Believe. Every Christian college student eventually faces this question: Is my faith built on much more than wishful thinking? Yet college can be a time of deepening and maturing faith, especially if we're accompanied by those who have successfully walked this path before us. This apologetics course introduces students to some of those winsome, wizened ancestors in the faith. We will read and evaluate excerpts from some of the classics (Aristides, Augustine, Martyr, Irenaeus, Boethius, Anselm, Aquinas, Calvin, Bavinek) and some of the newcomers (C.S. Lewis, Peter Kreeft, R.C. Sproul, Alvin Plantinga, Francis Schaeffer, Cornelius Van Til). There are films and videos, both from proponents of Christian orthodoxy and from those raising sincere questions about the faith. As part of our consideration of the reliability of the Scriptures, there is a painless (ungraded!) introductionto reading the Greek New Testament. The course requires consistent attendance, daily readings or ereative assignments, active participation in class discussions and activities, three quizzes and a term project. *K. Schaefer.* 8:30 a.m. to noon.

IDIS 150 15 DCM: P-12 Education in a High Stakes Environment. High-stakes testing and accountability directives have shaped curriculum and instruction in the United States since the passage of the No Child Left Behind Act (NCLB) in 2001. The proposed renewal of the act, the Blueprint for Reform, seeks to continue school accountability, but remedy the problems with NCLB. In September, 2011, the standards for proficiency on the Michigan Educational Assessment Program (MEAP) test were raised because the prior standards fit a manufacturing rather than a college and career readiness. What difference do these changes make? What do these pieces of legislation seek to do? What do they view as the problem with education in the United States? The solution? Who is benefiting from these legislative acts? Who is losing? Students in this course, through readings, online resources, visits from school administrators and teachers, and their own experiences, will examine the history and effects of school reform legislation in the past twenty years. Students will submit the final project, a suggested course of action for future legislation, to their legislator. *M. Terpstra.* 8:30 a.m. to noon.

IDIS 150 16 DCM: Utopian Literature. The word "utopia" means both "good place" and "no place," and utopian literature has traditionally been about places that are too good to exist in the world as we know it. The Garden of Eden is a kind of utopia; the redeemed heaven and earth promised in the Bible is another. In between those utopias, humans have always—and will always—create utopian visions of their own, usually in comparison to the cultures they live in, but also to pose larger questions: What would an ideal world look like? What in human nature prevents our world from looking like that? And wouldn't one person's idea of utopia be awfully oppressive or boring to someone else? Students in this course arrive at questions like these through class discussion of major utopian works, such as Thomas More's *Utopia* and George Orwell's *1984*, through regular response papers, and through a final argumentative essay. Students will also be evaluated using daily quizzes and an exam. *C. Engbers.* 8:30 a.m. to noon.

IDIS 150 17H Honors DCM: 1492. In this course, students will examine the art and literature produced around 1492. They will study images and texts from places around the globe. Special attention will be given to the relationship between sacred and secular culture during this historical period. In addition, we will also investigate the interaction between western and nonwestern cultures to deepen our understanding of international trade, the establishment of missions, and the processes of colonialism. Besides offering students an opportunity to learn more about western and non-western art and literature during the late middle ages and early modernity, it will provide students who have completed ARTH 101/HIST 151 the prospect to reflect on material they studied during the previous semester. Meanwhile, students registered for ARTH 102/ENGL 200 will be given a foretaste of materials they will encounter in the forthcoming semester. During the interim, students will travel off-campus to museums and galleries to see works of art firsthand. These experiences will foster a richer understanding of visual images produced around 1492. Students will participate in class discussions and write directed journal entries based on the images they have seen and the texts they have read. In addition, students will fulfill the requirements for DCM category of the core by completing the required test. Off campus dates: January 6-20. Fee: \$1950. H. Luttikhuizen, J. Vanden Bosch. Off campus.

IDIS 150 18 DCM: Coaching Young Athletes. This course is designed to provide students with knowledge and practical experiences related to coaching young athletes. The focus is on knowledge, skills, strategies, and issues in youth sport. This course aims to develop insight and knowledge for a youth sport leader primarily in the areas of philosophy, psychology, and pedagogy, and secondarily in physiology and risk management. Cultural norms involved in coaching the young athlete will be critiqued using a Reformed worldview in an attempt to expose the complicated demands of coaching and the necessary tools one should possess in order to be successful in coaching. *J. Bergsma*. 8:30 a.m. to noon.

IDIS 150 19 DCM: God Rested: Why Can't You. Living in a life of a 24/7 world, the notion of rest may come to our mind as an anachronism, a fantasy, or simply unimaginable. While we are created to worship God and rest in Him, we tend to worship our work, and rest in ourselves. These distortions affect our perceptions of ourselves, our relationships with others, and most importantly, our relationship with God. We may wonder, "Do I realize life while I live it, every, every minute?" This class will examine some of the personal and socio-cultural forces that drive us toward living restless life. In addition, this class will assist in developing a new perspective that will help rediscover leisure, work, and rest. Students will integrate many of the elements of a Reformed Christian perspective that have been introduced in your courses and co-curricular activities at Calvin. Students will develop an appreciation for the importance of leisure, work, and rest in their lives. They will explore God's plan and purpose for their lives as well as develop and begin to implement a personal plan that will help them address the rest-less life. *Y. Lee.* 8:30 a.m. to noon.

IDIS 150 20 DCM: Sport Ethics: Who Me? Cheat? This course will explore how a person's worldview shapes their behavior toward sports and ethical decision-making. The complex and rapidly changing sport environment imposes new demands on sport participants and organizations. The increased pressure to address ethical issues is one of these new demands. While there are no simple prescriptions for dealing with ethical issues, the purpose of this course

is to show how both sport participants and organizations can more effectively address these ethical dilemmas. The course examines and applies current understandings, concepts, models, and techniques that help manage ethical dilemmas in sport, as well as show how a Reformed worldview can help Christian sport participants discern responsibility in this area. *J. Timmer*. 8:30 a.m. to noon.

IDIS 150 21 DCM: Living the Psalms. This course focuses on God's world through the eyes of the biblical Psalms. It entails a history of the Book of Psalms, a study of the common genre of psalms (lament, praise, thanksgiving, and psalms for wisdom teaching or festival use), their spiritual and literary qualities, and their use in personal and corporate worship. The themes of Plantinga's *Engaging God's World* and other readings (hope, creation, fall, redemption, vocation, kingdom, consummation) will be explored in specific psalms by the instructor and by students in their presentations and essays, so that there will be interaction between the Psalms and the Christian world-and-life perspectives that are central to the mission of Calvin College. Students will be expected to demonstrate that they have acquired a concentrated introduction to Calvin College's perspectives on a reformed Christian, multi-facetted world-and-life view; and explored select textual, historical, theological, musical, and other cultural/artistic aspects of the biblical Psalms and interface them with such Christian perspectives. For assessment of student accomplishments, the course requires an oral team presentation, quizzes, an integrative DCM essay, and a multiple-choice final exam. *B. Polman.* 2:00 p.m. to 5:00 p.m.

IDIS 150 22 DCM: Music as Therapy in Everyday Life. 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 impact our lives, transforming us and reflecting God's redemption of the world. Through readings from contemporary musicology and the social sciences, films, and a variety of musical styles, students will explore the questions, 1) What is music? What are the possible roles of music within God's creation? 2) How does music make us human? 3) How might different musical forms and practices contribute to the restoration of a fallen world? and 4) How might music be part of a Christian's vocation, whether or not one is a professional musician? The field of music therapy will be looked at as a "case example" of themes and concepts discussed. No formal music training is required, though students will have the opportunity to participate in group music-making experiences. Students will demonstrate the ability to examine critically the role of music in everyday life. Students will also gain an introduction to the field of music therapy, study its use with different client groups, and examine how this musical vocation may be part of God's redemption of the world. Evaluation will be based on participation, reading responses, journal entries, oral presentations, and a final exam which includes the DCM integrative essay. E. Epp. 8:30 a.m. to noon.

CANCELLED IDIS 150 23 DCM: Music of Joy. "It is a certain sound of joy without words, the expression of a mind poured forth in joy." For St. Augustine, music — especially wordless singing — is a means through which joy becomes embodied in meaningful sound. This linkage of music and joy is deeply embedded in human culture from antiquity to the present day. As with St. Augustine, such music is for many the expression of joy rooted in contemplation of God. But music can also trigger a response that is palpably similar to the experience of joy, that might be described as not only expressive of joy but an actual experience of joy itself. In this way it may

produce what C. S. Lewis described as a "stab of joy," an experience that may arise, unlookedfor, at any time and in any circumstances. As noted by Neal Plantinga in *Engaging God's World*, such experiences can produce an almost unbearable longing that is ultimately satisfied in Jesus Christ alone. Building on key passages in the Old and New Testaments, the task of this course is to assemble a framework for understanding joy and its relationship to the experience of music. Consideration is given to how joy emerges even in the midst of sorrow and brokenness, and how the experience of joy can lead to compulsive behaviors and even idolatry. Musical examples are drawn from the historical traditions of European music as well as several non Western cultures, the progressive rock of Yes, the jazz of John Coltrane, and film scores by Howard Shore (*The Lord of the Rings*) and Vangelis Papathanassiou (*Chariots of Fire*). Students will keep a daily journal, write the DCM integrative essay, and take a final exam. *T. Steele*. 8:30 a.m. to noon.

IDIS 150 24 DCM: Music, Manipulation, and the Mind of God. This course will help students understand how and why music is such a powerful force in people's lives, and how this power fits into God's plan for human flourishing, as laid out in the common material for the "Developing a Christian Mind" course. Students who engage with the course material will be able to articulate how music affects their emotions, identity, interpersonal relationships, confidence, empathy, energy levels, purchasing decisions, attitudes toward race and gender, values, and faith. Graded activities include daily reading and reflection questions, participation in class discussions, a group presentation that explores the content and impact of a song or film scene, a final DCM integrative essay, and a final exam. *D. Fuentes.* 2:00 p.m. to 5:00 p.m.

IDIS 150 25 DCM: Development aid in Africa: Can Helping Hurt? This DCM section will involve a journey to Africa – not on a plane but through readings, films, and conversations. Our focus will be on how the nations of the developed world have sought to advance political and economic development in Africa and whether—as some observers claim—our help has only made a bad situation worse. Key questions to be addressed include: why should the world's rich help the world's poor? Should churches collaborate with governments and secular agencies to promote economic development, or should they promote only spiritual development? Students will read books and articles that try to answer these questions; learn from readings and conversations with local representatives how church-related agencies such as the Christian Reformed World Relief work with local partners to identify and address development needs; and view and discuss several films that convey the challenges facing Africa today. The goals of the course include learning about Africa's recent history and understanding its current political and economic situation; identifying the role of the church in situations where poverty is widespread; and reflecting on the ways in which students, their families, and their home communities can be effective partners with counterparts in sub-Saharan Africa. Evaluation will be based on several brief essays on assigned topics, reading reports, and an in-class individual or group presentation. D. Hoekema. 8:30 a.m. to noon.

IDIS 150 26 DCM: New Urbanism. This course examines the current cultural debate over the way we build cities. After the Second World War, the US embarked on an historically unprecedented pattern of development—low-density, auto-oriented suburbs. As the limits of that pattern of development became apparent in the 1990s, the "New Urbanist" movement was spawned—a movement of architects, planners, environmentalists and citizen activists that has tried to recover more traditional ways of putting cities together, cities that are compact, walkable,

transit-oriented, and filled with mixed-use neighborhoods. Students will review the history of city-building in the west, in teams of four or five design a town for 30,000, and read articles and view DVDs that explore different aspects of the issue. Several guest speakers from the development and planning community of Grand Rapids will address the class. The overall goal of the class is to gain a deeper understanding of our built environment. Evaluation will be based on reading journal entries, participation in the design project, quizzes, and a final exam. *L. Hardy*. 2:00 p.m. to 5:00 p.m.

IDIS 150 27 DCM This class is a joke: Psychological perspectives on humor. Humor is an integral part of the human experience, yet we rarely talk about it in academic settings. This course explores the many facets of humor, including a growing body of psychological research on why humor exists, and how it impacts our daily lives. The course follows three themes: 1) Why were we created to have humor? 2) How and why has humor been distorted and sometimes causes harm? 3) How can we be discerning with humor and use humor in the way it was intended? Specific topics include, psychological theories of humor (including recent evolutionary accounts), Biblical portraits of humor, the way our brains process humor (including brain conditions where humor comprehension is diminished), how humor develops in children, adolescents, and emerging adults, social and psychological benefits of humor. Considerable class time is devoted to critiquing and discussing examples of humor (e.g., comedy routines, movies, literature, sarcasm, jokes, etc.). In addition to exams, students are evaluated through group projects that observe the occurrence of humor in a particular setting - using themes learned during the course. *L. DeHaan, J. Moes.* 8:30 a.m. to noon.

IDIS 150 28 DCM: Psychology of Conflict, Forgiveness, & Reconciliation. Conflict is part of our lives and yet forgiveness and reconciliation are vital aspects of the Christian worldview. While psychology has been investigating the factors involved in conflict for some time, the field has recently begun to examine the psychology of forgiveness as well. This course explores psychological factors that influence conflict and forgiveness and how these factors relate to a Christian understanding of the topics. Topics will include both intergroup (e.g., racism, sexism) and interpersonal (personal offenses & transgressions) conflict, different perspectives on why we should forgive, what forgiveness truly is, and what methods can be used to facilitate the forgiveness and reconciliation process at both the group and individual level. Both similarities and differences between the psychological and Christian understanding of these topics will be explored. In addition to exams, students will be evaluated through their short response essays to the readings, class participation, and an integrative essay. *B. Riek.* 8:30 a.m. to noon.

IDIS 150 29 DCM: The Scandal of the Incarnation. 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 worldview. In particular, we will strive for greater theological insight through a study of the Incarnation of the Son of God and the implications that doctrine might have for Calvin's paradigm. Reading will be from St. Irenaeus, the 2nd century Church Father who first clearly articulated the Church's response to the growing anti-creational and anti-incarnational threat of Gnosticism. Implications for the contemporary setting of Christians and Christian churches in American society will be discussed. Students will learn

basic theological concepts and vocabulary and learn how to express them coherently in written and spoken form. Students will be evaluated with quizzes, exams, papers, and discussions. *A. Griffioen.* 8:30 a.m. to noon.

IDIS 150 30 DCM: World Christianity: Christ of the China Road. Some say that by the end of the 21st century, China will be largely Christian. How is Christ received by Chinese people accustomed to Confucian, Daoist, and Buddhist traditions? How do indigenization and syncretism differ? What are the main doctrinal characteristics of the indigenous Chinese Church? What are Chinese "cultural" Christians? What are Chinese "house" churches? What is the relationship of the Christian church to the Chinese government? To universities? To seminaries? What are six important ways in which CRC Christians are engaged in China today? How will Christian faith continue to grow and deepen in China in the future? Through readings, art, short videos, feature-length films, and class discussion, students will learn 1) about indigenous Chinese religious traditions, 2) good Christian church in China. Students will also integrate what they learn about Christ on the China Road with reformed Christian faith witness: creation, fall, redemption, renewal/restoration. Student accomplishment will be evaluated on the basis of sentence outlines, short quizzes, class participation, short class presentation, one carefully constructed, integrative essay, and required final exam. *D. Obenchain.* 2:00 p.m. to 5:00 p.m.

IDIS 150 31H Honors DCM: Called to Serve - Called to Lead. Through tears of shattered dreams, empty success, cruel injustice, and broken promises, the world cries for a sense of meaning, a sense of hope, and new life. Where are the leaders who can show us a "new land", a "new beginning', and a "new hope" for a better tomorrow? Exploring the commands of Jesus, the Biblical message, and Reformed theological insight, the course will examine (in practical terms) two propositions: (1) "Leadership is not simply a question of how can "leaders better serve", but rather how can "servants better lead" and (2) "Today's leaders are already in our midst." Class sessions will incorporate guest speakers, lectures, one-on-one and small group discussions, videos, and readings from Neal Plantinga, Jim Collins, Dietrich Bonhoeffer, and Timothy Keller. Students will be evaluated on the basis of performance during in-class discussion, group work, writing assignments, and final exam. *S. Berg.* 8:30 a.m. to noon.

IDIS 150 32 DCM: Global Hunger: Issues of Food Security and Sustainability. In this course students identify the root causes of global hunger and its linkage with environmental health, economic health, and social justice issues. By developing a clearer understanding of where our food comes from, students evaluate the sustainability of our current food system on environmental, nutritional, and social health. Factors considered in local context include land and water resource use, pesticides and chemicals, biotechnology, organics, farmer markets and community-supported agriculture. The local context, once fully informed, is applied to the global environment. Having understood the current global situation from environmental, economic and social justice points-of-view, students can then investigate ways in which they can serve as intentional and effective agents of redemption today and in the development of their vocational plans. This course examines how our perspectives influence our perceptions and understanding of world hunger issues. Students examine how the causes of world hunger are deeply rooted in our understanding of the nature of human beings, the meaning of creation, and the relationship of human beings to their environment. Students also consider how our

understanding of the norms of justice and how a biblical concept of justice applies to the worldwide distribution and availability of our daily bread. U. Zylstra. 8:30 a.m. to noon.

IDIS 150 33 DCM: The Church in the 21st Century. The local Christian church is changing rapidly. Shifts in worship style, music, the visual arts, and the role of lay leadership are only a few of the elements driving these changes. Others are asking, "What does a biblically functioning church look like?" And, "What is the role of the local church in the Kingdom of God?" Still deeper, many Christians are questioning the necessity of the institutional church. These questions are compounded by a North American society that is becoming rapidly more secular, pluralistic, and materialistic. Local churches must be ready to respond and speak clearly to these and other issues. This course will challenge students to think about their individual roles within the local church, and to think carefully about the nature and mission of the local church within a broad Kingdom context. Students will be required to attend local church worship services each Sunday (and one Saturday evening) of Interim. *R. S. Greenway*. 2:00 p.m. to 5:00 p.m.

IDIS 150 34 DCM: Culture Making in the Empire. The word "empire" refers to a complex reality that is referenced throughout Scripture and has significant implications for daily faithfulness in today's world. This course uses Colossians Remixed (Brian Walsh & Sylvia Keesmaat) and additional resources to help define empire and the culture-making role of fully awake Christians living in the empire. Human culture is explored with particular reference to food, fashion, shopping, advertising, television, and popular art. Interwoven with cultural examples, the course material touches on theological and philosophical concepts such as truth, storytelling, imagination, hope, modernism, and postmodernism. Through reading, film viewing, discussion, guest speakers and special projects, students explore the problem of sin reflected in idolatry, consumerism, and power manipulation, but they are also encouraged to find hope in the Kingdom of God, rooted in individual practices and communal rituals. Course evaluation consists of reading responses, group projects, online conversation with other students in the class, as well as a final project that allows students to choose a particular area of culture in which to apply the theological framework presented in the course. Students will emerge from the course with the ability to apply a comprehensive Reformed worldview to human culture making; An awareness of the systems and powers that influence human culture; and a sense of hope rooted in the promises of God's Kingdom. K & R. Vander Giessen - Reitsma. 2:00 p.m. to 5:00 p.m.

IDIS 150 35 DCM: Gender in American Culture. DCM (Developing a Christian Mind) introduces students to the "central intellectual project of Calvin College—the development of a Christian mind and a broad, faith-based engagement" with culture.* In this course students will be introduced, through readings and plenary sessions, to "basic themes of the Christian faith" and "the nature, tradition, and aims of Reformed Christian liberal arts education." This introduction should foster academic community by providing a shared intellectual foundation here at Calvin College. This course will further explore the implications of the foundations of Reformed faith on issues of gender in American culture. Students will closely examine and explore how issues of faith intersect with gender in American culture, how American culture and the church have historically viewed the concept of gender, and how Christians might form responses to those conceptions. We will consider questions such as "What does it mean to be 'feminine' or 'masculine,' to act like a man or a woman?" "Is gender God-ordained or culturally constructed?"

and "does gender describe 'natural behavior' or does it involve learned performance?" Discussion will integrate the principles and issues raised in the shared DCM readings and plenary sessions with historical, theoretical, science, and theological writings; popular cultural representations of gender; and literature. *L. Naranjo-Huebl.* 2:00 p.m. to 5:00 p.m.

IDIS 150 36 DCM: Science Fiction. SScience and Belief in Science Fiction

Science fiction provides a vehicle to explore questions about ourselves and our relationships to one another, to other beings, and to the world we inhabit. Science fiction can imaginatively ask some deep questions. For example, is it possible and morally acceptable to create conscious beings that are hybrids of human and animal, or autonomous robots that can think and feel? If such beings did exist, how should they be treated? How would or should society and government respond to extreme threats to our very existence through disease, environmental disaster, or the impact of an asteroid? Sci-fi stories often present moral, social, and spiritual dilemmas that allow for imaginative thinking as we develop our Christian minds. Through their characters, science fiction authors express a belief-system or "world view" that may conflict with religious or spiritual beliefs and values we hold dear. In this DCM section students will try to discern the world view of different sci-fi authors or directors and relate the ideas expressed to biblical themes of creation, humanity's fallen state, and God's acts of redemption and sanctification. Furthermore, the science used to support the plot will be discussed. Students will learn to distinguish between solid science, speculative science, and the sometimes impossible "science" portrayed in science fiction in order to carry the plot. However, the primary focus is to explore the human themes presented in a sci-fi work. Looking at science fiction from different generations will show how it often reflects the fears and preoccupations of the era when it was created. What are the worries of people today that are reflected in recent science fiction? Daily reading, writing, and discussion will be required. In-class viewing of sci-fi films and film clips with follow-up discussion will be a significant part of the course. Evaluation will be based on daily writing, class participation, and a final paper relating themes from science fiction to the themes presented in Plantinga's Engaging God's World in the form of a critical movie or book review posted to the class. S. Steenwyk. 8:30 a.m. to noon.

IDIS 150 37 DCM: Movies and Music: Theological Themes. This DCM section will examine how central theological themes are expressed in notable works of music and cinema. The compositions to be studied include works by Haydn (The Creation), Bach (St. John Passion, St. Matthew Passion, Cantata 106), and Mozart (Requiem). The films will be chosen from Babette's Feast, The Mission, The Seventh Seal, and Amadeus. Students will acquire a knowledge of important themes in Christian theology and how they are borne out in important cultural productions. Students will become better acquainted with sacred compositions (and their composers) as well as with landmark films (and their directors); will enhance their skills at listening and film analysis; and will engage their skills in discussion and oral presentation. Course requirements include readings, keeping a journal, writing a paper, engaging in discussion, and crafting an integrative reflection essay as part of a final exam. *R. Plantinga.* 2:00 p.m. to 5:00 p.m.

IDIS 150 38 DCM: Books Every Christian Should Read. Where can we turn to discover how "to be" in Christ today? In *25 Books Every Christian Should Read*, authors like Dallas Willard, Richard Foster, Richard Rohr, and Frederica Matthewes-Green put together a list of books to

launch and guide Christians on "a journey of spiritual reading and discipleship that will help people to become more like Jesus." The list includes the writings of people like St. Athanasius, St. Benedict, Julian of Norwich, Fyodor Dostoevsky, Thomas Merton, and Henri Nouwen. Such books have become "must reads" for those Christians who desire not just a historical look at Christian teachings *about* spirituality but entry *into* the soul of its practice. In this section of DCM, therefore, we will discuss how the ancients and contemporaries have wrestled with the big questions around thinking and living "Christianly." We will improve our ability to read, comprehend, and apply what we read. We will proceed by reading and discussing together four of the 25 books (none of them lengthy). Then each student will select one additional book from the list to read, write on, and present to the class. *A. De Jong.* 8:30 a.m. to noon.

Dutch

DUTC W10 Introduction to Dutch (1). This course intends to offer an introduction to the comprehension and use of spoken and written Dutch as well as exposure to the people and culture of the Netherlands. The course will acquaint students with elementary language functions. The objectives are that students learn to give and receive appropriate greetings; to express information about themselves, their families, and their environment. Students will also learn to use essential vocabulary to express gratitude for help and hospitality. They will acquire a basic cultural knowledge and a skill set for navigating the social and geographical terrain of the urban area in which they will live. Daily homework and quizzes and periodic tests will assess and evaluate student learning. This course is intended as a prerequisite for students who will go on Calvin's Semester in the Netherlands Off-campus Program at the VU University Amsterdam. *I. Kony*ndyk. 6:30 p.m. to 8:30 p.m. (MTTH).

CANCELLED DUTC W40 Dutch Interim Abroad. Experience Dutch culture and everyday life in the Netherlands. This course features extensive interaction and meetings with Dutch persons. Excursions to education, business, and political institutions, as well as museum visits, concerts, church services, and guided tours are additional aspects of the course. Depending on the language background of participants, individual students may receive semi-formal instruction in Dutch. Local and intercity travel is done via bus, train, and bicycle. Lodging is in comfortable hostels and home stays. Extended stays are in the cities of Amsterdam, Amersfoort, and Middelburg with excursions to numerous other cities and into Dutch-speaking Belgium. There are several free days for travel. Course goals are that students demonstrate gains in Dutch language skills and increase their understanding of various religious, political, and cultural facets of the Low Countries. Students demonstrate achievements of these goals in journal writing, field assignments, and a concluding writing project. This course may fulfill an elective in the Dutch major and minor and the Netherlandic Studies major. Students having taken at least one Dutch language course are given priority admittance to this course. This course will fulfill the CCE requirement. Course dates: January 3–23. Fee: \$3000. H. De Vries. Off campus.

Economics

IDIS W11 Indonesian Intersections: Business, Education and Culture. Course Dates: January 3 – 24. Fee: \$4,475. *E. Van Der Heide, D. Buursma*. Off campus.

IDIS W19 Cultural Norms and Discrimination. A. Abadeer. 2:00 p.m. to 5:00 p.m.

IDIS W53 NGOs and Grassroots Organizations. J. Kuilema, T. Kuperus. 8:30 a.m. to noon.

Education

EDUC 343 Early Childhood Education: Preschool Field Experience. A field experience in a preschool setting that meets state requirements for the endorsement . Provides for analysis of teaching methods, materials, and classroom organization as they relate to the early childhood setting . Prerequisites: education 236, 337, 339, and Sociology 304. *S. Verwys*.

IDIS W11 Indonesian Intersections: Business, Education and Culture. Course Dates: January 3 – 24. Fee: \$4,475. *E. Van Der Heide, D. Buursma*. Off campus.

IDIS W25 The Beatles & the Sixties: Music & More. R. Keeley. 8:30 a.m. to noon.

IDIS W48 Learning, Poverty, and Schooling. Course dates: January 3-23. Fee: \$1100. P. Stegink. Off campus.

MATH 323 Teaching Mathematics in the Elementary and Middle School (2 hours). *J. Genzink.* 8:30 a.m. to noon (M-F) and 2:00 p.m. to 5:00 p.m. (TTH)

English

ENGL W10 Finding God in the Movies: The Very Best. This course will focus on the very best religious films ever made, a list that will include works as diverse as The Shawshank Redemption to Babette's Feast. Although Hollywood and film generally are usually seen as bastions of gleeful secularism, these films comprise an extraordinary body of film--some of filmdom's greatest, in fact--that is religiously acute and moving. The course will look at the sorts of religious statements these films make and how they go about making them, concentrating on the interrelation between means and "message." The course will begin by asking the question of what makes a film religious, and then move on to consider the drama of religious experience in the journey from darkness to light, from despair to hope, and from tragedy to comedy. We will also reflect on the nature of audience response and the legitimacy of oft-drawn distinctions between religious film and Christian film. As much as possible the course will follow a seminar format. Recent viewing of all films in the course is a requirement. Class sessions view films and discuss, including some time for the professor's lecture on filmmakers and meanings, though this is kept to a minimum. Students will be responsible for viewing the films and reading analysis of written critical texts. The course is rather intensive, examining a film about every day of the term. It should also be noted that a number of the films in the course are R-rated and often dark in their estimate of human life. The viewing list will include such films as Kieslowski's Three Colors: Blue, Malick's The Tree of Life and The Thin Red Line, and Robbins' Dead Man Walking. The course is designed to immerse students in the work of the great masters of religious cinema in order to develop their own awareness of the religious capacities of cinema but also their exploration of the presence and character of the divine. Evaluation will be based on a daily log of reactions to films, three analytic papers, and a final exam on the substance of the course. *R. Anker.* 2:00 p.m. to 5:00 p.m.

CANCELLED ENGL W11 The Blues as Secular Spiritual. This course presents a study of the spirituals and the blues, analyzing their common origins in American slavery and the historic divide between sacred and secular music in African American culture. Whereas blues singers were often condemned for singing "the devil's music," James Cone, in his seminal book, The Spirituals and the Blues, argues in contrast that the blues should be interpreted as "secular spirituals." Students will read descriptions of the spirituals and blues written by influential African American authors, including Frederick Douglass, W.E.B. DuBois, Zora Neale Hurston, Richard Wright, and Ralph Ellison. Students listen to and analyze lyrics from spirituals and blues music in order to evaluate the validity of Cone's thesis. The course also includes presentations by local blues musicians. Evaluation is based on an oral presentation and a final exam which asks students to develop their own analysis of the relationship between the spirituals and the blues, the sacred and secular music of African American culture. *B. Ingraffia*. 2:00 p.m. to 5:00 p.m.

ENGL W12 The Great American Short Story. What constitutes greatness in an American short story. What, in fact, constitutes an American short story. Our aims in this course are to establish some criteria by which to judge the worth of the American short story, or perhaps any short story, to enjoy, discuss, and understand some contenders for the accolade "The Great American Short Story," and to designate one story for the honor. The class uses a common anthology from which stories are read in a roughly chronological order and in a wide variety of

styles and authors. Evaluation is based on lively participation, reports, and testing. *J. Timmerman.* 8:30 a.m. to noon.

ENGL W40 Portraits of a "Lady": Women & Power in Contemporary Culture. Students will analyze and evaluate cultural representations of femininity. While the primary cultural texts studied—from Margaret Atwood's novel *A Handmaid's Tale* to Luc Besson's *La Femme Nikita* to Lady Gaga's *The Fame Monster*—are narrative, students also examine visual representations of women from the history of art and contemporary advertisements. Evaluation is based on daily response papers that will demonstrate students' engagement (including literary interpretation and rhetorical analysis) with these texts, and a final presentation. This course may fulfill an elective in the English majors. *J. Holberg, J. Zwart.* 8:30 a.m. to noon.

ENGL W41 Vamps & Vixens: Modernist Women Writers in Paris. The literary life of Paris and London between 1900 and 1940 was equally marked by both its intellectual fervor and its giddy self-indulgence. Perhaps even more remarkable is the contribution of women to this heady mix. Following Shari Benstock's survey, *Women of the Left Bank: Paris: 1900-1940*, this course will ask "What was it like to be a part of literary Paris?" and will examine the works of female authors. Students will look at a number of women whose contributions illuminate aspects of Modernism that are often overlooked by standard accounts. Students will study women who participated in Paris and London life through a number of venues -- writers, publishers, book sellers, and salonières -- in order to question how these women positioned themselves as both women and intellectuals. Readings will include work by Virginia Woolf, Gertrude Stein, Mina Loy, Djuna Barnes, Coco Chanel, Edith Wharton, and others. Evaluation will be based on one-page responses for each novel read. This course may fulfill an elective in the English majors. *J. Williams*. 8:30 a.m. to noon.

ENGL W42 Language & the African American Church. This class will focus on discourse practices that are a part of the oral cultural of many traditional African American churches, with particular emphasis on the complex performance of preaching and church testimony. Students will learn about the linguistic structure and socio-cultural meanings of the variety of English spoken by many blacks in the United States: African American Vernacular English (AAVE). Through daily exercises, students will learn linguistic tools for analyzing the variation found in AAVE and other non-mainstream varieties of English. Through lecture, class discussion, and visits to local African American churches, students will learn about the history of the black church and the creative language use of its participants. Student learning will be assessed by regular short quizzes and exploratory essays. Each student will make a presentation at the conclusion of the class. This course can serve as an elective for the English Major, the Linguistics minor, the ESL minor, or the English minor. *A. Kortenhoven*. 8:30 a.m. to noon.

ENGL W43 Revising for Publication. This class will operate as a writing workshop in which students revise their writing with the goal of submitting it for publication at the end of the course. As members of this workshop, students will learn about and practice a range of strategies for developing new material and refining that material into writing that is reader-ready. Throughout their revising, students will receive feedback from professors and peers in small-group settings and one-on-one. In addition to daily workshop sessions, students will hear from editors and published authors about strategies for and the joys and frustrations of getting writing into print.

This workshop is open to students who are writing in a variety of creative, academic, and professional genres. Since students in this course will focus on revising, they should have completed a substantive rough draft of the writing that they hope to publish at the end of the course. Students will be evaluated based on the quality of their participation in the writing workshop, their engagement with the revising process, and the completeness of a writer's journal. This course m may fulfill an elective for the English Writing major and minor. *S. Moore.* 8:30 a.m. to noon.

ENGL 374 English Grammar. A study of traditional grammar, focusing on its history, its system, its applications, its competitors, and its place in the middle-school and high-school classroom. Special emphasis will be given to the system and terminology of this grammar. Student work will be evaluated by means of daily assignments, in-class projects, a test, and a short paper. *W. Vande Kopple, E. Vander Lei.* 8:30 a.m. to noon.

CANCELLED <u>IDIS W12 Taos Art & Literature</u>. Course dates: January 3-23. Fee: \$ 2200. L. Naranjo-Huebl. Off campus.

IDIS W22 January Series. *K. Saupe*. 8:30 a.m. to noon and 12:15 p.m. to 1:30 p.m.

Engineering

ENGR W80 Advanced Chemical Engineering. This course addresses essential advanced topics for design. Topics build on the foundational concepts from several earlier engineering courses. The course includes advanced topics from separations, heat transfer, and non-elementary kinetics. An introduction to mathematical modeling for advanced transport is considered. In addition, fundamental concepts of environmental, health, and safety issues as well as corrosion and materials of construction for design are presented. Students will be evaluated by written lab reports, homework, oral presentations, and final exam. This course may fulfill a requirement for the chemical concentration of the engineering major. Prerequisites: Engineering 330, 331, 335, and senior standing. *J. & J. Van Antwerp.* 8:30 a.m. to noon.

ENGR W81 Mobile Robotic Systems. Mobile robotic systems are becoming more commonplace and are now handling some of the most dangerous tasks allowing humans to stay at a safe distance. In this course, students will learn about the historical development of mobile robotic systems including some ethical issues surrounding such systems. Students will also analyze and design the electrical, mechanical, and control aspects of robotic systems. The final project will involve the construction and implementation of a mobile robotic system. Through this hands-on experience, students will learn about the mechanical structures needed to build the system, the motors and gears to drive the system, the sensors to guide the system, the wireless modules to communicate with the system, and the control algorithms and hardware to manage the system. Students will be evaluated on in-class discussions, lab write-ups, design project presentations, design project reports, demonstration, and their participation in the team design projects. This course may fulfill the Engineering 307 & 311 for electrical track students; Engineering 315 & 322 for mechanical track students. Preference given to senior-standing ECE/ME engineering students. *R. Brouwer, Y. Kim.* 8:30 a.m. to noon.

ENGR W82 Site Development & Design. This course focuses on civil engineering site development and design (SDD). The course objectives are for students to: know the key elements used in the design of a civil engineering projects (e.g., topographical analysis and earth balances, infrastructure documentation and linkage, regulations and permitting, and integration of built and natural systems; to understand and apply various land measurement applications (e.g., surveying, global positioning systems, and geographic information systems) that are typically used for SDD; and to learn sustainable SDD practices (e.g., LID and LEED) by integrating these into course design projects. Student performance will be evaluated with their work on course design tasks, projects, and lecture quizzes. This course may fulfill the Engineering senior special topics requirement. Prerequisites for this course include ENGR 306, ENGR 320, and ENGR 326, or permission of the instructor. *D. Wunder*. 8:30 a.m. to noon.

ENGR W83 Sustainable Energy Systems. Renewable and sustainable energy systems are providing increasingly large fractions of the energy mix worldwide. In this course students consider fundamental engineering principles, economic factors, and Energy Return On Investment (EROI) for a wide variety of renewable and sustainable energy technologies. Special focus is given to performance and design of wind and solar systems, and data from demonstration systems at Calvin College are analyzed extensively. Several software packages

that aid renewable energy system design are introduced. Evaluation will be based on several design projects. This course may fulfill an elective for mechanical concentration engineering students. Prerequisite: Engineering 333 or permission of the instructor. *M. Heun.* 8:30 a.m. to noon.

IDIS W41 China, Business & Engineering. Course dates: January 3 - 23. Fee: \$3800. A. Si , L.Van Drunen. Off campus.

IDIS W44 Business, Engineering & Religion in the Context of European Culture. Course dates: January 4-26. Fee: \$4495. G. Byker, L. DeRooy, N. Nielsen. Off campus.

IDIS W46 Dutch Landscapes. Course dates: January 2 - 26. Fee: \$3320. H. Aay, R. Hoeksema. Off campus.

IDIS 103 Oral Rhetoric for Engineers. *M. Steelman-Okenka*. 8:30 a.m. to noon or 2:00 p.m. to 5:00 p.m.

MATH 241 Engineering Statistics (2 hours). M. Stob. 8:30 a.m. to noon.

French

FREN W80 Interim in Quebec. Students live in Montreal with French-speaking host families that provide bed, breakfast, and dinner. Classes are held in downtown Montreal in space provided by the Farel Reformed Theological Seminary (near McGill and Concordia Universities). Over the three weeks of class, students examine current events in Quebec. They also study a novel, short stories, and films set in Montreal. In the afternoons, the group visits the neighborhoods described in these works and have various activities, ranging from museum visits, plays, concerts, and walking tours to service learning, tobogganing, skating, and (if possible) a Canadiens hockey game. Invited speakers offer seminars covering potential topics such as the differences between Quebecois French and "standard French," the religious history of Quebec, and the ecology of the Saint-Lawrence River. Excursions include a weekend trip to Quebec City and a trip to the Laurentian Mountains north of Montreal for a day of winter activities. Students are awarded 3 credit hours and a grade based on regular participation in course activities and satisfactory progress in improving French-language skills. In addition to oral presentations on aspects of Quebec society, students write a series of reflection papers on cultural differences and the challenge of adapting to the cultural expectations of the other. 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 3 -23. Fee: \$ 3000. O. Selles. Off campus.

FREN 112 Multisensory Structured French II. 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 expect to complete through the French 113 level. Evaluation will be by means of quizzes, tests, writing assignments, oral interviews, cultural projects and activities, journals and one-hour afternoon small group sessions. Prerequisite: French 111 or permission of instructor. *A. Haveman.* 9:00 a.m. to noon and 12:30 p.m. to 4:00 p.m.

FREN 132 Intermediate French. This is the second course in a closely integrated and intensive sequence of language study involving two semesters and the interim for students who have completed two years of high school French but who, on the basis of a placement test, are not prepared for 201. The course is also open to strong language learners who have had no previous French, but who are capable of learning French in a fast-paced sequence. Students in this sequence complete their foreign language core requirement with French 202. *V. DeVries*. 8:30 a.m. to noon.

Geology, Geography & Environmental Studies

GEOG W40 GIS & Urban Enivronments. The urban system is explored using Geographic Information Systems (GIS). The

focus of the course is on the global overview of urbanization and contemporary challenges associated with urbanization. The theoretical part of the course is supported by practical analysis of urban space and processes. There is a lecture and lab component and no prerequisite course is required. However, Geog261, Geographic Information Systems and Cartography is

recommended .Intermediate Computer skills are necessary. The Lab sections include the following themes: GIS Introduction, population dynamics, urban expansion, squatter settlements urban planning, neighborhood demographic changes, site location placement, Geoprocessing, location theory "ients, urban sprawl, air pollution and water resource demands. Students will master knowledge in urban geography concepts in a computer environment and will gain knowledge and skills in GIS applications of urban systems, which will be evaluated by the completion of lab exercises and a final examination. This course may fulfill an elective in the Geography major and Urban Study minor. *Y. Habtemariam.* 8:30 a.m. to noon.

GEOL W40 Hawaii: Volcanoes in the Sea. This course explores the natural and cultural history of Hawaii, Maui, Kauai, and briefly Oahu, the four major islands of the Hawaiian archipelago. Hawaii is the best location in the world to study volcanoes, and Hawaii supports a fragile, tropical ecosystem. The course examines the active and extinct volcanoes and other geologic features of the islands. Students also investigate Hawaii's marine (reef) environment, the diverse land ecology, and the human history of settlement and development of the islands. Students will view ongoing eruptions, if possible, and hike over and study fresh lava flows and associated volcanic features. Instruction will take place on daily field trips to sites of geological, oceanographic, ecological, cultural, and geographic significance. Daily activities include light to moderate hiking, and occasional snorkeling. In rainy weather, hiking can be strenuous. Each student is responsible for reading the assigned history of Hawaii, and discussing an aspect of the Hawaiian Islands or culture in an on-site class presentation. Each student will maintain a daily journal. This course may fulfill an elective in the Geology major, Geography major, Environmental Geology major, and Environmental Studies major. It also serves as an elective in the minor programs of the GEO Department. Course dates: January 3 - 23. Fee: \$3400. J. Van Horn, G. Van Kooten. Off campus.

GEOL 112 Earth Science for Educators: Montana (MAY) (4 semester hours). This course is designed for students in the education program. Students use earth science concepts in an inquiry-based approach to build a knowledge base that is appropriate to the school classroom. The course covers topics in earth sciences that are required as teaching objectives in National Science Education Standards and in the Benchmarks for Science Literacy. These include activities studying astronomy, plate tectonics, erosion and weathering, volcanology, meteorology, and how humans interact with earth systems. A perspective of respect for God's creation and Christian stewardship of the creation is presented as the purpose for investigating and learning to understand the concepts presented in earth science. Field trips will include Butte, Yellowstone National Park, and Craters of the Moon National Monument. Evaluation is based on graded lab/field work exercises, quizzes, journals and a final exam. This course may fulfill an

elective in the Integrated Science major or minor. NOTE: This 2-week Interim course begins immediately after spring commencement. Course dates: May 20-June 4. Fee: \$1250. K. Bergwerff. Off campus.

GEOL 153 Big Sky Geology: Montana (MAY) (4 semester hours). This May Interim course in Physical Geology is based in SW Montana, a location with a wide variety of superb geologic exposures and landscapes. This course fulfills the Physical World core and emphasizes outdoor, field-based investigation and learning. Students will be introduced to the breadth of geological study leading to responsible Christian appreciation and stewardship of the Earth. Topics include rocks and minerals, volcanoes, weathering, rivers and streams, geologic time, plate tectonics, natural resources and geologic hazards. Field activities are an important part of the course, withafternoon field work complementing morning lecture and lab activities. Included among the many visited localities are Butte, Yellowstone National Park and Craters of the Moon National Monument. As a graded course, quizzes and exams will cover lecture, lab and text. Students will be required to complete lab assignments, make an identified rock and mineral collection, and maintain a written field log. NOTE: This 2-week Interim in May course begins immediately after spring commencement. Course dates: May 20 - June 4. Fee: \$1250. G. Van Kooten. Off campus.

IDIS W46 Dutch Landscapes. Course dates: January 2 - 26. Fee: \$3320. H. Aay, R. Hoeksema. Off campus.

Germanic & Asian Languages

GERM W80 German Interim Abroad. Participants engage with and improve their knowledge of the German language and culture on this study experience which includes stays in Schleswig-Holstein, Berlin, locations in former East Germany, and in southern former West Germany. Activities include four home stays, lectures, discussions, interviews, tours, and attendance at cultural and social events. Course participants choose where they will travel independently during the last four days. Course goals include active participation in course activities, growth in intercultural sensitivity, gains in mastery of the language, and increased understanding of various religious, political, and broadly cultural phenomena of Germany. Students will be assessed on their individual vocabulary acquisition, submission of an examination of a current issue in German society based upon two interviews, and submission of at least two analytic journal entries. This course may fulfill an elective in the German major and minor. This course will fulfill the CCE requirement. Prerequisites: German 301 and permission of the instructor. Course dates: December 28 - January 23. Fee: \$2840 and up to \$600 for personal and final-week costs. *C. Roberts*. Off campus.

GERM 122 Beginning / Intermediate German. This course is the second in a closely integrated sequence involving two semesters and the interim. The sequence is intended for students who have completed one to two years of high school German but who, on the basis of a placement test, are not prepared for 201. It is also open to students who show strong language aptitude in German 101, providing an accelerated core track. The course includes a strong emphasis on oral interaction and intercultural learning. Evaluation is based on tests, quizzes, class participation, and an exam. Prerequisite: GERM 101/121. *M. Buteyn*. 8:30 a.m. to noon and 2:00 p.m. to 3:00 p.m.

IDIS W45 Exploring Japan (MAY). Course dates: May 26-June 13. Fee: \$4,400. *K. Deguchi Schau*. Off campus.

Greek

GREE 101 R Greek Review (0 semester hours). This review is intended for all students who have completed Greek 101 and intend to continue in Greek 102. The course thoroughly reviews the elementary Attic Greek grammar which was presented in 101 and aims to ensure that students maintain proficiency until 102 begins, since there is no time for extensive review in the spring semester. No work outside of class is required in Greek 101-R, though optional exercises are available. Since the course is non-credit, it is typically taken in addition to a regular Interim class. Identical sessions of Greek 101-R are offered each morning and afternoon to avoid any conflict with regular Interim classes. Prerequisite: GREE 101. *M. Williams*. 11:00 a.m. to noon or 2:00 p.m. to 3:00 p.m.

History

HIST W10 Vietnam & Cambodia: Legacy of Empire & War. This is an on-site course on the history and culture of Vietnam and Cambodia as it was affected by French colonialism and the ensuing war with the United States. Students prepare by reading a text on Vietnamese and Cambodian history and discussing the material in class before departure. We then travel to the main cities and sites where French colonialism and the war with the United States made their deepest impact. Places of focus will include Hanoi, Hue, Hoi An, My Son, Ho Chi Minh City, the Mekong Delta, and Cambodia. Students tour the main historical sites and talk with former soldiers and government officials in order to understand the history and culture of Vietnam, including the American War, from the Vietnamese perspective. Students record their thoughts in a journal and write an essay based on that journal and their readings and class discussions. This course will fulfill the CCE requirement. Course dates: January 3 - 20. Fee: \$4199. W. Van Vugt. Off campus.

HIST W60 Turkish Transformations. Few places in the world today match the complexities and ambiguities, or embody the confluence of ancient and modern, secular and sacred, European and Asian, Christian and Muslim, of Turkey. And in few places is the question of the role of religion in public life so pressing. This course explores the topic both historically, through evidence ranging from the Turkish conquest of the Greek Christian Byzantine Empire in the fourteenth century to the founding of the secular Turkish Republic in the twentieth, and by observing the society of contemporary Turkey. Site visits include Istanbul, Edirne, Bursa and Nicaea, Ankara, Ephesus and Pergamum. Readings introduce the inclusive vision of the human encounter with God of the medieval mystic Rumi; the history of the Christian-Jewish-Muslim encounter and dialogue in the Ottoman era through case studies; and the situation of modern Turkey through Muslim writers Bediüzzaman Said Nursi and Fethullah Gülen, hugely influential but little known in the West. Before departure students read a book and write a take-home test; while traveling students visit historic sites, listen to evening lectures, participate in and lead structured discussions, and keep a journal; on return students write an integrative paper. This course will fulfill the CCE requirement. Prerequisite: IDIS 150. Course dates: January 3-23. Fee: \$4200. D. Howard. Off campus.

HIST 294 Research Methods in History (2 hours). This course, required for majors in history, and optional for minors, offers an introduction to historical sources, bibliography, and research techniques, giving particular attention to the different genres of history writing, the mechanics of professional notation, and critical use of print and electronic research data bases. The course is intended as preparation for 300-level courses. This class also focuses on the role of the Christian historian as a professional and a person of faith. Student learning objectives include learning how to analyze primary sources (measured through practice exercises and assessed document analysis; learning how to locate, evaluate, and cite a range of sources (measured through practice exercises and an assessed bibliography; and learning how to craft strong research papers in history (measured through assessed research paper). Evaluation is based on several reports, essays, and exercises as well as a final exam. Prerequisite: one course in history or permission of the instructor. *B. Berglund.* 8:30 a.m. to noon.

IDIS W50 Film Noir and American Culture. J. Bratt, W. Romanowski. 2:00 p.m. to 5:00 p.m.

IDIS 375 Methods and Pedagogies for Secondary School Social Studies. *R. Schoone-Jongen*. 8:30 a.m. to noon.

Interdisciplinary (IDIS)

IDIS W11 Indonesian Intersections: Business, Education and Culture. This course will teach students about the intersections between the world of business and the work of developing Christian schools in Indonesian society. Students will learn about formal and informal business practices and the unique and often powerful role business offers in a developing country, particularly through educational opportunities. Travel will provide rich opportunities to meet with leaders in business, religion, and education. A key learning objective for this course is to provide students with the necessary knowledge to function effectively in the business and educational environments that differ from those with which the student is familiar. To accomplish this, students will learn about the history, culture, and economy of this emerging global power. The course includes readings in the history (dating back prior to 1200 A.D.) and culture of Indonesia as well as current economic conditions. As we travel across Java, Bali, and Sulawesi by plane, boat, bike, and automobile, we will explore the extensive flora and fauna of Indonesian Islands and the arts that are unique to Indonesian culture. Another objective is to learn about the impact of religion in peoples' lives. We will visit mosques, Christian churches, Hindu temples and plan to have engagement with Indonesians at the Christian University, Universitas Pelita Harapan (UPH) and two Christian K-12 school systems in and around Jakarta and Monado. Students will be assessed on a reflective journal, participation in group discussions, and an integrative response. Preference will be given to students majoring in education, business, economics, accounting or international development studies. This course will fulfill the CCE requirement. Course Dates: January 3 – 24. Fee: \$4,475. E. Van Der Heide, D. Buursma. Off campus.

CANCELLED IDIS W12 Taos Art & Literature. The literature and art of the American southwest are inextricably tied to the history, culture, and landscape of the area. Its writers and artists come from three primary ethnic groups: Native Americans, Mexican Americans, and Anglo Americans. Students will learn of the richness and diversity of the art in these converging traditions in Taos, New Mexico, and the surrounding area by visiting the places that form the basis of the literature and art developed here. Writers/ storytellers include Joy Harjo, Robert Mirabal, Leslie Silko, Willa Cather, and Rudolfo Anaya, among others. Students will also visit artists, studios, galleries, and sites to experience both traditional and contemporary art and artifacts. Artists include ceramists (e.g., Maria Martinez), painters (e.g., Georgia O'Keeffe), santeros/as, and contemporary regional artists. By studying the art and literature of the subcultures of the southwest, students will learn of the contributions they have made and make to U.S. culture. Students will witness how the inspiring landscape of the southwest influences artistic expression and how this art expresses and conveys faith and hope in a complex and fallen world. Students' interaction with the people and artists of the Taos area will enrich their understanding and enhance their appreciation for the people and gifts of these subcultures. Evaluation will be based on short papers, journal/sketchbooks, brief presentations, and their contribution to community activities and engagement. This course will fulfill the CCE requirement. Course dates: January 3-23. Fee: \$ 2200. L. Naranjo-Huebl. Off campus.

IDIS W13 Grand Canyon Outdoor Educator. The Grand Canyon Outdoor Educator course is a community based learning experience held in the Southwestern United States. This three week course is designed for students interested in developing wilderness leadership and advanced

skills in expeditionary backpacking, backcountry medicine, and rock climbing site management. The course begins in Joshua Tree National Park (CA) with a six day American Mountain Guide Association (AMGA) climbing site manager course (SPI). The second phase will take place in Flagstaff, Arizona where students will complete a nine day Wilderness First Responder (WFR) certification through the Wilderness Medical Institute of the National Outdoor Leadership School (NOLS). In the third phase, students will complete a six day backpacking route in the Grand Canyon, developing proficiencies in backcountry living and travel, risk management in the wilderness context, outdoor instructional planning and delivery techniques, and group leadership strategies. Additional course topics will include; wilderness trip outfitting and rationing, expedition planning and logistics management, environmental stewardship, Leave No Trace (LNT) backcountry ethics, and facilitation of group dynamics and development. Evaluation is based on exams and participation. Course dates: January 4 -23. Fee: \$2755. K. Heys, R. Rooks. Off campus.

CANCELLED IDIS W14 Peace, Pubs & Pluralism. Ours is a world of difference, a veritable alphabet soup of differing identities: religious, political, and otherwise. The discrete letters of this soup bump against one another in ways unimagined even a generation ago. And this makes our world ripe for dangerous religious and political antagonisms. This interim begins in Belfast, Northern Ireland, and ends in London, England, both settings well known for harsh antagonisms. Students will explore how Christians committed to peace, justice and reconciliation are addressing religious difference and diversity in these international cities. London is a cosmopolitan city called home by Jews, Christians, Muslims, Sikhs, Buddhists, Hindus, and secular atheists alike. And "the Troubles" which plagued Belfast, Northern Ireland in the last half of the 1900's are, sadly, legendary. Students will visit both cities, meet with religious leaders of various faith communities, including (if available) the Archbishop of Canterbury, and explore some of the theoretical and practical ways in which followers of the Prince of Peace are incarnating seeds of peace and justice in divisive contexts. Written or video journals, participation in inter-religious dialogue, observation of various sorts of worship practices, and daily discussion of reading materials form the basis of the course grade for the interim. This course will fulfill the CCE requirement. Course dates: January 3-21. Fee: \$3156. K. Corcoran. Off campus.

IDIS W15 L'Abri Switzerland. L'Abri Fellowship is a Christian study center situated in the French-speaking portion of the Swiss Alps. Founded in the 1950s by the Presbyterian missionary couple, Francis and Edith Schaeffer, it has become known as a place where people with questions about the Christian faith can go for instruction and counsel. Instruction is based on the tutorial system; English is the language of instruction. Typically, students spend half the day in study, the other half working in the community. Up to five Calvin students may spend the month of January at L'Abri in independent study for interim course credit. Students determine the course of their study with their tutors on site. Evaluation for the course is based on a daily journal of readings, notes and reflections. This course is a CCE optional course. Course dates: January 3-23. Fee: \$2500. L. Hardy. Off campus.

IDIS W16 Wildfire: A Natural and Cultural History. Grass and forest fires are widely viewed today as threatening intrusions into natural and domesticated landscapes. Yet for millennia fire has played a major role in shaping Earth's human and ecological communities.

This course traces the ecology and cultural applications of fire through three historical periods dominated successively by 1) naturally occurring fire, 2) fire use by native human populations, and 3) fire control under European-style land settlement. The course will examine adaptations of organisms to fire, ways in which fire structures biological communities in different biomes, and how human use of fire may have shaped the 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 parks and wilderness areas will be studied. The use of fire in managing and restoring ecosystems will also be explored. The course will include lectures, laboratory exercises, videos and at least one field trip. Evaluation will be based on an individual project and a final test. One college biology course is recommended. *R. Van Dragt, D. Warners*. 8:30 a.m. to noon.

IDIS W17 A Real Pain of a Class. This course introduces students to the human pain experience as a sensory and emotional experience that is influenced by one's social history and cultural expectations as well as individual differences in physiological, developmental, and psychological makeup. The student will compare and contrast the values, beliefs, and issues regarding pain as found in the Bible and other forms of literature as well as ancient and modern philosophical texts. The student will demonstrate understanding of pain mechanisms and pain management strategies at both the central and peripheral nervous system level. Finally, the student will identify patient, health care provider, and health care system characteristics that influence the human experience of pain, treatment of pain, as well as pain-related research. Students will be evaluated through class participation, exams, and assigned activities. *E. Byma*. 8:30 a.m. to noon.

IDIS W18 Bridge, A Card Game for Life. Bridge is arguably one of the best games ever, combining unmasterably complex strategy (like chess) with teamwork, analysis, and a very small dose of quantifiable luck, all with just 52 cards. Students who study this surprisingly challenging yet social game through this course learn to play the game, including the bidding and scoring. They become well-versed in common bidding conventions (not unlike learning a new language) and ultimately adapt their own as partnerships. They learn the etiquette and variations associated with tournament play. Ultimately, members of the class play at the official Grand Rapids Bridge Club and possibly begin to earn Masterpoints. To begin to master the game, students train their problem solving, decision making, and partnership building skills. More importantly, students develop an appreciation for a mentally invigorating game that they will enjoy for the rest of their communal lives. Students will also get a chance to join the nearly 700,000 member World Bridge Federation. For evaluation, class members compete against each other in informal tournaments as well as take several written tests that promote problem solving and informational learning. *D. Vander Griend*. 8:30 a.m. to noon.

IDIS W19 Cultural Norms and Discrimination. In many less developed countries (LDCs), certain inherited beliefs, traditions, taboos, customs, and myths continue to play significant roles in marginalizing the poor, minority groups, and women by limiting their capabilities, participation, and effective representation in many spheres of life. Accepting, ignoring, or failing to challenge these discriminating informal institutions can diminish or nullify the effectiveness of proposed interventions, despite the positive intentions of such interventions. This course utilizes the new institutional economic analysis (NIEA) which opens up a genuinely interdisciplinary

discussion involving political science, religion, sociology, and psychology, as well as economics. The course utilizes the NIEA of formal and informal institutions that embody societal reward and penalty systems that play crucial roles in spreading or eradicating the practice of modern-day slavery in many countries. The course uses case studies from different LDCs to highlight the specific factors and dynamics that create such fallen institutions as modern-day slavery, female genital mutilation, domestic violence, discriminating personal status laws, dowry and dowry burning, and "honor killing." The course also proposes solutions and intervention schemes from a Christian perspective to redeem the victims and end these and other practices that violate human rights. In the end, solutions should empower the victims to attain greater capabilities, representation, and participation in various spheres of life in LDCs. Students learn the interdisciplined analysis in NIEA; the significant role of cultures and informal norms in determining the formal institutions and the governance structures of transactions; how informal norms marginalize and discriminate against women and other groups of minority/ethnic population; proposed interventions based on understanding the causes of such discrimination; and Christian perspectives on the causes of such problems and also on proposed solutions/interventions. Students are evaluated on attendance, class participation, journals, quizzes, presentations, a course project and a final exam. A. Abadeer. 2:00 p.m. to 5:00 p.m.

IDIS W20 Dancing the Elementary Curriculum. This course explores the use of creative movement as a tool for teaching elementary curriculum. Students "move" through elementary math, Bible, social studies, science and language arts by creating improvisational studies and designing movement games. Students visit elementary classrooms, meet teachers, discuss their curriculum and, in pairs, design a movement-based lesson. Students teach their lessons to local elementary students. Students are evaluated upon the following requirements: a test upon readings, writing assignments, peer-teaching activities, lesson-planning and in-classroom teaching. No previous dance experience required. This course is recommended to Elementary Education students for fulfilling their dance component. *E. Van't Hof.* 8:30 a.m. to noon.

IDIS W21 Eating Lower on the Food Chain. Is your diet harming you? Is it harming the planet? In this course students explore the spiritual, moral, social, environmental, and health issues that lead many to eat "lower on the food chain." They learn the health and environmental risks of the Western diet with its highly-processed foods shipped from thousands of miles away and then learn how to prepare, cook, and enjoy local whole food alternatives. They learn the principles and practices of gardening and food processing, and then try their hand at growing and preserving food through canning, dehydration, pickling, and other practices. Through readings, class discussions, field trips, "food labs," and other hands-on activities, students explore and reflect on the food security, sustainability, and lifestyle implications of eating in a more sustainable manner. Students will be assessed by participation, reading quizzes, and journaling. Fee: \$100. *D. Koetje.* 8:30 a.m. to noon.

IDIS W22 January Series. The Award-winning January Series brings some of the world's greatest authorities in their fields to Calvin to speak on a range of topics. Participants in this course encounter a diversity of issues and perspectives by attending the January Series programs. Students enjoy additional opportunities to interact with the speakers by watching live interviews with several presenters and spending part of each morning in personal conversation with the speakers. In response to the values and ideas they encounter with each speaker, students are

challenged to clarify and articulate their own worldviews and to find ways to put their values into action. Evaluation will be based on attendance at all January Series events, a short reflection paper on each presentation, and a research paper on one of the Series speakers or topics. *K. Saupe.* 8:30 a.m. to noon and 12:15 p.m. to 1:30 p.m.

IDIS W23 The Psychology and Practice of Stock Market Investing. This course will examine not only how people can invest in the stock market, but also the psychology involved in this process. Why is it that losses are felt two and a half times more strongly than equivalent gains? Why did investment guru Warren Buffet say, "Be fearful when others are greedy, and be greedy when others are fearful"? Why did Buffett also say, "Give me LESS than a million dollars and I can make a 50% return in the market"? Does fundamental analysis work? Does technical analysis work? If a median income worker set aside 10% each year for retirement and understood the market enough to do just 1 percentage point better than the average market return, he or she would collect over a million dollars extra. Students will understand the basics of fundamental analysis, technical analysis, and what are statistically proven predictors of successful stocks and what are not. They will also learn the psychology of decision-making errors due to uncertain information and/or emotional biases. Evaluation will be on the basis of quizzes, analysis of select stocks, and small group participation. A previous course in statistics would be helpful, but not required. *A. Shoemaker*. 2:00 p.m. to 5:00 p.m.

IDIS W24 The Art(s) of Game Design. Game Design remains an intensely *interdisciplinary* subject, and this has the potential to become one of its greatest strengths. However, in cultural terms, game design has largely remained stuck in an immature state for well over a quartercentury, drawing together a wide variety of media elements - images, audio, music, video, animation, narrative, dialogue, theatricality, and interactivity – while stubbornly resisting being reshaped by the more mature artistic discourses and design practices associated with these media. This is because, for far too long now, game design has continued to be dominated by technologists. It's time for a revolution, where artists and designers finally begin to reshape the way we think about, discuss, create, and experience this remarkable interactive media form we currently call "computer/video games." In this course, students will work in interdisciplinary teams to create interactive media experiences that, when "played," present the sort of experiences of narrative and character that we so readily associate with, for example, good cinema but that have remained largely absent from our experience of videogames. At the same time, students will attempt to bring to game and interactive media design the same quality of Reformed Christian critique and reflection that is undertaken in regard to other media forms at Calvin, particularly in regard to current potential relationships between gameplay and the cultivation of Christian character. This course has no prerequisites. Students from all majors are welcome. Any student with a basic level of experience with creative work in any medium, digital or otherwise, has something valuable to offer to this undertaking. Students will be evaluated based on in-class discussions, brief written responses to reading and viewing the work of others, hands-on exercises introducing technologies, and contributions to team work. Through this course each student will acquire a deeper understanding of game design, an understanding of new technological and artistic skills and concepts, and a broader conception of the societal and cultural possibilities for this media form. J. Nyhoff. 8:30 a.m. to noon.

IDIS W25 The Beatles & the Sixties: Music & More. In this course the students get an overview of the career of perhaps the most important artists in 20th century popular music. They study the Beatles in both their musical and historical settings as well as other important music and culture of the era. The course includes an analysis of the Beatles recordings and films, videos, and concert recordings. Readings include recent books and articles that give context to their music and their careers. There is an emphasis on understanding the music in the context of the career path of the artist, other music of the time, and other things going on in the world that both influenced and were influenced by their art. Christian engagement with the music of the Beatles and the culture of the sixties is an important part of the discussions. Evaluation will be based on a presentation on one year from the decade focusing on events and cultural issues, a personal essay or piece of art on the Beatles albums, and a short presentation on some other music released in this decade. *R. Keeley.* 8:30 a.m. to noon.

IDIS W26 Theology of Narnia. What do we gain from thinking about the possibility of other worlds, worlds not accessible through technological means, through our own cleverness or work, but worlds that we can only reach through a gift or a call, worlds that aren't about us, where we're marginalized guests? The great Christian apologist and scholar C. S. Lewis believed that this sort of story - which is common in folklore and myth as well as in contemporary books and movies is driven by a desire for something other, something fundamentally unlike ourselves, a desire that is an important part of human nature. We long for connection with something that's not known, not human, or if it's human it's human in a new way. It was in part to address his own desire for such connection that Lewis wrote the well-loved Chronicles of Narnia. Although the books are presented as children's stories, there is much in them that children miss. Reading the books again as adults allows for a deeper experience of this other world and a deeper exploration of Lewis' ideas, methods, and use of the Christian tradition, especially the medieval tradition that was his scholarly specialization. The class considers the theological, philosophical, and aesthetic assumptions that drive these stories and the ideas - sometimes explicit, sometimes hidden - that Lewis introduces. Students in this class are expected to read all seven of the Chronicles as well as some brief secondary sources, to come to class prepared for discussion and analysis, and to complete in-class writing assignments for each of the seven novels, exploring ways in which the story under consideration that day interacts with a passage from Lewis' non-fiction writing and/or with one of his ancient or medieval sources. Students are evaluated based on class participation and in-class writing. L. Smit. 2:00 p.m. to 5:00 p.m.

IDIS W27 Spiritual Strength Training. Do you want to build your spiritual strength and be strong in the Lord? Do you want to deepen your relationship with God through the power of the Holy Spirit? This course is designed for students who desire to have a dynamic, intimate relationship with Jesus, and who long to cooperate with the Holy Spirit in all aspects of life. The third person of the Trinity is often the least known, yet it is He who makes Jesus Christ known to us. Special emphasis is placed on teaching students about the Holy Spirit to understand how one may be transformed and empowered to live as Christ leads, rather than charting one's own course and asking God to bless it. Course topics will include, historical overview of the church's understanding about the Holy Spirit; waves of renewal within the 20th century; theological and historical reasons why many traditions have resisted emphasis on the Holy Spirit; what the Bible teaches about the divine personhood, and inward and outward works of the Holy Spirit; how to receive guidance from, cooperate with, and be empowered by the Holy Spirit; how to discern and

develop one's gifts from the Holy Spirit; and what the Bible teaches about the healing ministry of Jesus, as it relates to spiritual, inner, relational and physical healing. Students are regularly provided with opportunities for the practical application of theoretical topics via the incorporation of in-class exercises; opportunities to pray with classmates; opportunities to dialogue with, and receive personal prayer from spiritual trainers; and participation in a local 2 1/2-day spiritual retreat (1/20/13-1/22/13), sponsored by the Presbyterian Reformed Ministries International Dunamis Project. Students are evaluated by written tests, critical reviews of assigned books, group research project and presentation, and reflection papers. *J. Kraak, N. Van Noord.* 2:00 p.m. to 5:00 p.m.

IDIS W40 Harness the Wind: Learn to Sail. For thousands of years people have taken to the water in boats propelled by wind and sails. Whether for business or pleasure, sailors have had to learn the skills needed to meet the challenges of sailing. In this course students learn to sail on 26-30 foot sailboats using the facilities of Eckerd College on Boca Ciega Bay in St. Petersburg, FL. Students progress from beginning to advanced levels of sailing skill and are introduced to a lifetime activity that can be enjoyed at various levels. During onboard instruction students explore the ways in which wind, water, sails and hulls interact to efficiently send a boat on its way. Leadership development, team building, cooperative learning, and an introduction to sailboat racing are integral to the sailing experience. In addition to extensive on-the-water instruction, the course includes classroom presentations, readings, projects and discussions on techniques and physics of sailing, sailboat design, navigation, meteorology and history. Excursions to observe marine environments and wildlife are included in the course. No boating experience is required. Students must have the physical ability to operate a sailboat and pass a 150 yard swimming test. This course may fulfill an elective in the Recreation major. You will also receive PER 140 credit. Course dates: January 2-19. Fee: \$2780. J. Ubels. Off campus.

IDIS W41 China, Business & Engineering. China's emerging economy has a large impact on today's world, especially in business and engineering. During this interim students spend three weeks in China meeting with business and engineering professionals who are part of this reshaping of the global economy. The course includes major cultural and economic centers of China: Beijing, Shanghai, Nanjing and Hangzhou. Students engage with professionals at approximately fifteen companies. In addition many important historic and cultural sites are explored, including the Great Wall and the Forbidden City. Students ascertain why China has a comparative advantage in many types of manufacturing and how some US firms have responded to that. Students learn what type of engineering is done well in China. Students discover some of the environmental impacts of China's rapid growth. In addition students learn about the history and culture of China and how this has shaped modern events. Students are challenged to consider what China means for their future careers in business and engineering. Evaluation is based on participation and on a journal and a reflective essay. Preference given to students majoring in the business or engineering departments. This course may fulfill the Engineering department international designation. This course will fulfill the CCE requirement. Course dates: January 3 -23. Fee: \$3800. A. Si, L.Van Drunen. Off campus.

IDIS W42 Leadership in Africa. This course focuses on how leaders in East Africa (Kenya, specifically) develop business, provide health care, organize media and government, respond to crises, and conduct worship. Students hear lectures on Kenyan history, politics, and culture from

leading African scholars, then travel to rural development sites to see leadership in action. Students see wild animals in the Masai Mara, Africa's greatest game reserve. Students walk the streets of Nairobi and the dirt paths of the Kibera slum. Students worship with African Christians under roofs, trees, and sun. We make friends among the Maasai, Kikuyu, and other tribal groups. We learn to be smart travelers in Africa, with a modest ability at Swahili. Students will have the capacity to meet, befriend, conduct discussions, and assess leadership in the developing world. They will understand historical, cultural, and religious influences in East Africa. Evaluation will be based on daily de-briefings and team discussions, student journals and occasional de-briefings and discussion with African leaders. This course may fulfill an elective in the CAS and IDS majors. This course will fulfill the CCE requirement. Course dates: January 3-23. Fee: \$4500. B. Arendt, B. Crow, M. Fackler, C. Jen. Off campus.

IDIS W43 Interim in Greece. This course is a tour of the major sites of Greece, with special emphasis on the urban centers of classical and early Christian civilization. On-site experts introduce the class to topics of Greek history, religion, philosophy, literature and art; evening lectures by the professors cover special topics on the relationship between classical and early Christian culture. The primary academic objective is to develop a first-hand understanding of the classical context within which the earliest Christian churches were established. Other goals include developing an understanding of the Orthodox tradition in Christianity and some familiarity with contemporary Greek culture. The itinerary includes Athens, Thessaloniki, Philippi, Berea, Pella, Delphi, Olympia, Nauplion, Mycenae, Epidaurus, and Corinth. Participants write a take-home test on required readings (list available in October), deliver an oral report on a site they choose, maintain a detailed journal of daily site visits and lectures, and write a final essay on one major topic of the course. This course may fulfill an elective in the Classical Studies, Classical Languages, Greek, and Latin majors. Prior course work in classical languages or culture is not required. Optional CCE credit is available. Course dates: January 3-23. Fee: \$4384. K. Bratt, D. Noe. Off-campus.

IDIS W44 Business, Engineering & Religion in the Context of European Culture. In today's global economy, business practices, engineering design, product development, and product marketing must take the international market into account. This course introduces the students to the business practices and product development in the international market, focusing on business and R & D in Europe. Students will learn how the languages, history, culture, economics, regulations, and policies of Europe shape the business and design process. They will tour businesses, engineering research facilities, manufacturing facilities, as well as enjoy discussion sessions with leading business executives and research engineers in Europe. A second theme of the course reviews the history of the reformation with visits to Wittenberg, Heidelberg, and more. Locations will include Amsterdam, Brugge, Paris, Strasbourg, Munich, Nurnberg, Prague, Leipzig, Berlin, and Bremen. Additional religious and cultural locations will include visits to the Begijnhof, The Hague, Versailles, Notre Dame Cathedral, Reims, Dachau, Neuschwanstein, St. Vitas Cathedral, and more. Evaluation will be based on a research paper, a daily journal, class participation, and a paper regarding the cultural aspects of the course. This course qualifies towards the Engineering Department's International Designation program. This course will fulfill the CCE requirement. Course dates: January 4-26. Fee: \$4495. G. Byker, L. DeRooy, N. Nielsen. Off campus.

IDIS W45 Exploring Japan (MAY). This course gives students an opportunity to experience daily life in Japan by living with Japanese families in two areas of the Japanese islands. Major historical and religious sites in the ancient capitals of Kyoto and Nara are explored as well as picturesque Hirado Island, where Christianity was first introduced in Japan. Students also visit schools, churches, stores, and homes in order to understand how the Japanese live. Course activities include lectures, discussions, interviews, meetings, tours, two homestays, and attendance at cultural and social events. Student learning objectives are to gain openness to different cultures and perspectives, to reflect on their own culture and faith, and to enhance languages skills through meaningful contacts with Japanese people aided by the instructor. Evaluation is based on increased understanding of life in Japan and growth in personal awareness as shown in a journal and a brief essay. Students will be asked to reflect on the differences as well as the similarities between Japan's predominantly non-Christian society and their own predominantly Christian society. Students enrolled in this course are required to exhibit basic Japanese language skills in and knowledge of communication with Japanese people. This course may fulfill an elective in the Japanese and Asian Studies majors and the Japanese Study Group Minor. This course will fulfill the CCE requirement. Course dates: May 26-June 13. Fee: \$4,400. K. Deguchi Schau. Off campus.

IDIS W46 Dutch Landscapes. Few countries exist where human activities have exerted a greater influence in the shaping of the land than the Netherlands. With daily field excursions and detailed topographic maps, students study this country's richly varied and historically layered cultural landscapes. Land reclamation, water management, and environmental preservation technologies used over many centuries are each an important part of understanding the complex interrelationships between society, technology and land. Additionally, students have opportunities for direct engagement with people from this country. We stay in a group accommodation facility about 10 miles north of Amsterdam. The primary mode of instruction is field excursion to locations throughout the country. These daily trips are guided by briefings the night before, interpretation en route, presentation made by local experts, topographic maps, and study sheet assignments. Additionally, each student spends part of the first weekend with a Dutch family. This course may fulfill an elective in the Geography and Environmental Studies majors. It also may fulfill the Engineering International Designation. The course will fulfill the CCE requirement. Course dates: January 2 - 26. Fee: \$3320. H. Aay, R. Hoeksema. Off campus.

IDIS W47 Development in Jamaica. Jamaica, with its vibrant multi-national urban centers, attractive tourist destinations and impoverished rural countryside, will provide the backdrop for examining issues facing developing countries in an increasingly globalized economy. The interim will expose students to Jamaican culture and history, including the African diaspora, Jamaica's colonial experience, and Jamaica's contemporary identity. Through readings, engaging guest lecturers, and classroom discussions students will examine the social and economic problems facing Jamaicans today - including urbanization, political unrest, gangs, tourism, migration, and the influence of the United States in Jamaica meeting with community development workers, viewing development projects as well as factories and plantations all the while assessing the impact of these organizations on development. Field trips to museums, historical sites, Parliament, soccer games, and tourist locations will also be used to examine the various political, social, economic and international trends that have shaped the island and impacted its

potential for successful development. At the end of the interim students will have gained insights into the challenges of development as well as sensitivity to issues facing Jamaicans in the context of globalization. Evaluation will be based on participation, written journal entries, and a final reflective paper. This course may fulfill an elective for IDS and Sociology majors as well as African Diaspora minors. This course will fulfill the CCE requirement. Course dates: January 3-23. Fee: \$2900. L. Schwander, T. Vanden Berg, R. Venema. Off campus.

IDIS W48 Learning, Poverty, and Schooling. Participants in this course will develop an understanding of the challenges of urban education with a particular emphasis on the effects of poverty on learning. Several schools that serve students in the urban environment will be explored. Participants will experience schools in Grand Rapids, Chicago, and Milwaukee. Particular emphasis will be given to the Cross Trainers Academy, a Christian school in Milwaukee, Wisconsin whose origins are in providing schooling to students who are homeless. Participants will engage in multiple experiences designed to explore aspects of educating students who live the urban schooling experience. Participants will learn from educators who coordinate programs for and who teach students in urban schools with a number of students who live at or below the poverty line. Participants will, investigate challenges associated with living in large urban settings, including urban migration, decay, and revitalization. They will visit schools that educate students in an urban setting, comparing program strengths and challenges. They will aide in classrooms of the Cross Trainers Academy during a two week stay in Milwaukee and also tour museums and landmarks that describe the schooling of students living in urban communities, including the immigrant experience. Evaluation will be based on daily engagement as evidenced by the preparation of journal responses associated with their experience, contributions to discussion groups and an integrative project. This course may fulfill an elective in the urban studies minor. This course will fulfill the CCE requirement. Prerequisites: EDUC 102 SOC 151, or permission of instructor. Course dates: January 3-23. Fee: \$1100. P. Stegink. Off campus.

IDIS W49 African American Art. This course surveys the history of African American art. We will cover four main historical periods: Slavery/Reconstruction; The Harlem Renaissance; the Evolution of a Modern Black Aesthetic in the 1960s and 70s; and Contemporary Concerns. Beginning with the arrival of Africans in the Americas through the trans-Atlantic Slave Trade and continuing to the present, we will examine the intersection of folk and fine art traditions, continuities from Africa, appropriations of new materials, techniques, and forms, and the influence of events like the Great Migration and the Civil Rights Movement. Above all we will engage the role of the visual arts in constructing a vital, although by no means homogenous, cultural and political voice and identity. As African American theorist bell hooks states "art constitutes one of the rare locations where acts of transcendence can take place and have a wideranging transformative impact." Featured artists will include Aaron Douglas, James VanderZee, Augusta Savage, Faith Ringgold, Romare Bearden, AfriCobra, Betye Saar, Martin Puryear, Fred Wilson, Lorna Simpson, Renee Green, Kara Walker, Carrie Mae Weems, and Kerry James Marshall. Activities will include guest speakers, field trips, film screenings, and the viewing and analysis of many, many images. Assignments will include a blog with daily entries/reading responses, and a final paper/presentation on one artist. This course may fulfill an elective for Art and Art History majors and minors. Fee: \$15. E. Van Arragon. 8:30 a.m. to noon.

IDIS W50 Film Noir and American Culture. An interdisciplinary analysis of film noir, a "style" or "historical genre" of film that emerged during World War II and flourished in the postwar era. This course begins with an examination of representative films from the classic noir period (1941-1953), approaching them through close analytic and interpretive readings which we will discuss together in class. Exploration of the legacy of film noir affords opportunity to see how filmmakers have amended and adapted aspects of its style and subject matter in different periods in American history. Identified as "neo-noir," films like Chinatown (1974), Body Heat (1981), and L.A. Confidential (1997) reflect historical and cultural changes in the American society and raise questions about remakes, nostalgia, and pastiche in the contemporary cinema. By the end of the course students will be able to (1) converse knowledgeably about the markers of noir visual and aural composition, (2) recognize the recurrent plot and character types attending the style, (3) define the eras of the style's development, (4) articulate how film noir at these various stages reflected conditions and moods in contemporaneous American society, and (5) analyze films/television series on their own as to how they do or do not qualify as noir artifacts. More broadly, students will be able to apply methods of interweaving historical context and cultural product to other artistic creations in other eras of the American past. Students will be assessed by their quality of analysis on three papers treating different dimensions of noir and a daily journal in which they respond to the reading, viewing, and discussion of the day. This course may fulfill an elective in the Film Studies Major. J. Bratt, W. Romanowski. 2:00 p.m. to 5:00 p.m.

IDIS W51 Gender Representation in American Film. This course examines gender representations in four major American film genres--melodrama, romantic comedy, the Western, and the action film, in light of the most compelling theories of gender from gender studies, film studies, and beyond. This class, which involves lectures, screenings, readings, and discussions, has the following objectives. First, it will familiarize students with the difference between biological sex and gender roles together with the central ideas and issues that arise from recent theories of gender/sex/sexuality. Second, it will apply such theories of gender to representations of male and female roles in four central Hollywood film genres. The melodrama and romantic comedy are usually thought to be feminine, while the Western and action film genres are typically marked masculine. Since genres evolve in cycles. Students will learn how even within specific genres the representation of women and men can be quite diverse and surprising. We will also explore how gender roles can be quite different depending on historical context and individual films. Methods of evaluation will include a daily journal, a formal paper, a student presentation, and a final exam. Readings will include film theory and criticism that addresses issues of gender and may include such works as Kathleen Rowe's The Unruly Woman and Laura Mulvey's Visual Pleasure in the Narrative Cinema. Films to be screened may include All About Eve, Johnny Guitar, Moonstruck, Pretty Woman, Stella Dallas, and Brokeback Mountain. This course may fulfill an elective in the Film and Media Studies majors. S. Goi, C. Plantinga. 2:00 p.m. to 5:00 p.m.

IDIS W52 Music and Politics. This course explores the complex relationship between music and politics: how governments, institutions and special interests groups have influenced the kinds of music made (or not made) in a given context, the variety of ways music has been used to meet political objectives, and the many different ways music has been understood to carry political meaning. The course will introduce case studies drawn from the twentieth century

onwards to illuminate these various relationships, including worker's music from the North American labor movement (1920s and 30s), music in Nazi Germany and the Holocaust, Soviet music during the Cold War, the urban folk revival in North America, music during and after Apartheid in South Africa, censorship and regulation of popular music in the US (especially the Parents Music Resource Council), and uses for music by American soldiers in the Global War on Terror. These diverse political contexts for music will highlight the extent to which music is implicated in questions of power and justice, and used as a political tool or weapon by political collectives of many places, eras, and ideologies. Evaluation will be based on journals, quizzes, class discussions, a group presentation, and a final reflective essay. This course may fulfill an elective in the music major or minor. *B. Wolters-Fredlund.* 8:30 a.m. to noon.

IDIS W53 NGOs and Grassroots Organizations. From Grand Rapids to the Global South, non-governmental organizations (NGOs) have exploded in numbers over the last thirty years, and are often regarded as being especially instrumental in alleviating poverty and enhancing development in the Global South. In the 1990s, the international development community shifted its support from large-scale international financial institution (IFIs) affiliated projects to NGOsupported development projects. At the same time, the United States has seen increasing shifts towards reliance on NGOs over the public social welfare net, and an emphasis on cooperation between the private and public sector. This course will examine what is behind these shifts and whether NGOs, as key civil society actors, "do development better." This course will also examine a more recent development interest, that is, the role that indigenous, grassroots organizations play in development. As the optimism surrounding NGOs has faded, attention has shifted to more locally-grown movements. Is local always better? This course will cover the academic literature regarding these debates as well as study specific NGOs and grassroots organizations, both faith-based and secular, involved in development both globally and locally. Through agency excursions, readings, films, guest speakers, and classroom discussions, students will discern the complexity of the NGO and grassroots sector of development as well as the many opportunities and challenges they pose for development. Evaluation will be based on participation, quizzes, a presentation and paper, and a final exam. This course may fulfill an elective in the International Development Studies major and minor. J. Kuilema, T. Kuperus. 8:30 a.m. to noon.

IDIS W54 Pre-Law Immersion: Legal Principles and Practice. This course offers students an opportunity to learn directly from legal practitioners about the many different kinds of law-related work they perform and to observe them during the various field experiences. Students participate in class lectures, classroom seminars, and field observations led by legal professionals who will describe the work they are doing and explain how their work integrates into the legal process. Students will be introduced to basic legal terms and theories as well as basic skills in legal research, thinking, and writing. Students must participate in all lectures, seminars, and field observations and will be required to write a paper about a legal subject discussed during the course or in the news, integrating legal principles and practice learned during the course. Not open to first-year students. This course may fulfill an elective in the political science major. *A. Vogelzang, J. Westra.* 2:00 p.m. to 5:00 p.m.

IDIS W60 Galapagos-Amazonia. As "living laboratories of evolution" both the Galapagos Islands and the Amazon rainforest are two of the most unique and fascinating places on earth.

Having an equatorial climate, these two 'jewels' are also quickly becoming trendy vacation spots, generating local economies that are heavily reliant on the ecotourism industry. Participants in this course will investigate the biology of the local flora and fauna of these areas, and also study the economic and environmental issues and tradeoffs that are necessary to maintain these areas. Particular attention will be given to the application of Reformed Christian principles of biological and economic stewardship as tools for assessing the current and future status of these important natural areas. Students travel to Ecuador to spend seven days on the Galapagos archipelago and six days living within the Amazon jungle. Daily excursions include hiking, canoeing, and snorkeling. Evaluation is based on a daily journal, active participation in course activities, and an exam. This course will fulfill the CCE requirement. Prerequisites: one biology course (high school or college) and permission of the instructors. Course dates: January 3-23. Fee: \$4985. *C. Blankespoor, D. Dornbos.* Off campus.

IDIS W61 Partnering to Improve Health in Rural India. In this course students learn how a community-based primary health care (CBPHC) approach to health and development enables and empowers people and communities to take health in their own hands, particularly in a developing country. Sustainable community-based health and development are discussed as students learn about the multi-tier approach to community health that is practiced in the Comprehensive Rural Health Project (CRHP) villages with village health workers providing the majority of primary health care and health education at the grassroots level. The objective of CRHP is to work with poor and marginalized people and enable them to achieve an acceptable level of health through the primary health care approach. Through this approach people are enabled to improve their health and lives in a holistic sense. The emphasis is on building capacity, empowering people and working towards achieving equity and integration of all health services. The overall success of this project has prompted CRHP to focus increasing attention on its role as a model project for both government and non-government organizations throughout the world. The model is used by the World Health Organization. Students have classroom sessions aimed at practical application of concepts and take part in field visits and discussion sessions with village health workers and members of farmers clubs, adolescent girls clubs and the mobile health team. Topics addressed include the principles of community-based health and development and understanding primary health care and its implementation. The course also includes sessions on leadership and personal development. Students are personally challenged by issues of justice, compassion and faith as they interact with Indian people in a rural setting. Evaluation is based on reflective journals, a presentation, and participation. Prerequisite: Junior standing or above. Course dates: January 1 - 23. Fee: \$3900. D. Bossenbroek, S. Couzens. Off campus.

IDIS W62 Creating Smartphone Apps. Students who are interested in smart-phone applications are encouraged to enroll in this course where they will learn to create their own apps for phones running Google's Android operating system. This course is designed for beginning programmers and to support this, Google has created App Inventor – an innovative system that lets people with no prior programming experience build mobile apps. This drag-n-drop system eliminates typing errors, letting students create apps without having to learn arcane programming language syntax. Students will learn about a variety of topics including GPS, video games, cloud services, graphical user interface design, and basic programming concepts. For the course project, students will design and build their own original apps using App Inventor. Students who

own Android-based phones will be able to install and run their apps on their phones; others will be able to run their apps using App Inventor's phone emulator software. In this hands-on course, evaluation will be based primarily on a student's completion of the course project. Prerequisite: IDIS 110, its equivalent, or permission of the instructor. *K. Vander Linden*. 8:30 a.m. to noon.

IDIS W63 The Book of Revelation. No writing in the Bible has been subject to a wider range of interpretations than the Book of Revelation. Although Protestant evangelicals tend to understand John's apocalypse to offer a "blue print" for the end of the world, many churches, including the Reformed tradition, recognize the highly symbolic nature of the book. This course utilizes a documentary film covering the history of how Revelation has been interpreted, from the fifth century to the present, including its prominence in Christian art. The movie "Left Behind," based on the popular series of novels by that name, also features in the course. Most class sessions are devoted to discussing the text of Revelation in its first-century setting. In each session, significant attention is also given to Revelation's relevance for engaging aspects of our post–Christian culture. Students are evaluated on the basis of brief journal assignments and a short reflection essay. Prerequisite: one course in Religion. *D. Harlow*. 2:00 p.m. to 5:00 p.m.

IDIS W80 Fluorescence: Science & Uses. Fluorescence is a very important and practical phenomenon in science and every-day use. Green fluorescent protein (GFP) has allowed the detection of gene expression in living organisms, and its discovery and application was recognized with the 2008 Nobel Prize. Fluorescent materials have high visibility. The success of the Human Genome Project was due in part to the use of fluorescence for automated gene sequencing. 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 is and how it is used. The course also addresses these key questions: what kinds of substances are fluorescence different from other forms of luminescence, like phosphorescence. 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 research labs that use fluorescence. Participants will get experience using a variety of scientific instrumentation and will also complete a fluorescence project of their own choosing. Students in any science and engineering field are encouraged to take this course. Student work will be evaluated based on lab and classroom participation, lab electronic-notebook/journal, project report and presentation. This course may fulfill an elective in the Chemistry major and minor. Prerequisite: Chemistry 103 or one college science major course or permission of instructor. *M. Muyskens*. 2:00 p.m. to 5:00 p.m.

IDIS W81/PHYS W80 Biophysics. Biophysics is a growing discipline in which the tools of physics are used to elucidate biological systems. The course covers a broad spectrum of topics, including why ants can easily lift many times their own weight, how bees fly, why the cells of an elephant are the same size as those of a chipmunk, and why cats have a higher survival rate when dropped from taller heights. An additional feature of the course is that no calculators are used. All results are achieved by estimation, with a focus on learning the art of approximation. The class is highly participatory and the hope is that students will make the application of physical reasoning to biophysical systems their own so they can draw on this skill in the future. In addition to the above items, there is also a section devoted to the construction of simple

biophysical simulations using the open source software package Sage, though no previous experience is required. Evaluation is based on homework, tests, paper, and labs. Prerequisites: The course is designed to be accessible to any student with at least a semester of algebra based college physics or a year of algebra based high school physics. *P. Harper*. 2:00 p.m. to 5:00 p.m.

IDIS 103 Oral Rhetoric for Engineers. A study of the principles of oral rhetoric, with emphasis on developing student competency in preparing and delivering effective speech- es . The emphasis is on basic speech design for engineers communicating their creation and refinement of ideas to peers, managers, subordinates, venture capitalists, and to the public at large . This course will be offered at an accelerated pace during the interim term. Pre-requisite: enrollment in the engineering program. *M. Steelman-Okenka*. 8:30 a.m. to noon or 2:00 p.m. to 5:00 p.m.

CANCELLED IDIS 196 Transcultural Caring for the Health Professions. The major focus of the course will be to increase student understanding and knowledge in the area of transcultural care (culture care), an area of study that is essential in the diverse and global world in the 21st century. Students will examine culture care from a Christian perspective, implementing a variety of theoretical perspectives on culturally congruent care. Students will have the opportunity to directly be involved with several ethnic groups as they examine the life ways and cultural norms and values of groups in relationship to their health care needs . This course provides valuable information to students who are interested in entering the health care professions. Evaluation will be based on participation, presentations, journals and a final paper. *A. Ayoola.* 8:30 a.m. to noon.

IDIS 375 Methods and Pedagogies for Secondary School Social Studies. This course introduces prospective teachers to important curricular and pedagogical issues related to teaching history and social studies at the middle and high school level. It examines the links between a Christian understanding of human nature, pedagogy, curricular standards, lesson planning and curriculum construction, teaching resources, classroom methods, and assessment instruments. *R. Schoone-Jongen.* 8:30 a.m. to noon.

International Development Studies

The following courses will fulfill an elective in the International Development Studies major or minor.

HIST W10 Vietnam & Cambodia: Legacy of Empire & War. Course dates: January 3 - 20. Fee: \$3,938. W. Van Vugt. Off campus.

HIST W60 Turkish Transformations. Course dates: January 3-23. Fee: \$3700. D. Howard. Off campus.

IDIS W11 Indonesian Intersections: Business, Education and Culture. Course Dates: January 3 – 24. Fee: \$4,475. *E. Van Der Heide, D. Buursma*. Off campus.

IDIS W42 Leadership in Africa. Course dates: January 3-23. Fee: \$4670. *B. Arendt, B. Crow, M. Fackler, C. Jen.* Off campus.

IDIS W47 Development in Jamaica. Course dates: January 3-23. Fee: \$2723. *L. Schwander, T. Vanden Berg, R. Venema*. Off campus.

IDIS W61 Partnering to Improve Health in Rural India. Course dates: January 1 - 23. Fee: \$3900. D. Bossenbroek, S. Couzens. Off campus.

NURS W60 Belize: A Nursing Experience. Course dates: January 3-23. Fee: \$2990. R. Boss Potts. Off campus.

Kinesiology

KIN W10 Amazing Race: Learning to Race, Racing to Learn. Competition is a fact of life, and it's everywhere you look: in athletics, business, academics ... politics. We compete institutionally, interpersonally, and intrapersonally. Competition is innate and as old as human history and starts as early as birth. The stories of Cain and Abel, and Joseph, in the Old Testament show powerful competitive forces inside families. In the New Testament, Jesus' parables about human competition teach more important, subtle, startling truths. Competition can be healthy or unhealthy, evoke our best or worst—it can build or destroy. But God calls us into life and competition, and He wants us to use it to accomplish His purposes. This interim will provide opportunity to not only discuss the multi-facets of competition but also experience the healthy and unhealthy dimensions of competition. The races or competitions the students will participate in will be the laboratory for the study of competition. Students will experience this competition by visiting five US cities (San Antonia, Denver, San Diego, LA, Phoenix) and competing in an adventure race modeled after the reality TV show, The Amazing Race. When not competing, students will learn about the healthy and unhealthy elements to competition, how competition fits into our lives as Christians and as Christians how we can strive to keep competition healthy and good. Students will also be challenged to further develop life skills such as teamwork, healthy competition, and conflict-resolution. Evaluation is based on a daily journal, active participation in course activities, critique of journal articles about competition from a Christian perspective and a written examination. Course dates: January 5 - 23. Fee: \$2250. B. Bolt, A. Warners. Off campus.

KIN W11 Sport Nutrition. Proper nutrition is a key ingredient for success in competitive athletic performance. The goal of the Sport Nutrition course is to investigate the types, amounts, and timing of food and fluid intake, as well as the fact and fiction surrounding nutritional supplements. Specifically, students will study the types of foods necessary before and during exercise, as well as the recommended food/nutrient intake for optimal recovery following exercise. Differentiation between eating on practice vs. competition days will be made, as well as performance eating during all-day events and when traveling for competition. Students will learn the basics about analyzing food and training plans for strength, power, and endurance sports for men and women. The course will also cover the incidence of body dysmorphias (disordered eating, female athlete triad, Adonis complex), as well as strategies for weight gain. The course will combine a variety of lecture, diet analysis, hands-on cooking in the Nutrition classroom, and group discussions and diet plans. The cooking activities are designed to teach athletes how to eat lower on the food chain while still getting adequate protein, how to incorporate more carbohydrates into a meal, how to make healthy snacks, and ideas for quick, affordable, yet nutritious meals at the end of a day when practice necessitates a late arrival home. Each student will complete a project that entails the development of a booklet of nutritional guidelines for athletes by sport and gender. Evaluation methods include guizzes, a final exam, and the project. Fee: \$30. J. Walton. 8:30 a.m. to noon.

KIN W40 Medical Terminology. This course will include the study of basic medical word structure, organization of the body, word parts (roots, suffixes, prefixes), medical specialties, and case reports. This course fulfills the prerequisite for pre-physical therapy, pre-occupational therapy, and Physician's Assistant graduate programs. The course will include daily chapter

quizzes, practice reading and writing medical records, and a comprehensive final exam. *N. Meyer.* 8:30 a.m. to noon.

IDIS W13 Grand Canyon Outdoor Educator. Course dates: January 4 -23. Fee: \$2755. K. Heys, R. Rooks. Off campus.

IDIS W20 Dancing the Elementary Curriculum. E. Van't Hof. 8:30 a.m. to noon.

IDIS W27 Spiritual Strength Training. J. Kraak, N. Van Noord. 2:00 p.m. to 5:00 p.m.

PER Activities Courses (1 semester hour)

124A Swim I.S. DeKleine. 10:30-11:20 (MWF)
137A Bowling. #+ J. Sparks. 10:30-12:20 (TTH)
137B Bowling. #+ J. Sparks. 1:00-3:00 (TTH)
165A Ballet II. J. Genson. 12:30-2:15 (TTH)
174A Volleyball I. D. Bakker 10:30-12:20 (TTH)
176A Cooperative World Games. S. DeKleine. 1:30-2:15 (MWF)
180A Badminton I. D. Bakker. 10:30-11:45 (MWF)
181A Badminton II. J. Kim. 8:35-9:50 (MWF)
182A Tennis I. J. Kim. 10:30-12:20 (TTH)

Fee required.

+ Class will meet off-campus.

Mathematics

MATH W80 Curricular Materials for K-8 mathematics. This course examines and evaluates K-8 mathematics curricula in the context of the NCTM Principles and Standards for School Mathematics. Although the emphasis this year will be on grades 6-8, curricula at all grade levels will be examined. Some of the curricula to be discussed are Everyday Mathematics, Investigations, Math TrailBlazers, Bridges, Connected Mathematics, MathScape, MathThematics , Mathematics in Context, and Singapore Math. Familiarity with a variety of K-8 mathematics curricula, with state and national mathematics grade level standards, and with state and national K-8 mathematics testing instruments is important for prospective teachers. Practice in designing exemplary mathematics lessons, making mathematics/literature connections, and solving mathematics problems are valuable skills for classroom mathematics teachers. Students are expected to complete assigned readings, to participate in and lead sample activities and lessons, and to contribute to small-group and whole-class discussions of the materials under consideration. Evaluation is based on in-class participation, presentation of grade-level lessons, written quizzes, and several written projects. Optional K-8 classroom observations can be arranged for the morning hours. Students should arrange their schedules so that they can spend additional hours in the Curriculum Center. Prerequisites: Mathematics 222, Education 302/303. This course is required for the Mathematics Elementary major, and replaces Math 110 for Mathematics Elementary minors (with permission of their mathematics advisor). J. Koop. 2:00 p.m. to 5:00 p.m.

MATH W81 Infinite Series. The theory of infinite series is a fascinating area of mathematics due to its wealth of surprising results. At a basic level, the theory provides a logical basis for extending finite addition to "infinite addition." Students will learn the basic definitions, and will be able to test series for convergence or divergence, using both the more elementary tests and more sophisticated tests such as those of Kummer and Raabe. Finally, they will study the harmonic and alternating harmonic series, and closely related series, and will be able to find the exact sum of many different convergent series. There will be daily assignments and a final project. This course may fulfill an elective for mathematics majors. Prerequisites: Mathematics 172, and either Mathematics 256 or a 300-level mathematics course in which proofs are emphasized. *J. Ferdinands*. 2:00 p.m. to 5:00 p.m.

MATH 170 Elementary Functions and Calculus. This course is a continuation of Mathematics 159. Topics include applications of derivatives, integrals, the fundamental theorem of calculus, and applications of integrals. Grades are based on problem sets, tests, and a final exam. Prerequisite: Mathematics 159. *M. Bolt.* 8:30 a.m. to noon and 2:00 p.m. to 5:00 p.m.

MATH 241 Engineering Statistics (2 hours). A course in statistics with emphasis on the collection and analysis of data in engineering contexts. 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. *M. Stob.* 8:30 a.m. to noon.

MATH 323 Teaching Mathematics in the Elementary and Middle School (2 hours). A discussion of the methods, pedagogy, and strategies for teaching mathematics in the

elementary/middle school. Curricular issues, including discussion of various materials and the use of technology, will be tied to criteria for evaluation of such. Topics of assessment, state and national standards, and lesson development will be examined. The relationship of mathematics teaching and the Christian worldview will be discussed. Field experiences will allow students the opportunity to see the issues raised in the course in the setting of a school . Prerequisites: Mathematics 221, 222, Education 302. *J. Genzink.* 8:30 a.m. to noon (M-F) and 2:00 p.m. to 5:00 p.m. (TTH)

Music

IDIS W52 Music and Politics. B. Wolters-Fredlund. 8:30 a.m. to noon.

Nursing

NURS W60 Belize: A Nursing Experience. Immerse yourself in the health issues and nursing care of the people of the small developing country of Belize, Central America. Belize is both geographically and culturally diverse with mountains, rainforests and the largest coral reef in this hemisphere! Explore health concerns and care strategies for a culturally, socially and economically varied nation of seven distinct groups including Creole, Mayan, Taiwanese, Garifuna and others. Nursing students have the opportunity to serve in community clinics, private hospitals, struggling government hospitals, mental health half-way house & an orphanage. Students learn from local herbalists, traditional midwives and folk healers. Students take an excursion to Guatemala for 3 days to explore the contrast in health care and culture of these two developing countries. Students will also have the opportunity to live in a Mayan village absorbing the culture firsthand. Students learn about village health needs and the role of the traditional birthing assistant. Students meet four times in the fall to enhance preparation for this experience. Clinical experiences, cultural events, reflective discussion and informal lectures contribute to the learning in this interim. Course goals are that students demonstrate Christian nursing care, understand cultural health care and adapt nursing skills to a variety of settings. Student evaluation is based on preparatory readings, required journal, presentation and participation in course activities. Prerequisites: Satisfactory completion of at least one semester of nursing courses and permission of the instructor. Course dates: January 3-23. Fee: \$2990. R. Boss Potts. Off campus.

IDIS W17 A Real Pain of a Class. E. Byma. 8:30 a.m. to noon.

IDIS W61 Partnering to Improve Health in Rural India. Course dates: January 1 - 23. Fee: \$3900. D. Bossenbroek, S. Couzens. Off campus.

CANCELLED <u>IDIS 196 Transcultural Caring for the Health Professions</u>. A. Ayoola. 8:30 a.m. to noon.

Philosophy

PHIL W10 Concepts of Nature. An examination of how nature is conceptualized by various thinkers, how their different pictures of the natural world shape responses to environmental issues, and the way that nature functions in Christian reflections on humans and their place in the world. The first week of the course will be held at Walden Lake Lodge with classes held in the classroom at that facility. The rest of the course will be held on Calvin's campus, but will include a three day backpacking trip to experience winter hiking in Michigan, and experience the challenges of living in the wilderness during the winter months. This trip will either be held on the Manistee River Trail or at Wilderness State Park in one of the hike-in cabins; in the latter case students will either ski or snowshoe to the cabin with their supplies in backpacks. Basic equipment for the trip (tents, sleeping bags, stoves) will be provided. Students will be responsible for any specialized clothing (boots, snow pants) needed for the trip. Through this course students will understand the range of ways theorists have conceptualized the natural world; gain experiential understanding of the complexities of any concept of wilderness; develop respect for and understanding of survival in outdoor situations; and articulate a Christian response to creation care issues that incorporates both theoretical and experiential understanding of human relationships to the natural world. Evaluation will be based on in-class discussion and regular written journal entries as well as a final reflection paper or project that brings together their experiences during the course. Fee: \$275. R. Groenhout. 2:00 p.m. to 5:00 p.m.

PHIL W11 Moral Issues in Film. This course focuses on moral concepts such as moral duty, moral responsibility, supererogation, collective responsibility, and moral expectation. About eight motion pictures will be shown illustrating these moral concepts. These concepts will also be examined in the context of the Christian life. Learning objectives include knowledge of these moral concepts and the ability to analyze and identify their presence in the plots of motion pictures and, by extension, how they function in the lives of human moral agents. Evaluation is based on a research paper and several short written assignments. One previous course in Philosophy is recommended but not required. *G. Mellema*. 8:30 a.m. to noon.

PHIL W40 Buffy: Violence, Sex and Gender. Since it premiered in 1997, Buffy the Vampire Slayer has served as a cultural touchstone. Its groundbreaking combination of horror and humor presented a sustained (seven-season) exploration of the coming of age of its central characters: Buffy, Willow, and Xander. The show has had a lasting impact on popular culture on a number of fronts, but one of the respects in which Buffy has been most formative is the portrayal of a 16 year-old girl as "The Chosen One" who is responsible for protecting the world from dangers unimaginable to most or its inhabitants. The course will examine Buffy's ability to kick butt in the latest fashions, redefine conceptual space for female characters on television and pave the way for other works (like Alias and The Hunger Games) that feature women who use their physicality as well as their wit without modeling themselves after men. This class will focus on the constant interplay between violence, sex, and gender that keeps Buffy both interesting and relevant 15 years after it first aired. In particular, it will address the way in which these factors influence the characters' development-and why the show still resonates so strongly with college students who are neither slayers nor vampires. There are no prerequisites for this course other than a sense of humor and a general knowledge of pop culture. Students should be familiar with the general plot arcs of all seven series (and the series as a whole) before the course

begins. It's not necessary to have viewed all the episodes prior to the class, but the class will assume basic knowledge of characters and how they develop over the course of the show. Evaluation will be based on oral presentations, participation in intense discussions, reading journals, and a final project. This course may fulfill an elective in the Gender Studies minor. *C. Van Dyke.* 2:00 p.m. to 5:00 p.m.

PHIL W60 Reason, Evidence, and Christian Faith. Scripture says to "be prepared to give reason for the hope that is within you" (I Peter 3:15). Christian growth as well as Christian witness entails reflection on hard questions about why Christian belief makes sense. In recent philosophy of religion and epistemology these questions are also at the heart of the debate between evidentialists like Richard Swinburne and "Reformed epistemologists" like Alvin Plantinga and Nicholas Wolterstorff. This course investigates these questions from a philosophical perspective. We will first introduce a probabilistic framework for evaluating what counts as good evidence. We will then consider the two stages of classic evidentialist apologetics. The first stage argues that various facts in the natural world and in human nature give objectively good reasons to believe that God exists; and the second stage argues that the New Testament writings, evaluated as historical testimony within a theistic context, provide good evidence for believing in the life, death, resurrection, and divine mission of Jesus. Last, we will consider the approach of Reformed epistemologists, stressing worldview-sensitivity, the importance of properly basic beliefs, and the role of the Holy Spirit in the proper grounding of Christian belief. By the end of the interim, the student will be able to: explain some main lines of reasoning in the "evidentialist" approach to Christian apologetics; explain the "Reformed epistemology" approach, viewing Christian belief is "properly basic"; explain and give an intelligent evaluation of the epistemological underpinnings of each approach, and of some main strengths and weaknesses of each. This course involves intensive daily reading and writing. Students are required to do close reading of daily assignments, to write regular critical summaries of these readings, and to work in teams presenting their summaries for class discussion. Reading may also be checked by means of quizzes and, if needed, an exam. Prerequisite: Philosophy 153 and one other philosophy course. S. Wykstra. 2:00 p.m. to 5:00 p.m.

CANCELLED <u>IDIS W14 Peace, Pubs & Pluralism</u>. Course dates: January 3 -21. Fee: \$3156. K. Corcoran. Off campus.

IDIS W15 L'Abri Switzerland. Course dates: January 3-23. Fee: \$2500. L. Hardy. Off campus.

Physics

ASTR W10 Astronomy of the Southwest. Because of the high elevation and dark, clear skies of the American Southwest, astronomy there is recognized as a natural resource and developed accordingly. Add to this the geological features that exhibit the history of the crust of our own planet, and the Southwest provides unique opportunities for the study of astronomy. This course pursues these topics both using Calvin's own observatory in Rehoboth, New Mexico, and through a series of site visits throughout Arizona and New Mexico. The region is also home to a number of distinctive Native American peoples. The course includes a cross-cultural engagement component involving interactions with members of the Navajo, Zuni, and other tribes. Visits will also be made to sites of interest to Native American astronomy, such as Chaco Canyon, Grand Canyon and Kitt Peak National Observatory. Each student prepares a presentation on one of the destinations to be presented to the group while on site. Additionally, each student does an observing project. The student learning objectives are to understand modern techniques of astronomy, the major processes that affect the development of the Earth's crust, and the distinctive cultures of some of the Native American peoples of the region. Students are evaluated on a presentation, the making of a web page and participation in discussions. This course will fulfill the CCE requirement. Course dates: January 3 - 23. Fee: \$1975. L. Molnar. Off campus.

PHYS W10 Is there Science in Science Fiction? Science fiction provides a vehicle to explore questions about ourselves within our personal and social contexts. In part, this course will critically examine the possible and impossible in selected works of science fiction literature and film based on what is currently understood in science. Students will learn to distinguish where solid science is properly used in constructing plausible story lines, where speculative science is employed, and where established principles of science are flagrantly violated. However, beyond matters of science, profound moral, philosophical and religious questions often arise in contexts more extreme and alien than an "ordinary" plot could plausibly explore. In addition to the science per se, participants will discuss and keep a journal/blog about the human themes being explored in a work. Looking at science fiction from different generations will show how it often reflects the fears and preoccupations of the era when it was created. All physical, biological and social sciences will be topics of discussion. Participants will try to discern the world view of the author or director. The course is for students in any major who enjoy imagining alternate realities and can enrich the discussions from their varied disciplines. Daily reading, writing, and discussion will be required. Reading works of science fiction and viewing of films and film clips with discussion and clarification of scientific ideas will be a significant part of the course. Evaluation will be based on daily writing, class participation and a final project in the form of a critical movie or book review posted to the class. S. Steenwyk. 8:30 a.m. to noon.

PHYS W80/IDIS W81 Biophysics. Biophysics is a growing discipline in which the tools of physics are used to elucidate biological systems. The course covers a broad spectrum of topics, including why ants can easily lift many times their own weight, how bees fly, why the cells of an elephant are the same size as those of a chipmunk, and why cats have a higher survival rate when dropped from taller heights. An additional feature of the course is that no calculators are used. All results are achieved by estimation, with a focus on learning the art of approximation. The class is highly participatory and the hope is that students will make the application of physical reasoning to biophysical systems their own so they can draw on this skill in the future. In

addition to the above items, there is also a section devoted to the construction of simple biophysical simulations using the open source software package Sage, though no previous experience is required. Evaluation is based on homework, tests, paper, and labs. This course may fulfill an elective in the Biology major. Prerequisites: The course is designed to be accessible to any student with at least a semester of algebra based college physics or a year of algebra based high school physics. *P. Harper*. 2:00 p.m. to 5:00 p.m.

Political Science

IDIS W51 Gender Representation in American Film. S. Goi, C. Plantinga. 2:00 p.m. to 5:00 p.m.

IDIS W54 Pre-Law Immersion: Legal Principles and Practice. *A. Vogelzang, J. Westra*. 2:00 p.m. to 5:00 p.m.

Psychology

PSYC W60 Addictions: What, How, Why? This course explores not only the rapidly expanding knowledge of addictions but also how this knowledge is informing identification and treatment of addicted individuals with subsequent impact on society and the Christian community. Specific topics include biological, psychological, and societal contributors to addiction and treatment modalities. Through the use of The Addiction Project film, selected readings, class discussions, projects and guest speakers, this course hopes to demystify the problems of addiction and our Christian responsibility toward individuals with addictions. The course will include an in-depth investigation of alcoholism through the use of a first person account, *Smashed, Story of a Drunken Girlhood*, a visit to an AA meeting, and examination of Christian perspectives concerning addiction as discussed in the book, "Alcohol, Addiction and Christian Ethics. Students will be evaluated on class participation, journal entries, written responses to readings and a final project presentation. Prerequiste: Psychology 151. *J. Yonker*. 8:30 a.m. to noon.

PSYC W61 Helping Skills. This course presents fundamental skills and strategies that underlie many psychotherapies. In reviewing the theory and research on therapy and helping relationships, the course identifies basic principles of problem management, communication, listening, and helping. A workshop format is used to teach and practice helping skills. Students develop skills in practice interviews and small group exercises. Students are assessed with direct observation of skill development, behavioral ratings, and writing assignments. Appropriate for students in psychology as well as social work, pastoral counseling, or management fields. Prerequisite: Psychology 151. *J. DeBoe.* 8:30 a.m. to noon.

PSYC W80 Knowing Yourself. This course is an introduction to contemporary theories and research about how people come to know and evaluate themselves and how self-judgments influence our emotions, actions, and aspirations. How can an individual's self-concept and self-esteem be assessed? What are the limits and distortions of self-understanding? How does one's self-concept originate and develop? How do people seek to maintain stable self-conceptions and enhance their self-esteem? How does self-understanding contribute to the way we deal with anxiety, depression, and personal failure? What dynamics contribute to the disintegration of self? The course includes readings, lectures, class discussions, films, and personal reflection on one's own self-concept. Students are required to take two written tests and to complete a narrative life history that demonstrates their ability to use appropriate principles and concepts from the course. This course may fulfill an elective in the psychology major or minor. This course is not open to students who have taken or plan to take Psychology 311. Prerequisite: Psychology 151. *J. Brink, G. Weaver.* 2:00 p.m. to 5:00 p.m.

PSYC W81 Psychopathology on Film. From the advent of the motion picture industry, movies have attempted to capture the essence of human affect, behavior, and cognition. This course focuses on the attempts of the movie industry to capture the essence of mental illness. The course is divided into two parts. The first part will trace historical changes in the understanding of mental illness and the perspective on the mentally ill and those who treat them, and in so doing emphasize how movies reflect the Zeitgeist of broader western culture. The second part will focus on various emotional disorders, emphasizing symptoms and perspectives on the

development and the treatment of these disorders. Students view a variety of movies and are involved in critiquing them regarding perspective, accuracy, and realism. The goal is to develop critical-thinking skills by viewing film portrayals of psychological disorders. Students are evaluated on the basis of a group project and final paper. This course may fulfill an elective in the psychology major. Prerequisite: Psychology 212 or equivalent. *S. Stehouwer*. 8:30 a.m. to noon.

IDIS W23 The Psychology and Practice of Stock Market Investing. *A. Shoemaker*. 2:00 p.m. to 5:00 p.m.

SPAUD 343 Principles of Human Neuroanatomy. *E. Helder, P. Tigchelaar.* 8:30 a.m. to noon.

Religion

REL W40 Movies and Music: Theological Themes. This course examines the expression of theological themes in select musical works and films. Compositions studied include works by Haydn (*The Creation*), Bach (*St. John Passion, St. Matthew Passion, Cantata 106*), and Mozart (*Requiem*). Films analyzed include *Babette's Feast, The Mission, The Seventh Seal*, and *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. Students will acquire a knowledge of select theological themes; become acquainted with certain sacred compositions (and their composers); enhance their listening skills; become acquainted with certain films (and their directors); advance their skills in film analysis; and exercise their skills in discussion and oral presentation. Students will be required to do readings, keep a journal, write a paper, engage in discussion, and participate in a final exam. This course may fulfill an elective in the Religion major or minor. *R. Plantinga*. 2:00 p.m. to 5:00 p.m.

REL W41 Birth, Sex, and Death in the Biblical World. Why is sexual intercourse "unclean" according to Leviticus 15:18? If the body is in the grave, where is the "person" after death. In recent years, anthropologists and other social scientists have begun to examine more closely the ways in which human cultures conceptualize and organize the ordinary events of the human life cycle. Biblical scholars, too, have begun to consider these things by using the Bible, not as a theological textbook, but as a window into the lives of ordinary people in ancient Israel and the early Church. This course looks at various aspects of the human life cycle as they are described or discussed in the Bible. Material from other ancient Near Eastern cultures is also used to illuminate the thought world of the Bible. Some of the aspects of the life cycle covered are the reasons why people wanted to have children, theories of conception and fetal development, birth and the postpartum period, the female reproductive cycle, the structure of marriage, raising children, sexual activity and restrictions, celibacy, old age, death, and the afterlife. Students get to study biblical texts as reflections of a particular moment in human culture; look at and interpret various biblical texts for themselves; and think about how various biblical texts might apply today. Students write a paper which is based on the material covered in class. This course may fulfill an elective in the Religion major or minor. R. Whitekettle. 8:30 a.m. to noon.

REL W42 Learning to Pray Like Jesus. This course explores the place of prayer in the New Testament literature and the life of the early church, including the Jewish roots of Christian practice, and how the theology of prayer was developed in the early church fathers. Delving into the practical dimensions of the practice of prayer will include a look at the traditional spiritual disciples of meditation. We also investigate some of the theological questions raised by prayer: Can God be influenced? Does God change his mind? Does prayer make a difference in the world? Student evaluations are based upon two book reviews, class participation and the keeping of a personal prayer journal. This course may fulfill an elective in the Religion major or minor. *D. Crump.* 8:30 a.m. to noon.

CANCELLED REL W43 Martyrdom in Theology & Film. This course is a historical and theological study of Christian martyrdom that will devote significant attention to its cultural presentation in the medium of film. Topics considered include definitions of martyrdom, the

literary genre known as "martyrology," the theological significance that Christian traditions have attached to their martyrs, and the potential dangers of the concept of martyrdom, especially in an age of religious violence. To this end, students will study early church martyrs, the phenomenon of martyrdom in the Reformation era, and more recent martyrs such as the German anti-Nazi theologian Dietrich Bonhoeffer, civil rights activist Martin Luther King Jr., and Salvadoran Archbishop Oscar Romero. By taking this class, students will develop a deeper understanding of the meaning and ambiguities of Christian martyrdom. These topics are examined through readings, discussion, lectures, and film. Evaluation is by means of short written reflections, class participation, and a take-home final examination. This course may fulfill an elective in the Religion major. Fee: \$20. *M. Lundberg.* 8:30 a.m. to noon.

REL W44 One Bible, Many Readings. This course examines the emergence, development, and practice of non-Western-crentered biblical hermeneutics. Special attention is given to the phenomenon of biblical interpretation in Asia: how the Bible, a Semitic book formed in an entirely different geographic, historical, and cultural context, and interpreted for so many centuries by the West, can and should be interpreted in Asia by Asian Christians for their own people. In what way does biblical authority help Asian Christians confess Christ in a multiscriptural content. Through engaging in meaningful dialogue with others, students learn a balanced attitude toward diverse readings of biblical texts. Student learning objectives are: a) to read an extensive amount of biblical and theological works of the Third-world perspectives, especially Asian perspectives; b)to be able to summarize and analyze the nature and contribution of this movement; c) to examine and construct their own biblical hermeneutical perspective. This course is designed for active dialogue sessions among participants on the subject matter. To facilitate discussions, each student will: a) lead two sessions on how non-Western readers interpret biblical texts (one from the Old Testament and the other from the New Testament); b) lead one session on a reading from Asian Faces of Jesus; c) bring a short paragraph reflecting the assigned readings. A final 5-page paper on a chosen biblical text which show how "you" read the text. This course may fulfill an elective in the Asian Studies major. This course will fulfill the CCE requirement. W. Lee. 8:30 a.m. to noon.

IDIS W26 Theology of Narnia. L. Smit. 2:00 p.m. to 5:00 p.m.

IDIS W63 The Book of Revelation. D. Harlow. 2:00 p.m. to 5:00 p.m.

Science Education Studies

SCES 214 Communication and Learning in the Natural Sciences. This course provides a systematic examination of communication and teaching strategies for natural science at the middle and high school level, including oral exposition, visual imagery, demonstrations, technology, and laboratory activities. Theoretical components include the underlying educational theories, scientific literacy, and the unifying themes and practices in science. Practical components include methodologies for assessment, lesson and unit development, laboratory safety, and student presentations and response. Evaluation is based on oral presentations, lesson planning, class participation, and two written exams. Prerequisite: At least three courses in natural science. *J. Jadrich.* 8:30 a.m. to noon.

SCES 312 Teaching Science in Elementary School. A consideration of the methods, pedagogies, and strategies associated with teaching science in elementary and middle school. Curricular resources for teaching science, including the use of technology and written materials, are also examined with consideration of the criteria for their evaluation. Additional topics include assessment, benchmarks and standards, and lesson and unit development. The relationship of Christian faith to the teaching of science in the classroom is also examined. Field experiences during normal course hours are included. Students will be assessed on completed homework assignments, two quizzes, a written final, a completed unit plan and lesson plan, and observation of their teaching in a local elementary school. Prerequisites: EDUC 302/303 and at least one college level science course. *K. Bergwerff.* 8:30 a.m. to noon and 2:00 p.m. to 5:00 p.m. (TTH)

Sociology & Social Work

SOC W40 The Sociology of Law & Order. This course examines a variety of contemporary sociological debates as introduced by the television show *Law & Order*. The medicalization of behavior, race, and gender bias in capital punishment, as well as the culpability of structural factors in the lives of career criminals, are a few of the topics that will be explored. Students will consider the roles of structure, culture, and human agency amongst the stakeholders involved in each topic to better understand the social aspects and implications of human behavior. Student Learning Objectives include: 1. A command of fundamental sociological concepts; 2. An understanding of the interaction between structure, culture, and human agency in social life; 3. The ability to locate, analyze, and synthesize scientifically sound social research; 4. The ability to make a fact-based argument orally and through writing; and 5. A familiarity with contemporary social issues and debates.

Methods of evaluation include daily homework assignments, one quantitative test, one major research paper, one debate presentation, daily debate contribution assessments, and a final qualitative and quantitative exam. This course may fulfill an elective in the Sociology major. *E. Marr.* 8:30 a.m. to noon.

SOWK W10 What's Health Got to Do with It? What is the role of health and health care in overall well-being? In what ways can we promote quality of life among those living with a chronic illness? This class explores concepts of person in environment, showing the interactions between physiological health and psycho-social-spiritual well-being. Students explore these interactions as they learn about the interactions between chronic illness and quality of life. A major part of the course focuses specifically on health disparities and models/interventions that seek to reduce these disparities among those with chronic illnesses (i.e. cancer, heart disease, diabetes). Readings and class discussions explore how systematic oppression and structural barriers contribute to poorer health outcomes, particularly in the area of chronic disease, among vulnerable populations. By the end of the course students will be able to describe the interactions between chronic disease and quality of life, recognize how discrimination and chronic stress contributes to health disparities among people with chronic illnesses, and identify psychosocial interventions that address these health disparities. Evaluation is based on discussions of the readings, reflection papers, and a final project and presentation. *K. Admiraal.* 8:30 a.m. to noon.

CANCELLED SOWK W11 Human Trafficking. This course aims to help students gain a better understanding of contemporary human trafficking and modern day slavery. Contemporary human trafficking will first be compared to the historic "White Slave Scare" in the United States and Europe. Students will then develop an understanding of the different types of human trafficking as well as efforts to detect the scope and scale of human trafficking domestically and globally. Students will gain awareness of the physical, emotional, psychological, and spiritual trauma experienced by victim/survivors of human trafficking. The course will also explore the political, social, cultural, and economic context that influences the development and maintenance of human trafficking. Students will identify current anti-trafficking efforts and the role that specific entities, such as government, the media, and faith-based organizations play in these efforts. Student learning will be assessed through two brief papers, daily journaling, and a final presentation. *R. Venema.* 8:30 a.m. to noon.

IDIS W47 Development in Jamaica. Course dates: January 3-23. Fee: \$2723. *L. Schwander, T. Vanden Berg, R. Venema*. Off campus.

IDIS W53 NGOs and Grassroots Organizations. J. Kuilema, T. Kuperus. 8:30 a.m. to noon.

Spanish

SPAN W80 Spanish in Yucatan. Students spend three weeks immersed in Mexican culture and Spanish language in Merida, the capital of the state of Yucatan. Merida has a population of one million and offers a colonial past, strong Mayan influence in the present, and intensive globalization as it faces the future. It is the site of two universities and several mission organizations. Students live with Mexican families and attend daily lecture and discussion classes focusing on aspects of Mexican culture such as Mexican and Mayan history, the history of Catholicism and Protestantism in Mexico, and the current political and economic context. Students also participate in excursions to Mayan ruins and attend religious and cultural events. Student learning objectives are to 1) improve comprehension and fluency in the Spanish language, 2) increase understanding of various cultural and religious phenomena of Mexico and particularly of Yucatan, and 3) grow in personal maturity and awareness of cultural differences. Students keep a journal with notes from lectures and discussions as well as personal observations on Mexican culture and on their own experiences. Evaluation is based on satisfactory achievement of course goals, including participation in course activities, increased understanding of various cultural and religious phenomena of Mexico in general and Yucatan in particular, and growth in personal awareness and maturity as measured by journal entries, a language journal, reflection papers, cultural reports based on interviews, and a final oral presentation. This course may fulfill an elective for Spanish majors and minors and IDS majors and minors. This course will fulfill the CCE requirement. Prerequisites: Spanish 201 and permission of instructor. Course dates: January 2 -23. Fee: \$2200. M. Bierling, S. Lamanna. Off campus.

SPAN W81 Spanish Grammar through Translation. Translation is an activity that combines the intellectual with the practical. As advanced students acquire more language skills they often are able to avoid difficult vocabulary and grammar structures, leading to gaps in knowledge and accuracy. This course asks students to observe and then translate characteristic Spanish words and structures. Through observation students will become aware of details in what they hear and read, and through translation they will practice manipulating what they have observed. The goal of this course is to use translation to provide advanced Spanish students with hands-on manipulation of grammatical, lexical, and cultural detail. Using a wide variety of texts and exercises, students will focus on lexical and grammatical detail in order to produce acceptable translations. This course will not produce professional translators but will make students aware of grammar details they did not know and will provide them with interesting opportunities to improve their Spanish. The focus will be on written translation. Evaluation will be based on daily written translations and a final exam. This course may fulfill an elective in the Spanish major and minor. Prerequisite: Spanish 301. *C. Slagter*. 8:30 a.m. to noon.

SPAN W82 Spanish for Health Care Workers/Professionals. This course is an introduction to the terminology and cultural context of oral and written communication in Spanish relating to the fields of medicine and social work. The course is conducted in Spanish and is designed for advanced students of Spanish. The course helps students develop language skills and increases their cultural awareness of health care practices and needs for the patient or client of Hispanic background. Skills in Spanish are increased through the learning of health-related vocabulary, situational role play, and discussion of medical and cultural issues, body language, and intercultural communication. The course includes various trips to health clinics and other health-

related sites in Grand Rapids. Students are evaluated by means of in-class presentations/projects, vocabulary quizzes, unit tests, and a final paper or examination. This course may fulfill an elective in the Spanish major or minor. Prerequisites: Spanish 202 or 203 (or higher) or permission of instructor. *D. Zandstra*. 8:30 a.m. to noon.

SPAN122 Intermediate Spanish. This course is the second part of the closely integrated 121-122-202 sequence which fulfills the requirements for foreign language. Students attend large-group sessions in the morning and small-group sessions in the afternoon to acquire skills in speaking, listening, reading, and writing in Spanish and participate in discussion of cultural topics related to the Hispanic world. Chapter tests, vocabulary, grammar quizzes, compositions, oral presentations, and a final exam are required. Prerequisite: Spanish 121. *M. Pyper, D. Ten Huisen.* 9:00 a.m. to 3:00 p.m.

SPAN 358 Aiding in the Spanish Classroom. The goal of this course is to give advanced students of Spanish the opportunity to experience first-hand the teaching of foreign language and to develop their oral skills by leading small-group practice sessions completely in Spanish. Students enrolled in this class are an essential part of the successful teaching of Spanish 122. Morning activities include meeting with other aides and the program director, observing master teachers, and preparing class plans, materials, and activities. During the afternoon, aides lead their own practice groups and tutor students with problems. A daily journal, an activity card file, lesson plans, prepared material and quizzes, and classroom techniques are used to evaluate a student's competency in oral and written Spanish and in pedagogical skills. In addition, students are evaluated twice by the students in their small groups, and they are regularly observed by the instructor of Spanish 358. Prerequisites: Spanish 302 with a grade of B+ or better and approval of the instructor through an application process. *M. Rodriguez*. 8:30 a.m. to noon and 2:00 p.m. to 5:00 p.m.