



Fall 2015 Elective Course Offerings ~ as of 8/17/15

KLEINMAN CENTER FOR ENERGY POLICY

ENMG 502-001 Introduction to Energy Policy

Mark Alan Hughes

Tuesday, Thursday 10:30am – 12:00pm

This course provides an advanced introduction to the design and delivery of energy policy at various levels of government in the U.S. and elsewhere. Energy especially in the context of economic development and environmental sustainability, presents a career-defining challenge to many disciplines and professions. This course, therefore, is intended to provide an organizing foundation for courses across the University in Law, Wharton, Design, SAS, and SEAS. The first half of the course will offer readings and lectures on systems theory, the energy system, the policy process, design thinking, policy design, decision analysis, and emerging issues. The second half of the course will use this foundation to explore a set of timely energy policy issues using readings and student presentations. Issues will include: disruption of legacy business models in energy markets, carbon budgets and tax and trade policies, compliance options under EPA's Clean Power Plan, energy efficiency and rebound, grid reliability and investment, emerging technologies such as energy storage, stranded assets and corporate sustainability, and others. Students will write two short papers in the first half of class, give a presentation in the second half, and write a research paper on an energy policy issue as a final project. Open to:

Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics. Students interested in enrolling should email Kleinman Center Program Director Cory Colijn, ccolijn@design.upenn.edu for more information.

CITY PLANNING

CPLN 520-001 Introduction to Community and Economic Development,

Amy Hillier

Tuesday, Thursday 10:30am-12:00pm

Introduction to the theories and practices of urban economic and community development with a focus on improving opportunity and quality of life in low-income communities. Provides foundation for advanced courses in real estate and economic development finance, housing policy, downtown and neighborhood revitalization, workforce development and metropolitan regional development. Open to: Architecture, City Planning, Landscape Architecture, Historic Preservation, Fine Arts, Urban Spatial Analytics

CPLN 530-0011 Introduction to Environmental Planning and Policy,

Daniel Moscovici

Fridays, 9:00am-12:00pm

Overview of federal programs for protecting air quality, water quality, and endangered species along with managing climate change, solid waste, toxics, energy, transportation, and remediating brownfields in an overall sustainability framework. State-level, local government, and NGO efforts to protect the environment are also explored as are green infrastructure and green cities. Open to: Architecture, City Planning, Landscape Architecture, Historic Preservation, Fine Arts, Urban Spatial Analytics

CPLN 660-401 Theory and Practice of Urban Design

Stefan Al

Wednesdays, 2:00pm-5:00pm

An introduction to the theoretical basis for beliefs and practices in city and environmental design, including the relation of the built environment to the natural environment, the organization of groups of buildings, the use and meaning of public places, and the relation of technology to land use and community. Open to: Architecture, City Planning, Landscape Architecture, Historic Preservation, Fine Arts, Urban Spatial Analytics

CPLN 671-401 Big Urban Data Analysis

Eugene Brusilovskiy

Monday, Wednesdays, 5:30pm-7:00pm

This intermediate level methods class will introduce students to various data mining, pattern-finding, modeling, and visualization tools for use in analyzing large, disaggregate (individual, change, or transaction-based), and real-time and remotely-sensed data. Examples of urban processes to be analyzed and modeled will include: transportation system usage vs. available capacity; housing transactions and processes of neighborhood change; real-time use and quality of community facilities such as parks and public spaces; crime locations and patterns; demand for and quality of city services; and opportunities for infrastructure and community investments. Open to: Architecture, City Planning, Landscape Architecture, Historic Preservation, Fine Arts, Urban Spatial Analytics.

FINE ARTS**FNAR-552 Printmaking: Relief & Screen Printing**

- Section 401 - Matthew Neff – Tuesday and Thursday: 1:30 – 4:30 p.m.

This course is an introduction to technical skills and investigative processes in screen printing and relief and examines methods for combining digital technology with traditional print media. The course introduces students to several contemporary applications of silkscreen and relief printmaking including techniques in multi-color printing, photo-based silk screening, digital printing, woodcut, linocut, and letterpress. Demonstrations include photo and image manipulation, color separating and output techniques, hand carving and printing, as well as drawing and collage. Both traditional and experimental approaches are explored and encouraged and technical and conceptual skills are developed through discussions and critiques. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-523 Drawing I

- Section 401 – Joan Wadleigh Curran – Monday and Wednesday: 10:00a.m. – 1:00 p.m.
- Section 402 – Marjorie Edgerton – Monday and Wednesday: 2:00 – 5:00 p.m.
- Section 403 – Andrea Hornick– Tuesday and Thursday: 1:00 – 4:00 p.m.
- Section 404 – Deidre Murphy – Tuesday and Thursday: 4:30 – 7:30 p.m.
- Section 405 – Marjorie Edgerton– Monday and Wednesday: 5:00 – 8:00 p.m.

This course is designed to develop visual awareness and perceptual acuity through the process of drawing. Students learn to sharpen perceptual skills through observational drawing, and to explore the expressive potential of drawing. A variety of problems and media will be presented in order to familiarize students with various methods of working and ways of communicating ideas visually. Subject matter will include object study, still life, interior and exterior space, self-portrait and the figure. Different techniques and materials (charcoal, graphite, ink, collage) are explored in order to understand the relationship between means, material and concept. Critical thinking skills are developed through frequent class critiques and through the presentation of and research into historical and contemporary precedent in drawing. If you need assistance registering for a closed section, please email the department at fnarug@design.upenn.edu. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-530 Making Space and Public Art

- Section 401 – Ken Lum – Tuesday: 9:00a.m. – 12:00 p.m.

The French social philosopher Michel de Certeau upset the common understanding of the relationship between space and place by elevating space as practice place. By this, he meant that place is but a set of geo-physical particularities that has no dynamic meaning unless activated through social engagement so that space is produced. Spatial practice is a key concept in the modern understanding of the city as a society of abstract space, one in which the problem of human alienation is riven with the logic of spatial spectacularization. Public Art is often employed to address or mollify such urban problems through concepts of historical reconstruction or institutional critique, including possibly testing the limits of public expression. Historical markers play a somewhat different role by calling attention to lost or negative histories, albeit most often vetted through the language of tourism factoids. This course will examine the discursive issues at play in respect to art and markers, particularly for Philadelphia. Additionally, important public art works from around the world will be examined. The course will also include the occasional visit of several key works downtown in which the question of what can and cannot said will be pondered. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-531 Painting Practices

- Section 401 – Deidre Murphy – Tuesday and Thursday: 1:30 – 4:30 p.m.
- Section 402 – Pernot Hudson – Tuesday and Thursday: 9:00a.m – 12:00 p.m.
- Section 403 – Joan Wadleigh Curran – Monday and Wednesday: 2:00 – 5:00 p.m.

Painting practices is an introduction to the methods and materials of oil painting. This course begins with an investigation of color and color relationships. The beginning of the semester will cover technical issues and develop the student's ability to create a convincing sense of form in space using mass, color, light and composition. The majority of work is from direct observation including object study, still life, landscape, interior and exterior space and the self-portrait. Class problems advance sequentially with attention paid to perceptual clarity, the selection and development of imagery, the process of synthesis and translation, color, structure and composition, content and personal expression. Students will become familiar with contemporary and art historical precedent in order to familiarize them with the history of visual ideas and find appropriate solutions to their painting problems. Prerequisite(s): FNAR 523. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-532, 533, 534 Painting Studio

- Section 401 – Jackie Tileston – Monday and Wednesday: 5:00 – 8:00 p.m.

Painting Studio presents an ongoing exploration of the techniques, problems and poetics of painting, the nuances of the painting language, and the development of a personal direction. A wide variety of problems will address such issues as color, composition, and the development of imagery, process, and content. Students are expected to improve in technical handling of paints and move towards developing personal modes of seeing, interpreting, and thinking for themselves. This course introduces different topics, strategies and individual challenges each semester, so it may be repeated with advanced course numbers. Prerequisite(s): FNAR 531. This course can be continued by registering for FNAR 533 Painting Studio (III), and FNAR 534 Painting Studio (IV). Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-538 Open Book

- Section 401 – Sharka Hyland – Tuesday: 5:00 – 8:00 p.m.

"Open Book" will focus on visual communication of information. It will address two methods of inquiry and the corresponding means of visual representation: the objective, well-structured research of facts and images, and the creative process of their subjective evaluation and restatement. Students will propose a topic based on their area of interest and engage in a focused, semester-long exploration, which they will present in the form of a designed and printed book. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-541 Hand-Drawn Computer Animation

- Section 401 – TBA – Friday: 11:00a.m. – 4:00 p.m.

Using software tools designed for hand-drawn animation, students will develop animation skills applicable to all forms of animation. In this course students will learn to draw with a sense of urgency and purpose as they represent motion and drama in a series of frames. Through careful study of natural movements, precedents in the history of animation, and through the completion of a series of animation projects students will develop strategies for representing naturalistic movement, inventing meaningful transformations of form, and storytelling. Prerequisite(s): FNAR 636. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-545 Sculpture Practices

- Section 401 – Tom Bentsen – Monday and Wednesday: 2:00 – 5:00 p.m.

As an introduction to traditional and contemporary three-dimensional practice, this course is concerned with the concepts and methodologies surrounding three-dimensional art making in our time. Students experiment with a variety of modes of production, and develop some of the fundamental techniques used in sculpture. In addition to these investigations, assignments relative to the history and social impact of these practices are reinforced through readings and group discussion. Processes covered include use of the Fab Lab, wood construction, clay, paper, mixed media, and more. If you need assistance registering for a closed section, please email the department at fnarug@design.upenn.edu. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-550 Introduction to Printmaking

- Section 401 – Tom Bentsen – Monday and Wednesday: 5:00 – 8:00 p.m.

The course offers an introduction to several forms of printmaking including: intaglio, screen printing, relief, and monoprinting. Through in-class demonstrations students are introduced to various approaches to making and printing in each medium. The course enhances a student's capacity for developing images through two-dimensional design and conceptual processes. Technical and conceptual skills are developed through discussions and critiques. If you need assistance registering for a closed section, please email the department at fnarug@design.upenn.edu. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-558 Introduction to Clay: the Potter's Wheel and Beyond

- Section 401 – Sumi Maeshima – Monday and Wednesday: 2:00 – 5:00 p.m.
- Section 402 – Matthew Courtney – Monday and Wednesday: 5:00 – 8:00 p.m.
- Section 403 – Ryan Greenheck – Tuesday and Thursday: 1:30 – 4:30 p.m.

In this introductory clay class, students will learn all the fundamental skills needed to create three-dimensional forms in clay using a variety of methods: wheel throwing, hand building (such as coil building and slab construction), and press molding. Whether creating utilitarian forms or creating sculpture, projects are designed to strengthen both craftsmanship and individual creativity. In addition to developing a working knowledge of the ceramic process, including surface treatments and glazing, students will also be introduced to design issues as well as contemporary art/ceramics topics that influence our aesthetic sensibilities. No prerequisites. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-559 Beginning Clay: Handbuilding and Casting Techniques

- Section 401 – Sumi Maeshima – Monday and Wednesday: 5:00 – 8:00 p.m.

Modeling and casting are fundamental methods of object-making. Students will learn basic hand building techniques such as coil building, slab construction, and mold making through assignments that incorporate conceptual and technical issues. Through experimentation with these methods, this course promotes an understanding of materials, processes, visual concepts, and techniques for creating three-dimensional forms in space. In addition to using different water-based clays and plaster, other materials such as wax, plastiline, paper pulp, cardboard, and tar paper will be explored. No prerequisites. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-563 Advanced Wheel Studio

- Section 401 – Ryan Greenheck – Tuesday and Thursday: 5:00 – 8:00 p.m.

This course teaches students more advanced wheel throwing techniques while helping to develop their critical skills in other areas of ceramic work. Students will learn to throw, employing larger masses of clay, and to increase the complexity of their work by combining and altering thrown parts. There will be an emphasis on experimentation in surface treatment and design, the goal of which is to expand a student's ability to create more complicated and personalized clay works. In addition to learning the technical knowledge, there will be critical discussions. Prerequisite(s): FNAR 261. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-566 Graphic Design with Creative Technologies

- Section 401 – Scotty Reifsnyder – Tuesday: 1:00 – 4:00 p.m.
- Section 402 – Mark Owens – Thursday: 4:30 – 8:30 p.m.

The aim of this course is to introduce students creative ways to use color, typography, and layout across new materials and media, ranging from print to physical objects. Students will explore visual design through a set of assignments and projects that are geared towards exploring the role of design in visual arts, interaction design, media design and architecture. The course introduces a number of design concepts such as content organization, navigation, interaction and data-driven design and show ways to develop new design metaphors, presentation techniques, and imagery using old and new technologies. course is structured as a combination of lectures and hands on workshops where students will have the chance to work both individually and collaboratively to realize their projects. Prerequisite(s): FNAR 264/636. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-567 Computer Animation

- Section 401 – Joshua Mosley – Tuesday and Thursday: 12:00 – 3:00 p.m.

Through a series of studio projects this course introduces techniques of 2D and 3D computer animation. Emphasis is placed on time-based design and storytelling through animation performance and montage. Students will develop new sensitivities to movement, composition, cinematography, editing, sound, color and lighting. Prerequisite(s): FNAR 636. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-568 Integrative Design Studio: Biological Design

- Section 401 – Orkan Telhan – Monday and Wednesday: 1:00 – 4:00 p.m.

This course is a research-based design studio that introduces new materials, fabrication, and prototyping techniques to develop a series of design proposals in response to the theme: Biological Design. The studio introduces life sciences and biotechnologies to designers, artists, and non-specialists to develop creative and critical propositions that address the social, cultural, and environmental needs of the 21st century. The course will be a pilot study of the first bio-design challenge organized by CUT/PASTE/GROW. The final projects will be submitted to a competition and the winning entry will be featured at Biofabricate in Summer 2017. Prerequisite(s): FNAR 636. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-569 Typography

- Section 401 – Sharika Hyland – Monday and Wednesday: 2:00 – 5:00 p.m.

The study and practice of typography spans the history of individual letterforms through the typesetting of full texts. It is a complete immersion into type as an integral part of visual communication. Typesetting conventions and variables including legibility, readability, texture, color and hierarchy will be stressed, as well as a form for organizing information and expressing visual ideas. Studio work will include collecting and analyzing type, designing an original typeface, researching type history and experimenting with typographic forms. Prerequisite(s): FNAR 264. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-571 Introduction to Photography

- Section 401 – Gabriel Martinez – Tuesday: 1:30 – 4:30 p.m.
- Section 403 – Karen Rodewald – Monday: 2:00 – 5:00 p.m.

This course is an introduction to the basic processes and techniques of black & white photography. Students will learn how to expose and process 35mm film, SLR camera operation, darkroom procedures & printing, basic lighting and controlled applications. It begins with an emphasis on understanding and mastering technical procedures and evolves into an investigation of the creative and expressive possibilities of making images. This is a project-based course, where students will begin to develop their personal vision, their understanding of aesthetic issues and photographic history. Assignments, ideas and important examples of contemporary art will be presented via a series of slide lectures, critiques and discussion. No previous experience necessary. 35mm SLR cameras will be available throughout the semester for reservation and checkout from the photography equipment room. If you need assistance registering for a closed section, please email the department at fnarug@design.upenn.edu. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-574 Reconfiguring Portraiture

- Section 401 – Brent Wahl – Thursday: 9:00 a.m. – 12:00 p.m.

As methods of representation are constantly shifting, one thing is clear - the photographic portrait is not what is used to be. Exploring both traditional and contemporary methods of portraiture, this class will uncover and discuss the ways in which we perceive each other in imagery, both as individuals and as groups. Throughout the semester, we will consider how portraits deal with truth, physical absence, the gaze, cultural embodiment, voyeurism and the digital persona. This course will build on the combination of perception, technology, and practice. Throughout the semester, students will advance by learning lighting techniques and strategies of presentation - as these core skills will become tools in the execution of project concepts. In tandem with each project, students will encounter and discuss a wide array of photography and writings from the past to the present, in an effort to understand the meanings and psychological effects of freezing the human image in time. Prerequisite(s): FNAR 571 or FNAR 640. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-576 Critical Issues Seminar

- Section 201 – Jackie Tieson – Monday: 1:00 – 4:00 p.m.

This seminar investigates issues concerning visual artists. Part one begins with Plato and Kant and progresses through a history of ideas in art, exploring the questions which concern artists today, including Modernism, post-modernism, abstraction and representation, appropriation, context, art and politics, identity, and the artist's relationship to these subjects. Part two of the course will focus on current texts in contemporary art, the current dialogue(s), and issues specific to our time and place as artists. The seminar engages contemporary issues in a spirit of curiosity and critique, and relates them to our studio practice. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-578 Documentary Strategies

- Section 401 – Michael Bryant – Tuesday: 9:00a.m. – 12:00 p.m.

This course offers a context for photographers to develop a documentary project - either within a traditional photojournalistic framework or one that challenges these traditions. The aim is to understand documentary as an evolving practice and to develop an artistic response when depicting our social reality - from everyday experience to the events that shape the world. An important aspect of the class will be examining the diversity of ways that journalists and artists have used the camera to extend and question the power of photography as document. The class will address key questions of media and mediation, the nature and status of documentary in the context of globalizing media and how traditional documentary work has been affected by video, performance, conceptual art and activism. Prerequisite(s): FNAR 571 or FNAR 640 or Permission from Instructor. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-580 Figure Drawing I

- Section 401 – Douglas Martinson – Monday and Wednesday: 5:00 – 8:00 p.m.
- Section 402 – Ivanko Talevski – Tuesday and Thursday: 1:30 – 4:30 p.m.

Students work directly from the nude model and focus on its articulation through an understanding of anatomical structure and function. Students will investigate a broad variety of drawing techniques and materials. Prerequisite(s): FNAR 123
Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-598 Grad Sculpture Seminar

- Section 201 – T.B.A. - Wednesday: 1:30 – 4:30 p.m.

Sculpture instructor (to be announced) will lead this studio course based on improvisational approaches to developing individually made sculptural works, as well as works that are made in collaboration with others. As in Music or Theater, these works involve the collaboration of others, yet they are equally initiated by small thoughts, and carry those thoughts into a more public and interactive format of installation. Open to: Architecture, City Planning, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-620 Letterpress & Risograph: Intro to Multimedia Printmaking

- Section 401 – Kayla Romberger – Tuesday and Thursday: 9:00 a.m. – 12:00 p.m.

This studio course introduces students to the world of printed material and circulation through methods in letterpress and Risograph printmaking (a high-speed digital printing system developed in Japan in the 1980s), focusing particularly on the format of posters and artists' ephemera. Students will create their own broadsides, flyers, announcement cards, press clippings, and invitations, exploring the ways in which artists, designers, and musicians make use of the printed form as an art form in itself in order to disseminate information; initiate happenings; advertise events; or foment change. In addition, students will learn about and present research on some of the most significant producers working within this realm—from the Surrealists to punk bands— and develop skills in page layout, typography, and design; mechanized and hand-pulled press operations; and digital to analog pre-press and post-print production methods. By the end of the course, each student will have a full set of each of their classmate's finished prints. The course includes a field trip to Printed Matter and MoMA's archives in New York City. Prerequisites: None. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR- 622 The Big Picture: Mural Arts in Philadelphia

- Section 401 – Jane Golden Heriza – Monday and Wednesday: 2:00 a.m. – 5:00 p.m.

The history and practice of the contemporary mural movement couples step by step analysis of the process of designing with painting a mural. In addition students will learn to see mural art as a tool for social change. This course combines theory with practice. Students will design and paint a large outdoor mural in West Philadelphia in collaboration with Philadelphia high school students and community groups. The class is co-taught by Jane Golden, director of the Mural Arts Program in Philadelphia, and Shira Walinsky, a mural arts painter and founder of Southeast by Southeast project, a community center for Burmese refugees in South Philadelphia. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-633 Digital Illustration

- Section 401 – Jeremy Holmes – Tuesday and Thursday: 7:30 – 10:30 p.m.

Digital Illustration is a course designed to expose students to the diverse techniques and approaches used in creating digital illustration for print publication. Course assignments will include two-dimensional animation storyboard rendering, figure illustration, technical diagram illustration, photographic retouching and enhancing. Digital applications will include morphing with layers, surface cloning, three-dimensional modeling and spatial transformation of scenes and objects. Students completing this course will possess the capability to design and plan creatively and skillfully execute finished artwork. Prerequisite(s): FNAR 636 and FNAR 523. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-634 Art of the Web: Interactive Concepts for Art & Design

- Section 401 – Sebastien Derenoncourt – Tuesday and Thursday: 6:00 – 9:00 p.m.

Art of the Web: Interactive concepts for art and design is a first step in learning how to create, analyze and discuss interactive content, as a visual creator. It is an exploration of the culture of the internet, the ideas behind its quirks, the dreams and freedoms it encapsulates, and the creative power it gives to us. Students will be assigned projects that will challenge their current understanding of the web, and the ways it shapes human connectivity and interaction. Upon completion of this course, students will possess a working knowledge how to organize and design websites and learn to critique web-content including navigation, UX design and information architecture. The course will require analytical and conceptual skills and foster creative thinking. Prerequisite(s): FNAR-264. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-635 3-D Computer Modeling and Sculpture

- Section 401 – Scott White – Monday and Wednesday: 10:00 a.m. – 1:00 p.m.
- Section 402 – Scott White – Monday and Wednesday: 5:00 – 8:00 p.m.
- Section 403 – Scott White– Tuesday and Thursday: 9:00 a.m. – 12:00 p.m.

Students will develop a comprehensive knowledge of how virtual worlds are constructed using contemporary computer graphics technique with a fine arts perspective. The course will offer the opportunity to explore the construction, texturing, and rendering of forms, environments, and mechanisms while conforming to modeling specifications required for animation, real-time simulations or gaming environments, and rapid prototyping. Prerequisite(s): FNAR 523 and FNAR636. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-636 Art, Design and Digital Culture

- Section 401 – Scotty Reifsnnyder – Tuesday and Thursday: 9:00 a.m. – 12:00 p.m.
- Section 402 – David Comberg – Tuesday and Thursday: 1:30 – 4:30 p.m.
- Section 403 – TBA– Monday and Wednesday: 5:00 – 8:00 p.m.
- Section 404 – TBA – Monday and Wednesday: 10:00a.m. – 1:00 p.m.
- Section 405 – Keith Fledderman– Tuesday and Thursday: 4:30 – 7:30 p.m.

This course is an introduction to the fundamental perception, representation, aesthetics, and design that shape today's visual culture. It addresses the way artists and designers create images; design with analog and digital tools; communicate, exchange, and express meaning over broad range of media; and find their voices within the fabric of contemporary art, design, and visual culture. Emphasis is placed on building an extended form of visual literacy by studying and making images using a variety of representation techniques; learning to organize and structure two-dimensional and three-dimensional space, and designing with time-based and procedural media. Students learn to develop an individual style of idea-generation, experimentation, iteration, and critique as part of their creative and critical responses to visual culture. If you need assistance registering for a closed section, please email the department at fnarug@design.upenn.edu. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-638 Creative Research

- Section 001 – Orkan Telhan– Tuesday: 4:30 – 7:30 p.m.

This seminar explores what it means to do research in creative and critical practices. Students learn about different research methods from design, engineering, humanities and sciences; utilize them for developing and evaluating their individual creative work as cultural producers. This is an interdisciplinary course that encourages students to observe, measure, analyze, test, study, experiment, diagram, prototype, speculate, generate and criticize; apply multiple modes of inquiry; be conceptual, analytical, propositional and critical at the same time to develop their work from different perspectives. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-640 Digital Photography

- Section 401 – Anna Neighbor – Monday: 10:00 a.m. – 12:00 p.m.
- Section 402 – Karen Rodewald – Monday: 5:00 – 8:00 p.m.
- Section 403 – Jamie Diamond– Wednesday: 5:00 – 8:00 p.m.
- Section 404 – Tony Ward– Monday: 2:00 – 5:00 p.m.
- Section 405 – Gabriel Martinez– Tuesday: 5:00 – 8:00 p.m.
- Section 406 – Jamie Diamond– Wednesday: 5:00 – 8:00 p.m.
- Section 407 – Gabriel Martinez– Wednesday: 2:00 – 5:00 p.m.
- Section 408 – Sarah Stolfa– Wednesday: 8:00 – 11:00 p.m.

This class offers an in-depth technical and conceptual foundation in digital imagery and the opportunity to explore the creative, expressive possibilities of photography. Students will become proficient with the basic use of the camera, techniques of digital capture, color management and color correction. They will also develop competency in scanning, retouching, printing and a variety of manipulation techniques in Photoshop. Through weekly lectures and critiques, students will become familiar with some of the most critical issues of representation, consider examples from photo history, analyze the impact of new technologies and social media. With an emphasis on structured shooting assignments, students are encouraged to experiment, expand their visual vocabulary while refining their technical skills. No previous experience is necessary. Although it is beneficial for students to have their own Digital SLR camera, registered students may reserve and checkout Digital SLR cameras and other high-end equipment from the department. If you need assistance registering for a closed section, please email the department at fnarug@design.upenn.edu. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-648 Counter the Land: Wyeth, Welling and Photographing the Land

- Section 401 – Brent Wahl – Friday: 10:00a.m. – 2:00 p.m.

What is your relationship to the land around you and how would you image it? Stemming from the introspective art of Pennsylvania native, Andrew Wyeth and the contemporary images of James Welling - an artist that pioneered new forms of representation by way of the photographic image – this class will photographically explore the landscape of our surrounding's, the region, and the self. Through visits to exhibits, conversations with artists and class time in the field, this class will focus on the photographic expression of the land through conceptual and experimental means. Open to fine arts, landscape architecture, writers, and anyone that has an interest in the landscape. Prerequisite(s): FNAR 571 or FNAR 640 or with permission from the instructor. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-661 Video I

- Section 402 – Emory Van Cleve – Tuesday: 1:30p.m. – 4:30 p.m.
- Section 403 – Emory Van Cleve – Tuesday: 10:00a.m. – 1:00 p.m.
- Section 404 – James Howzell– Tuesday: 4:30 – 7:30 p.m.
- Section 406 – David Novack– Monday: 1:00 – 4:00 p.m.
- Section 407 – Emory Van Cleve – Wednesday: 2:00 – 5:00 p.m.

This course provides students with the introductory skills and concepts related to producing short works that explore the language of the moving image. Students will learn the basics of cinematography and editing through a series of assignments designed to facilitate the use of the medium for artistic inquiry, cultural expression and narrative storytelling, through both individual and group projects. If you need assistance registering for a closed section, please email the department at fnarug@design.upenn.edu. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-662 Video II

- Section 401 – David Hart – Thursday: 1:30p.m. – 4:30 p.m.

Video II offers opportunities to further explore the role of cinematic narrative technique, non-narrative forms, digital video cinematography, editing, and screen aesthetics. Through a series of several video projects and a variety of technical exercises, students will refine their ability to articulate technically and conceptually complex creative projects in digital cinema. In addition, one presentation on a contemporary issue related to the application of cinematic storytelling and/or the cultural context of digital video is required. Prerequisite(s): FNAR 061. Open to: Architecture, City Planning, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-669 Graduate Video Studio

- Section 401 – Joshua Mosley – Monday and Wednesday: 9:00a.m. – 12:00 p.m.

Through a series of studio projects, this course focuses on the conceptualization and production of time-based works of art. A seminar component of the course reviews contemporary examples of media based art and film. A studio component of the course introduces production techniques including lighting, cinematography, audio, editing, mastering projects, and installing audio-visual works in site-specific locations or gallery spaces. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-670 Advanced Graphic Design and Typography

- Section 401 – David Comberg – Tuesday and Thursday: 9:00a.m. – 12:00 p.m.

This course will explore advanced commercial, public and personal forms of visual communication. Emphasis will be placed on creative problem solving with consideration for audience. Discussion of design history, current ideology and future design applications will inform individual student projects. Work generated in this studio can be used to build a portfolio. Prerequisite(s): FNAR 266 and FNAR 269 or Permission of Instructor. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-671 Film Sound: History, Aesthetics and Subversion

- Section 401 – David Novack– Monday: 6:30 – 9:30 p.m.

Sound and Image as experienced in the cinema, are not divisible. One perception influences the other, and transforms it. While a preexisting harmony between these two senses may exist, its conventions are subject to manipulation and the whims of subversion. Film Sound tracks the technological and aesthetic history of sound for film including psychoacoustics, dialogue, music, sound fx and audio's gradual and triumphant march towards fidelity, stereo and surround sound. This lecture course, through an historical and pedagogical romp loaded with examples throughout film history and visits by lauded audio professionals from the film world, seeks to instruct students to engage in the process of sound perception, gaining an appreciation for the art of sound as it relates to the varied phenomenological dimensions of that unique audio-visual encounter we call movies. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-684 Photography and Fashion

- Section 401 – Tony Ward– Thursday: 5:00 – 8:00 p.m.

Since the invention of photography, the fashion industry has been one of the cornerstones of creative expression, innovation and visionary provocation. Contemporary fashion photography has continued to attract a leading group of image-makers that continue the tradition of creating artwork that not only is being published in cutting edge magazines such as V, Another Magazine and Citizen K, but also are exhibiting their work in various galleries and museums around the world. This course is designed for students who are interested in creating contemporary fashion images through specific assignments that define the process: lighting in studio or location, working with fashion designers, stylists, models, hair/ make-up artists, and the application of a variety of post-production techniques, via Photoshop. The class will explore modern constructs that define the importance of branding, marketing, advertising and the relationship of fashion photography in contemporary art and culture today. . Prerequisite(s): FNAR 571 or FNAR 640 or Permission from Instructor. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

FNAR-685 Photography and Fiction

- Section 401 – Jamie Diamond– Thursday: 1:30 – 4:30 p.m.

In spite of photography's traditional relationship with fact, the medium has been a vehicle for fiction since the very beginning. Fiction and photography encompass a broad range of meanings, from elaborately staging and performing for the camera, to manipulations using digital technology such as Photoshop to construct the work. This class will examine and trace the history of manipulated photography while paying special attention to the complex negotiations between the decisive moment, the constructed tableau, and the digitally manipulated image. There will be a combination of class lectures, studio projects, assigned readings, visiting artists, film screenings, field trips, and class critiques. Prerequisite(s): FNAR 571 or FNAR 640 or Permission from the Instructor. Open to: Architecture, City Planning, Fine Arts Historic Preservation, Landscape Architecture, Urban Spatial Analytics

LANDSCAPE ARCHITECTURE

LARP 730-001 Topics in Professional Practice: Transformational Leadership: Research and Practice

Lucinda Sanders

Wednesdays, 3:00pm – 6:00 pm

This course is designed to explore aspects of transformational leadership which can provide greater agency to emerging landscape architects. Two possible conduits for expanding the field of landscape architecture are practice and research. These two means of expression will be woven together under the umbrella of transformational leadership. The course will be a pre-requisite for a new research based and implementation elective studio (LARP 702) to be offered in the spring semester. Registration will be limited to LARP students, others by permission of the instructor. LARP students will have the option to use this course as their pre-requisite work for the LARP 702 Studio that adjunct professor Cindy Sanders plans to offer during the spring 2016 semester. Students may also take this course to fulfill an elective requirement, without committing to the corresponding LARP 702 studio in the spring. Open to: LARP students only, others by permission of the instructor.

LARP 740-001 Topics in Digital Media: Simulated Natures

Keith VanDerSys

Thursdays, 9:00 am – 12:00 pm

Fabrication has always been a complex act rooted in strategy, research, cumulative knowledge, intent, collaboration and expertise. Commanding the ability to orchestrate the productive appropriation of digital tools and fabrication techniques not only affords incredible potential to facilitate the translation of spatial ideas into reality, but also provides incredible advantages for practicing designers in the current professional atmosphere towards that end. Course participants will explore this potential by taking a rigorous and hands-on approach to utilizing the digital fabrication tools available in Meyerson Hall. Demonstrations of essential tools and techniques will be presented and discussed throughout the semester, while exemplary and relevant projects will be studied. Most time this semester, however, will be spent sharpening fabrication skills through the development of an intricately fabricated physical project utilizing the School's CNC mill, laser-cutters and traditional tools within the shop. Open to: LARP students only. Pre-requisite: successful completion of LARP Media III (LARP 543).

LARP 743-401 Topics in Digital Media: Geospatial Software Design

Dana Tomlin

Wednesday 9:00am – 12:00pm

The purpose of this course is to equip students with a selected set of advanced tools and techniques for the development and customization of geospatial data-processing capabilities. Open to: Architecture, City Planning, Historic Preservation, Fine Arts, Landscape Architecture, Urban Spatial Analytics. The course is open to any student with experience equivalent to that of an entry-level class on GIS.

LARP 755-001 Topics in Horticulture & Planting Design: Issues in Arboretum Management I

Cynthia Skema

Tuesday, 1:30pm – 4:30pm, Internship held at the Morris Arboretum

This course is designed as an introduction to all aspects of public gardens. Course topics include the role of gardens as public institutions, basic horticultural, botanical and ecological concepts and practices underpinning public garden management, the management and curation of living plant collections, as well as education, public programs, sustainability, historic preservation, and storm water management, as related to public gardens. This interdisciplinary course looks at public gardens as a whole, integrating both theoretical and hands-on, practical coursework, and often utilizing the Morris Arboretum as a case study. This course takes place at the Morris Arboretum in the Chestnut Hill section of Philadelphia and students are responsible for getting to and from the arboretum on their own. PennDesign students interested in taking this course should contact Cynthia Skema, cskema@upenn.edu for further information. This course will be a pre-requisite for students interested in taking Issues in Arboretum Management II during the spring semester.

LARP 780-001 Topics in Theory and Design: Classics Considered

Laurie Olin and Raffaella Fabiani Giannetto

Monday, 9:00am – 12:00pm

This course fulfills the LARP Theory III requirement.

The purpose of the course is to familiarize students with aspects of the physical design and realization of landscape, emphasizing its properties as a medium of expression, its materiality, and issues of craft, composition, and construction in relationship to functionality and poetics. The sites chosen are among those frequently considered representative of particular movements, periods, or exemplars of design excellence. Also, the size and scale of many of the sites selected allows them to be drawn, modeled, and comprehended in a manner suitable to a single semester's study. Twelve remarkable landscape designs from different regions and periods will be examined, analyzed, and discussed. Topics will include their purpose, construction, form, composition, ideas, materials, sources, and current state. Students will prepare drawings, models, and work written reports. Each student will work on at least 1 of the projects producing drawings (plans, sections, key details and views), a scale model, and a paper – it is likely that two students will work as a team for each project (they may wish to join classmates on one or more of the other projects as well). This is not to be a 'history' course per se despite the historic importance of many of these designs, but rather a 'design' analysis endeavor in a way similar to the way students and faculty in literature study exemplar texts by highly regarded poets or novelists, studying their structure, context, ideas, and craft, employing 'close reading' and comparative texts. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics. Class limited to 17 students, priority to LARP students, but other department majors accepted if room allows.

LARP 780-401 Topics in Theory and Design: The Culture of Nature

Richard Weller

Wednesday, 9:00am – 12:00pm

This course fulfills the LARP Theory III requirement.

Landscape architecture, architecture and visual art are all mediations between nature and culture. This course is designed to help students form their own world view regarding our relationship with the 'natural' world around us in an age of ecological crisis. To achieve this, the course provides a stimulating historical and contemporary survey of ideas of nature. We explore ways 'nature' has been understood mythically, theologically, ideologically, philosophically, scientifically, and artistically throughout the ages, which an emphasis on contemporary culture. We survey the way in which the polarity of culture and nature has been historically constructed and more recently, deconstructed. The pedagogical philosophy of this course is that an appreciation of the broad pattern of history and the ideas that have shaped it are foundational to living a critical and ethical life and central to the process of making contemporary art, architecture and landscape architecture. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics, by permission of the department.

HISTORIC PRESERVATION**HSPV 516-001 Building Diagnostics and Monitoring**

Michael Henry

Fridays, 2:00pm – 5:00pm

Building diagnostics pertain to the determination of the nature of a building's condition or performance and the identification of the corresponding causative pathologies by a careful observation and investigation of its history, context and use, resulting in a formal opinion by the professional. Monitoring, a building diagnostic tool, is the consistent observation and recordation of a selected condition or attribute, by qualitative and/or quantitative measures over a period of time in order to generate useful information or data for analysis and presentation. Building diagnostics and monitoring allow the building professional to identify the causes and enabling factors of past or potential pathologies in a building and building systems, thus informing the development appropriate interventions or corrective measures. In the case of heritage buildings, the process informs the selection of interventions that satisfy the stewardship goals for the cultural resource. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

HSPV 521-001 American Architecture

Nancy Holst

Wednesdays, 9:00am – 12:00pm

This course is a survey of architecture in the United States. The organization, while broadly chronological, emphasizes themes around which important scholarship has gathered. The central purpose is to acquaint you with major cultural, economic, technological, and environmental forces that have shaped buildings and settlements in North America for the last 400 years. To that end, we will study a mix of “high-style” and “vernacular” architectures while encouraging you to think critically about these categories. Throughout the semester, you will be asked to grapple with both the content of assigned readings (the subject) and the manner in which authors present their arguments (the method). Louis Sullivan, for instance, gives us the tall office building “artistically considered” while Carol Willis presents it as a financial and legal artifact. What do you make of the difference? Finally, you will learn how to describe buildings. While mastery of architectural vocabulary is a necessary part of that endeavor, it is only a starting point. Rich or “thick” description is more than accurate prose. It is integral to understanding the built environment – indeed, to seeing it at all. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

HSPV 540-001 American Building Technology

Frank Matero

Wednesdays, 9:00am – 12:00pm (0.5 CU / 2nd half of the semester)

Much architectural writing--from Vitruvius to Le Corbusier--has drawn analogous comparisons between buildings and the human body. Like the skeleton, skin, and internal metabolic systems of the human corpus, buildings are comprised of a structure, infrastructure, and outer surface which are all connected and through which liquids, gases and solids pass. Traditionally, form depended in large part on systems of construction and the selection and manipulation of individual materials. Understanding architecture's materiality in terms of form and fabric, structure and skin, and mechanical systems is essential in understanding not only what a building is, but how it evolves over time. American Building Technology will be divided into two discreet six week modules conceived in succession and taught during the second half of the first semester and first half of the second semester respectively. Module 1: Building Anatomy will examine traditional construction methods through a typological analysis of construction systems. Module 2: Building Archaeology will address the morphological evolution of a structure and its physical setting, sometimes known as “above ground archaeology.” Since the physical fabric and its evidences of cultural alteration present one primary mode of inquiry, archaeological theory and method provide an excellent means to recover, read, and interpret material evidence, especially in association with documentary and archival sources. The course is intended to introduce students in Historic Preservation to the physical realities of built form and its analysis through careful observation and description. Note: This course continues in the first half of the spring semester for another 0.5 CU. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

HSPV 572-001 Preservation Through Public Policy

David Hollenberg

Fridays, 9:00am – 12:00pm

An exploration of the intersection between historic preservation, design, and public policy. That exploration is based on the recognition that a network of law and policy at the federal, state and local level has profound impact on the ability to manage cultural resources, and that the pieces of that network, while interconnecting, are not necessarily mutually supportive. The fundamental assumption of the course is that the preservation professional must understand the capabilities and deficiencies of this network in order to be effective. The course will look at a range of relevant and exemplary laws and policies existing at all levels of government, examining them through case studies and field exercises. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

HSPV 600-001 Documentation, Research, and Recording I

Francesca Ammon

Tuesdays, 9:00am – 12:00pm

The goal of this class is to help students develop their understanding and utilization of materials that contextualize the history of buildings and sites. In order to gain first-hand exposure to the actual materials of building histories, we will visit half-dozen key archival repositories. Students will work directly with historical evidence—both textual and graphic—and exercise their facility through projects. We will explore various forms of documentation, discussing each in terms of its nature, the motives for its creation, and some ways it might find effective use. Philadelphia is more our laboratory than a primary focus in terms of content, as the city is rich in institutions that hold over three centuries of such materials; students will find here both an exposure to primary documents of most of the types they might find elsewhere, as well as a sense of the culture of such institutions and of the kinds of research strategies that can be most effective. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

HSPV 640-301 Contemporary Design in Historic Settings

Pamela Hawkes

Tuesdays, 1:00pm - 4:00pm

Thoughtful contemporary design can add value and meaning to historic settings of any scale. Rigorous dialogue with history and context enriches contemporary design. This seminar immerses students in the rewarding yet challenging realm of design with landmarks and existing structures. It will encourage participants to create their own models for design and preservation planning through discussion of source materials that illustrate the political, cultural and aesthetic environments that have shaped regulation and design with heritage throughout the past century. Sketch problems set in Philadelphia and analysis of case studies from around the world will enable students to critique and communicate a range of responses to landmarks and historic contexts, and to explore the roles of significance, physical and intangible conditions in shaping appropriate responses. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics, by permission of instructor – email pwh@scattergooddesign.com.

HSPV 660-301 Theories of Historic Preservation

Randall Mason

Thursdays, 9:00am – 12:00pm (0.5 CU / 1st half of the semester)

Theories of historic preservation serve as models for practice, integrating the humanistic, artistic, design, scientific and political understandings of the field. This course examines the historical evolution of historic preservation, reviews theoretical frameworks and issues, and explores current modes of practice. Emphasis is placed on literacy in the standard preservation works and critical assessment of common preservation concepts. In addition to readings and lectures, case studies from contemporary practice will form the basis for short assignments. Professional ethics are reviewed and debated. The instructor's permission is required for any student not registered in the Graduate Program in Historic Preservation. Note that the course is organized in two parts; the first half, on the basics of preservation theory, is taught in the fall semester while the second half takes place in the spring semester and engages advanced topics. Note: This course continues in the second half of the spring semester for another 0.5 CU. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

HSPV 740-301 Conservation Seminar: Wood/Masonry

Roy Ingraffia and Andrew Fearon

Mondays, 6:00pm – 9:00pm

Module 1: Masonry – Roy Ingraffia

This seminar will offer an in-depth study of the conservation of masonry buildings and monuments with a particular focus on American building stone. Technical and aesthetic issues will be discussed as they pertain to the understanding required for conservation practice. Part 1 will address a broad range of building stone, masonry construction technologies, and deterioration phenomenon; Part 2 will concentrate on conservation methodology as well as past and current approaches for the treatment of stone masonry structures. The subject will be examined through published literature and case studies. Students will gain practical experience through lab and field exercises and demonstrations. The subject matter is relevant to interested students of conservation and preservation, architecture, landscape architecture, architectural history, and archaeology.

Prerequisite: HSPV 555 Conservation Science. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

Module 2: Wood – Andrew Fearon

Prior to the twentieth century, most structures found in the built environment relied upon wood as a primary material for both structural members and decorative features. An understanding of the physical properties as well as the historic application of this organic material provides the basis for formulating solutions for a wide spectrum of conservation issues. As the scope of preserving wooden structures and wooden architectural elements is continually broadened, new methods and technology available to the conservator together allow for an evolving program – one that is dependent upon both consistent review of treatments and more in depth study of craft traditions. This course seeks to illustrate and address material problems typically encountered by stewards of wooden cultural heritage – among them structural assessment, bio-deterioration, stabilization and replication techniques. Through a series of lectures and hands-on workshops given by representative professionals from the fields of wood science, conservation, entomology, engineering, and archeology, theoretical and practical approaches to retaining wooden materials will be examined with the goal to inform the decision making process of future practicing professionals. Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

HSPV 747-401 Conservation of Archaeological Sites

Frank Matero

Tuesdays, 1:00pm - 4:00pm

This seminar will address the history, theories, and practice of the preservation and display of archaeological sites and landscapes. The course will draw from a wide range of published material and experiences representing both national and international contexts. Topics will include site and landscape documentation and recording; site formation and degradation; intervention strategies including interpretation, display, and exhibits; tourism and development, and legislation, policy, and contemporary issues of descendent community ownership. The course is organized as a seminar incorporating readings, lectures, and discussions focused on major themes. Readings have been selected to provide exposure to seminal works in the development of theory and method as well as current expressions of contemporary practice. Readings and discussions will be complemented by a field project: Fort Union National Historical Site in eastern New Mexico, the largest earthen ruin in North America. Participants will have the opportunity to review the history of the site and its preservation and display, evaluate current conditions, and make recommendations for intervention and interpretation. A funded site visit is planned during studio travel week, Oct 3-10. The course is open to all first and second year preservation students and all others interested in the conservation and management of archaeological sites.

Open to: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCHITECTURE**ARCH 638-001 Writing for Architects**

Nicholas Klein

Wednesday 9:00am – 12:00pm

There are eloquent writers who ultimately may not have much to say. And there are poets and “Hemingway’s” who can perform open-heart surgery with a hand full of words. Writing is an art and it can be a critical tool. Many famous architects were also great writers, captivating and erudite in unveiling their most potent ideas. This seminar will focus on honing concepts and mastering the most dynamic ways of expressing them. Students will sharpen their skills towards becoming more confident, sensitive and evocative. A key principal is, as with lattice and vine; that the tension between rigor and free expression yields the most powerful results... i.e. igniting the imagination of the reader... or developer or critic. The class will explore similarities between writing and architecture and then pinpoint the key principals of writing, from defining a premise to developing it through a spectrum of engagements to an ultimate challenge and resolution. Understanding differences between writing for academics, for clients or for the public will also be explored and clarified. As they say; the more you know the rules, the more artfully you can transcend them. This class will also consider how writing can help inspire and facilitate interdisciplinary thinking, distilling the essence of ideas and the laws that empower them, such that designs themselves, their manifold objectives and expression in multimedia contexts can all work more synergistically. Finally we will consider the question of authenticity, where students can observe how even the subtlest “genuine voice” can ultimately outperform the most accomplished “ventriloquist”. Open to: Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 711-003 Architecture of Patterns

David Salomon

Thursdays 6:00pm – 9:00 pm

The course will cover a selected multidisciplinary history of the pattern and speculate about future design directions through an alternating series of seminars and graphic workshops. The seminars will compare a variety of theoretical definitions – including ones elaborated by Frank Lloyd Wright, Ernst Gombrich, Gyorgy Kepes, Arthur Loeb, Christopher Alexander, and Gregory Bateson – and link them to contemporary architectural topics. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 711-006 Domestic Networks, Foreign Habitations

Ignacio Gonzalez Galan

Mondays 6:00pm – 9:00pm

This seminar considers key theoretical discourses on architecture interiors and the social construction of domesticity, as well as a selection of historical case studies to discuss their transformation throughout the last 100 years. We will start by considering that domesticity, as a historical construction, was shaped throughout the nineteenth century in relation to an exterior: private versus public, own versus foreign, etc. Our aim will be to understand how these dialectic relationships have taken on new and particular forms as interiors and the realm of domesticity have mutated throughout the last century with the expansion of public housing, and with the changing relationships between interiors and the bodies and objects they contained. Domestic interiors could accordingly be defined as a series of objects circulating in the market, reflected in image reproductions in the media, reduced to interfaces, and connected through increasingly pervasive networks. The home is additionally destabilized as not only goods and information circulate, but inhabitants also become more mobile: tourists, immigrant workers, and refugees are but a few examples of increasingly delocalized populations and their characteristic forms of residence—certainly foreign to the traditional idea of domestic habitations. These new constructions concern the interior of the home as much as the domestic space of the nation, as the definition of both is simultaneously challenged in contemporary global regimes. Articulated with these different networks and operating within these global dimensions, new architectures define contemporary forms of residence, in ways that this class aims to discuss. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 711-007 Urban Imaginaries

Joseph Watson

Tuesdays 9:00am – 12:00pm

Utopian thinking has been a fundamental and persistent aspect of culture across the globe throughout history, and the city has typically been its object: in works in fiction, it is the centerpiece of a transformed society; in works of modern architecture, it is the starting point from which transformation will spread. This course explores how architects and other intellectuals have imagined alternative spatial, social, and political worlds under different historical circumstances. One goal of this course is to develop an understanding of these works of architectural and literary speculation and the historically produced objects of collective hopes, desire, memories, and anxieties, as much as the unique visions of indicial authors. Another goal is to consider through readings, discussions, and drawings how the histories of these ideas continue to bear on the globalized context of contemporary design discourse. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 711-008 The Agency of Autonomy

Eduardo Rega

Mondays 6:00pm – 9:00pm

Architecture cannot be reduced to an introverted disciplinary discourse, nor can it be understood solely through its actions and relations with other entities outside of itself. The debate developed in the last 40 years between architecture's *project for autonomy* vs architecture as an *instrument for social and political change*, serves as a premise for this seminar, which analyzes and seeks to instrumentalize both theoretical positions. Adopting Graham Harman's terms, the seminar positions itself in a theoretical territory that neither undermines architecture through an essentialist discourse (Autonomy) nor overmines it through a purely relational one (Agency), but rather does both at once. The readings, presentations, debates and projects will capitalize on the differences and transferences in order to develop research and design tools that enable the translation between architecture as an autonomous discipline and its potential to provoke change in the social and political milieus of which it is a part. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 711-401 Architecture's Cultural Performance: The Facade

David Leatherbarrow

Tuesdays 2:00pm – 5:00pm

This course will ask again about the interrelationships between topics of design that seem to be categorically distinct: the project's functionality and its style, its provision of settings that allow the enactment of practical purposes and its contribution to the image and appearance of our landscapes and cities. Our concentration will be at once historical and thematic. We will study and reconsider buildings from the twentieth century and we will ask questions that resonate through the past several decades into the present, questions about the building (its materials, construction, and figuration) as well as the process of design (description, projection, and discovery). Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 717-001 Philosophy of Urban Design

Manuel Delanda

Thursday 6:00pm – 9:00pm

This class introduces students to the branch of the philosophy of history that specializes in cities. Cities are social entities that exist at an intermediate scale between the micro-level of individuals and the macro-level of society as a whole. Social science (economics, sociology) has tended to focus at those two extremes, while the intermediate *meso-level* has been neglected by the mainstream schools. The philosophy of history, in turn, has been affected by these choices, becoming a theory of the dynamics of entire societies (and the ages through which they pass, such as agricultural, industrial, and information ages) or a theory of the decisions and actions of great individuals. The philosophy of urban history aims at remedying this situation, stressing not only the role of *cities as historical actors*, but also the role of other mesolevel social entities: from local communities and institutional organizations, to urban regions and provinces. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 721-401 Designing Smart Objects

Carla Diana

Thursday 3:00pm – 6:00pm

Today's children enjoy a wide array of play experiences, with stories, learning, characters and games that exist as physical stand-alone objects or toys enhanced with electronics or software. In this course, students will explore the domain of play and learning in order to develop original proposals for new product experiences that are at once tangible, immersive and dynamic. They will conduct research into education and psychology while also gaining hands-on exposure to new product manifestations in a variety of forms, both physical and digital. Students will be challenged to work in teams to explore concepts, share research and build prototypes of their experiences in the form of static objects that may have accompanying electronic devices or software. Final design proposals will consider future distribution models for product experiences such as 3D printing, virtual reality and software-hardware integration. Instruction will be part seminar and part workshop, providing research guidance and encouraging connections with subject matter experts throughout the Penn campus. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 724-001 Immersive Kinematics

Simon Kim

Wednesday 9:00am -12:00pm

The aim of this course is to understand the new medium of design within the format of a research seminar. The subject matter of new media is to be examined and placed in a disciplinary trajectory of building design and construction technology that adapts to material and digital discoveries. We will also build prototypes with the new media, and establish a disciplinary knowledge for ourselves. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 731-001 Experiments in Structures

Mohammad Al-Khayer

Tuesday 9:00am - 12:00pm

The objective of this course is to correlate the architectural design process with the structural one in an integrated building. The emphasis will be on the rational process of developing light-weight structural solutions for various spatial configuration. The course will focus on the use of tensile and lightweight structures. Through hands on experiments conducted in workshop environments. Students will develop skills in making structural working models and develop a (touch-feel) for the forces flowing within structural elements. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 741-001 Architectural Design Innovation

Ali Rahim

Wednesday 9:00am – 12:00pm

This seminar will explore systemic thinking and digital design techniques that yield architectural forms that have contributed to the contemporary discourse of architecture. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 743-001 Form and Algorithm

Cecil Balmond and Ezio Blasetti

Monday 9:00am – 12:00pm

This workshop will be devoted to the design of architectural immersive environments from nonlinear computational generative systems. This research will focus on the inherent potential of computation to generate space and of algorithmic procedures to engage self-organization in the design process. Participants will engage closely with encoded processes in order to develop an aesthetic and intuition of complexity that resides in a balance between design intent and emergent character. During the seminar, participants will work in small teams and create their own custom algorithms appropriate to the research trajectories of choice. The output will be a book, a series of boards and animations. Students who are interested joining the “Emergent Formation” studio of spring 2015 should definitely participate in this seminar. Open to:

All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 750-001 Parafictional Objects

Kutan Ayata

Wednesday 9:00am – 12:00pm

This Representation/Design Seminar will start with series of lectures examining the histories of Realism in Art with their aesthetic provocations at the center of this inquiry. The design portion of the seminar will proceed with the generation of "Still Life bound" objects with parafictional scenarios. These objects will then be fabricated to gain physical presence in the world. The realism of these objects as things in the world will be further explored through a project in rendering and photocomposition as each object will be inserted into different Still Life painting. These explorations are attempts to explore the aesthetics of realism for the objects in a different context. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 751-001 Ecology, Technology, and Design

William Braham

Wednesday 9:00am – 12:00pm

The course draws on systems ecology and the history and philosophy of technology to examine the complex task of environmental building design. Rethinking ecological design at the beginning of the twenty-first century means reconsidering the strong claims made about ecology and technology, utopian and dystopian, through the twentieth century, as the impacts of technology on eco-systems were encountered. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics

ARCH 765-001 Project Management

Charles Capaldi

Friday 9:00am 12:00pm

Arch 765 is an introduction to construction management, project management and various construction project delivery systems. In the study of construction delivery systems, we will examine the players, relationships and the advantages and disadvantages of different contractual and practical relationships, both on the construction site and at the tops of the various "paper piles". Exercises and lectures will focus on developing perspectives into the various roles, needs and expectations of the many parties involved in a construction project and the management skills and techniques which help to bring a project to a successful. Open to: All departments, with instructor permission: Architecture, City Planning, Fine Arts, Historic Preservation, Landscape Architecture, Urban Spatial Analytics.

DEPARTMENTAL CONTACT INFORMATION:

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DETAILED INFORMATION ON REGISTRATION IS AVAILABLE ONLINE AT: [COURSES AND REGISTRATION](#)

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