College of Fine Arts Interdisciplinary Courses

About Course Numbers:

Each Carnegie Mellon course number begins with a two-digit prefix that designates the department offering the course (i.e., 76-xxx courses are offered by the Department of English). Although each department maintains its own course numbering practices, typically, the first digit after the prefix indicates the class level: xx-1xx courses are freshmen-level, xx-2xx courses are sophomore level, etc. Depending on the department, xx-6xx courses may be either undergraduate senior-level or graduate-level, and xx-7xx courses and higher are graduate-level. Consult the Schedule of Classes (https://enr-apps.as.cmu.edu/open/SOC/SOCServlet) each semester for course offerings and for any necessary pre-requisites or co-requisites.

62-002 CFA Elective
Intermittent: 9 units
TBA

62-010 Pittsburgh Filmmakers
Fall and Spring: 9 units
Any of Pittsburgh Filmmakers full semester course offerings are available for registration through the CFA Dean’s Office. Visit https://filmmakers.pfpca.org/ for listings. Registration can only be done on or after your scheduled registration day. Spaces are limited. Stop by CFA 100 for details and to register.
Course Website: http://filmmakers.pfpca.org/

62-102 Modern Dance Workshop
Fall and Spring: 6 units
A modern dance class based on the philosophy of the Martha Graham technique. The class is designed to encourage exploration and discovery of the roots of physical movement and control. The class also covers fundamental and technical aspects of modern dance as a classical performing arts form.

62-105 Exploring Pittsburgh
Fall: 6 units
TBA

62-106 Architecture and the Arts
Fall: 9 units
This interdisciplinary course explores the entangled relationship between architecture and the arts, and their struggle between autonomy and engagement. It will be structured around a series of themes, drawings, and writings that reveal architecture's constantly changing involvement with art, culture, society, and related disciplines. The course functions both as an introduction to Architecture as Art for a general audience, as well as a critical introduction to architectural thinking and theory for architecture majors. The course will include lecture, reading, discussion, written reports, and a series of research exercises to engage architecture and art more critically, and an exam. We’ll examine the common roots, disparate characters, and intertwined histories of architecture and the arts. We’ll investigate not just buildings and art works, but ideas, drawings, images and other representations involved in the construction and reception of architecture that often relate closely to the arts. We’ll look at shared terms like composition, rhythm, studio, and form. We’ll define architecture in relation to categories such as fine and applied arts, high and low arts, visual and performing arts, and relate these to broad categories such as design, visual culture, and the liberal arts.

62-110 Passport to the Arts
Fall and Spring: 9 units
Exploring Audience and Ideas in the Arts: ‘Passport’ is an introductory level course that explores the philosophy of aesthetics through direct attendance at performances and exhibitions. The course is constructed in modules that represent each school within the College of Fine Arts (architecture, art, design, drama and music) building toward cross-disciplinary practice. Each module contains a guest lecture, event attendance, and follow-up discussion which serve as points of entry into each discipline as well as points of comparison within the arts as a whole. These three components provide a direct link between theory and practice allowing students to gain a critical vocabulary to discuss their experiences. Outside of class, supplementary readings, audience participation, and written reflections provide an opportunity for students to use course material to enrich their own artistic practice. Ultimately, students are asked to consider their roles as an artist: within their discipline, within the arts, and within the broader community. This course concludes with a final symposium/exhibition of participating students.

62-122 Digital Media I
Fall: 6 units
This course will engage in an overview of foundational workflows in digital media regarding two-dimensional representation techniques for spatial design processes. The course is divided into two topics with one assignment each: Technical Drawing and 2D Graphics. Students are required to submit work at the end of each class. Students are required to submit work at the end of each class.
Course Website: https://enr-apps.as.cmu.edu/open/SOC/SOCServlet}

62-123 Digital Media II
Spring: 6 units
TBA
Prerequisite: 62-122

62-125 Drawing I
Fall: 6 units
62-125 is an introductory course in free-hand architectural drawing. Its central learning objective is building a capacity for visualizing three-dimensional space through hand-drawing. A parallel objective is fostering visual literacy: the ability to use line and tonal values to represent architectural space. Schedule and Content The course is taught in two three-week segments that alternate with the three-week segments of a parallel course Digital Media I. It concludes with a final project that is shared with 48-100 Introduction to Architecture. The course has three themes that bridge over the two three-week segments. The first focuses on contour and cross contour to describe surface and space. At its completion, it addresses the appearance of architectural space in perspective. Exercises are inspired by the approach of Kimon Nicolaides, The Natural Way to Draw, to these same subjects. The second focuses on the projection of space using both freehand axonometric and perspective drawing. The third is centered on modeling surface and creating space by using tone. A sculptural approach adapted from Kimon Nicolaides is used and at the end applied to drawing architectural sections. This work is preparatory for the final project.

62-126 Drawing II
Spring: 6 units
TBA
Prerequisite: 62-125
62-135 The Basics of Self-Producing: How to put up your show in NYC and get it reviewed  
Fall and Spring: 6 units  
For any actor/writer/director/theatre artist in New York City, the time between jobs can feel stressful and frustrating. Self-producing is the quickest way to get your work on stage without permission from anyone else or having to adhere to anyone else’s restrictions. From blurs to budgets to rehearsal space to press releases to equity paperwork, this course covers everything you need to know in order to get your work produced and noticed in New York City without breaking the bank. This course will draw from readings on independent theatre, interviews with working independent producers in New York, and the working experience of Anderson Cook, author/producer of The Disembodied Hand That Fisted Everyone to Death - the Musical!, Blatantly Blaine, Pop Punk High, Donny and Kelly Save the Slumber Valley ASPCA, and more - all produced and reviewed in NYC.

62-141 Black and White Photography I  
Fall and Spring: 10 units  
This course will teach you the basic craft of photography from exposure of the negative through darkroom developing and printing to print finishing and presentation. Content includes student presentations, class discussions, shooting assignments, darkroom sessions and class critiques. We will concentrate not only on the technical aspects of photography, but also the aesthetics of seeing with a camera. The course concentrates on photography as a fine art — what is unique to it and the concerns that are shared with other visual arts, such as composition, tonal values, etc. and aims to equip students with an understanding of the formal issues and the expressive potentials of the medium. Lab fee and 35mm manual camera required. Each student is responsible for the cost of paper and film.

62-142 Digital Photography I  
Fall and Spring: 10 units  
This course explores digital photography and digital printing methods. By semester’s end students will have knowledge of contemporary trends in photography, construction (and deconstruction) of photographic meaning, aesthetic choices, and the use of color. Students will learn how digital cameras work, proper digital workflow, RAW file handling, color management and Adobe Photoshop. Through the combination of the practical and theoretical, students will better define their individual voices as photographers. No prerequisites.

62-145 Photojournalism  
Fall and Spring: 10 units  
Photojournalism is the use of documentary photography to inform mass audiences. This course will examine the role of the photojournalist in modern society, critically examine the use of photography in publication, and give students different types of photojournalistic assignments throughout the semester. The class will evolve to function as its own newsroom photo department.

62-150 IDeATe Portal: Introduction to Media Synthesis and Analysis  
Fall: 10 units  
To view the different section topics, visit courses.ideate.cmu.edu/62-150. Technologists, artists, and designers are engaging in new, interdisciplinary modes to consume, create, and reuse media. To do this, they thoughtfully collaborate and critically reflect on media creation, distribution, participation, interaction, and how media affects the audience. In this course, students will challenge themselves to work in these new modal contexts by thinking critically in a genre of exploration. They will formulate the intent of their creative work, articulate relationships to art/design practice and theory, and respond insightfully to creative, media-rich outcomes. The class will introduce core concepts through foundational texts, in-class exercises, collaborative projects, and group critique. Through hands-on media exploration, students will ground concepts such as embodiment, emergence, composition, participatory interfaces, and mediated experiences. Section A will be an Introduction to Textile Media. Section B, will be an Introduction to Mediascapes: 2D to 3D Spatial Environments. Section C will be an Introduction to Digital Storytelling + Archives. For more detail on these sections, please visit courses.ideate.cmu.edu/62-150  
Course Website: https://courses.ideate.cmu.edu/62-150 (https://courses.ideate.cmu.edu/62-150/)  

62-156 Mutable Landscape:  
Intermittent: 10 units  
With camera in hand, students will explore, document and invent a sense of place in Pittsburgh. Informed by photographic history and landscape studies, students will develop their own portfolios of digital prints. As a CFA Interdisciplinary photography course, students will be encouraged to consider their photographs in the medium of their home department, and in some cases as a starting point for projects in other materials. No prerequisites.

62-175 Descriptive Geometry  
6 units  
This is a manual construction course for solving problems in three-dimensional geometry through working with two-dimensional planes using basic mechanical drawing tools. The course covers basic concepts of descriptive geometry, solving problems involving lines and planes in space and their spatial relationships; rotations in three dimensions; locating points and tangents on solids and surfaces; intersection of solids; shades and shadows; perspectives; and development of surfaces.

62-188 Introduction to Playwriting  
Intermittent: 6 units  
Add description

62-193 Intro to Screenwriting  
Intermittent: 9 units  
Ever watched a terrible movie and thought ‘I can do better than that?!’ Or seen a beautiful film and had the opposite reaction: ‘I could never do that!’? Then this is the class for you! This practical skills course will provide students with the tools they need to construct compelling, image-driven screenplays. Students will be writing throughout the semester, ultimately preparing them to complete a polished script of a short film as a final project. Assignments will include reading masterwork screenplays for in-class analysis. Class time will also be dedicated to roundtable readings & discussions of each other’s writing.

62-194 Playwriting  
Spring: 9 units  
Section A: Are Quentin Tarantino’s films, such as Django Unchained, exploitative or celebratory of black culture? Is a show like Bodyguard reinforcing negative stereotypes about Muslim people or challenging the way that terrorism is viewed in the U.K.? If it’s a problem for Scarlett Johansson to play a Japanese character in Ghost in the Shell, is it also problematic that David Oyelowo black Britplays Martin Luther King Jr. in Selma? These are just a few of the sorts of questions we will be asking in this class. We will ask these questions not to put down other artists, but to seriously interrogate our own views of representation. In addition to analyzing representation of race/ethnicity in film, TV, and theatre, students will write scenes and (ultimately) one-act plays that incorporate characters from multiple racial identity backgrounds. We are just now at a point in the United States where people of color are being given more space to tell their own stories; this is the beginning of the process of dismantling stereotypical representations of race. In a diverse nation and a diverse world, we need to better understand one another, this class will act as a step in that process.

62-195 Writing Satire for the Stage  
Fall: 9 units  
This course will teach you the basic craft of photography from exposure of the negative through darkroom developing and printing to print finishing and presentation. Content includes student presentations, class discussions, shooting assignments, darkroom sessions and class critiques. We will concentrate not only on the technical aspects of photography, but also the aesthetics of seeing with a camera. The course concentrates on photography as a fine art — what is unique to it and the concerns that are shared with other visual arts, such as composition, tonal values, etc. and aims to equip students with an understanding of the formal issues and the expressive potentials of the medium. Lab fee and 35mm manual camera required. Each student is responsible for the cost of paper and film.

62-196 Screenwriting  
Spring: 9 units  
This course is designed to give writers a variety of tools they can use in writing or rewriting a current project full-length screenplay. There will films assigned to watch and analyze. Either a first draft or a rewritten version of a full-length screenplay is to be completed by the end of the semester. Prerequisite: None.
62-207 IdeAte: Variational Geometry I
Fall: 6 units
This course will introduce concepts and strategies for the modeling and development of complex computational geometry for 3D printing purposes and introduce algorithmic thinking using the Rhinoceros McNeel platform and Grasshopper plugin. This course is intended for students with no or little 3-D modeling skills to advance their abilities in modeling, digital prototyping and visual communication.
Course Website: http://ideate.cmu.edu/about-ideate/departments/college-fine-arts/ideate-variational-geometry-i/

62-208 Alternative Photography: Contemporary Antiquarian Printmaking
Intermittent: 5 units
This focused, making-based course explores antique, handmade printmaking/photography methods through contemporary techniques. Students will learn how to make light-sensitive papers, while creating their own negatives digitally, combining both processes in a traditional darkroom. Students will use the Van Dyke, Cyanotype, and Platinum printing methods from start to finish, creating handmade, unique images that are distinct from those made with digital processes alone.

62-210 Stars, Kites and Darts: A Primer on Islamic Geometric Designs
Fall and Spring: 3 units
The title of this micro-course takes it name from the dominant geometric figures found in islamic style patterns, tiling and designs, in which is provided an overview of geometric designs across various islamic cultures, their compositional styles classified and the constructive composition of representative examples demonstrated. Students assignments mirror these exercises and include simple compositional analyses and developing an islamic design of their own.

62-214 Photography and the Narrative of Place
Intermittent: 5 units
This half-semester course will use photography to develop understandings of our surrounding environments. Students will choose a single location to work in, producing and researching its function in the community, its history, and its relationship to broader concepts and similar spaces. Weekly assignments will require students to work with a variety of photographic methods to construct a narrative that derives meaning from the complex connections between people, objects and the spaces they inhabit. Throughout the course, students will strengthen their understanding of the ways in which these tangible and abstract elements of our environments work together through in-class exercises, weekly discussions and critiques. The course work will culminate in a portfolio of the completed project. The class will study work and books by notable and emerging figures found in islamic style patterns, tiling and designs, in which is representative examples demonstrated. Students assignments mirror these exercises and include simple compositional analyses and developing an islamic design of their own.

62-221 Fly Me to The Moon with Cristi Morrow
Fall and Spring: 3 units
Students will learn basic skills or expand on their existing skill set, to create one of a kind, celestial themed jewelry out of borosilicate glass. Come ready with ideas and a sketchbook, as this class will begin with fundamentals and design, and move towards pieces tailored to your specific skill level or ideas. Possibilities include pendants, earrings and more. Class tuition includes 2 hours of open-studio time per student to be used during the 8-week course period. This will help you become familiar with the studio itself and learn the process of studio rental beyond class hours. Course is taught at the Pittsburgh Glass Center. Registration for Pittsburgh Glass Center classes can only be done on or after your scheduled registration day. Spaces are limited. Registration is done on a first come, first served basis. Please email Dan Barrett at dbarrett@andrew.cmu.edu to register. Course fee is $175. Not eligible for PCHE Cross Registration.

62-223 Glassy Botanicals
Fall and Spring: 3 units
In this class learn the basics of sculpting glass flowers out of Borosilicate glass. Working with both a bench and hand torch you will learn how to use and apply color, as well as how to shape petals, leaves, tendrils and more. A focus on solid hot seals will be covered and how bridging can be your friend. Both group and one-on-one demonstrations will be given. Please bring a sketch book and any ideas you have. Small to medium flora will be made. Class tuition includes 2 hours of open studio time per student to be used during the same class session. This will help students become familiar with the studio and learn the simple process of studio rental outside of class hours. Course is taught at the Pittsburgh Glass Center. Registration for Pittsburgh Glass Center classes can only be done on or after your scheduled registration day. Spaces are limited. Registration is done on a first come, first served basis. Please email Dan Barrett at dbarrett@andrew.cmu.edu to register. Course fee is $220. Not eligible for PCHE Cross Registration.

62-225 Generative Modeling
Fall and Spring: 9 units
This course introduces students to the fundamentals of generative modeling using computer aided design as practiced in the field of architecture. Core competencies will be developed through modeling projects and software intensive labs, while a broader critical framework for conceiving of design and thinking, and mass-customization. Rather than positioning parametric modeling as a disruption of historical architectural design process, the course will encourage students to consider how new tools might augment the discipline’s historical commitments to orthographic projection, perspective drawing, and physical modeling.

62-235 Photographing America
Intermittent: 10 units
In this course, students will create an original photographic project that responds to or builds on a legacy of photography that has sought to describe and often to critique the United States of America, its aspirations, and its challenges. Through readings and class discussion, students will examine a range of projects that addresses notions of America or an American character, including work produced by both American and foreign observers, including Walker Evans, Robert Frank, Diane Arbus, Stephen Shore, Hank Willis Thomas, Justine Kurland, Chris Maggio, and others. Students will develop their own ‘American’ body of work, culminating in a portfolio project. There is no prerequisite, but students must be comfortable with their photographic equipment as well as with Adobe Photoshop and digital output. Students who have not taken Digital Photography I should contact the instructor before the course begins.
62-240 Unfolding Environments: The Intersection of Person and Place
Fall and Spring: 10 units
This course will use photography to explore our surrounding environments. Assignments will focus on editing and image sequencing, combining the practices of portraiture, landscape, still life and observational photography to create narrative work that explores the complex connections between people, objects and the spaces they inhabit. Throughout the course, students will strengthen their understanding of the ways in which these tangible and abstract elements of our environments work together, while also developing their technical abilities by working with color and black and white images and varied light sources. Students will also learn approaches to project development and digital workflow. Discussions, readings, gallery visits and critiques will provide an outline for completing assignments. The class will study work and books by notable and emerging figures in the medium, including Robert Adams, Rineke Dijkstra, Carolyn Drake, Roy DeCarava, Milton Rogovin, Judith Joy Ross, Rinko Kawauchi, Alec Soth, Larry Sultan, Carrie Mae Weems and Susan Worsam. Required readings will include essays and short stories by Wendell Berry, Rebecca Solnit, Robert Walser and Albert Camus.

62-241 Black and White Photography II
Fall and Spring: 10 units
Black and White Photography II continues developing your technical skills in analog photography by introducing medium and large format cameras and prints. Large format view cameras remain the state of the art in control and quality in both film and digital photography. These cameras as well as unusual panoramic and pinhole cameras will be supplied. This course emphasizes aesthetic development and personal artistic growth through individual tutorials and group critiques, and will help to build professional level photography skills. Additional topics include digital printing and negative scanning, advanced monotone printing methods, and a focus on exhibition and folio presentation.
Prerequisites: 62-141 or 60-141

62-245 Portrait Photography
Intermittent: 10 units
Portraiture maintains a unique standing in photography for its direct and collaborative relationship between an individual and a photographer. This course will examine this relationship and the larger contexts which provide the conceptual framework for deriving meaning and understanding from an image of another person. We will study the theoretical and practical aspects of portrait photography in both studio and environmental settings, providing students with an understanding of the genre by developing both technical and conceptual skill sets. Students will utilize analog and digital equipment, learn studio lighting techniques, develop approaches to working with natural light, and explore methods of printing and presentation. Students will gain knowledge in the development of portraiture through the work of notable figures in the medium's history and contemporary field, including August Sander, Dorothea Lange, Walker Evans, Dawoud Bey, Milton Rogovin, Rineke Dijkstra, Zoe Strauss, Susan Lipper, Justine Kurland, Stefan Ruiz, Larry Sultan, Carrie Mae Weems, Roy DeCarava and Alec Soth. Class discussions, readings and critiques will provide an outline for completing both single and serial image assignments.
Course Website: http://cfaphoto.cfa.cmu.edu/classes17.html

62-247 Hot Glass I
Fall and Spring: 3 units
In this introductory class, learn to gather clear molten glass from the furnace and then shape it into various forms, from paperweights to simple blown shapes, such as cups and bowls. Instruction focuses on a team approach to glassblowing, with an emphasis on safety, proper tool use, basic techniques, and materials. You’ll never drink from a glass again without appreciating the energy and detail that went into making it! Little to no hot shop experience is required. You may also wish to take this class a second time in order to continue to develop and refine basic skills before moving on to Hot Glass 2. Each time you take it, your skill level, confidence, and passion for glass will grow. Class tuition includes 2 hours of open-studio time to be used during the 8-week course period. This will help you become familiar with the studio itself and learn the process of studio rental beyond class hours. Course is taught at the Pittsburgh Glass Center. Registration for Pittsburgh Glass Center classes can only be done on or after your scheduled registration day and is done on a first come, first serve basis. Please go to CFA Room 100 to register. Spaces are limited. Course fee is $175. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.
Course Website: https://www.pittsburghglasscenter.org

62-250 Beads, Beads, and, more Beads
Fall and Spring: 3 units
Make colorful beaded necklaces or stunning drop earrings using components you've designed and created yourself! Many beads will be created over the course of Fall & Spring and you'll learn the basic skills of heating Moretti (soft) glass, applying it to a mandrel, then using gravity and tools to shape it. first, learn to make round beads and alter their shape. Then, learn to add decorative color with techniques like encasing, dots, frits, trails, and more. While this class is for beginners, those with experience will focus on more advanced decorative techniques and shapes so they can take their beadmaking to the next level. Class tuition includes 2 hours of open-studio time to be used during the 8-week course period. This will help you become familiar with the studio itself and learn the process of studio rental beyond class hours. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Course fee is $175. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

62-251 Pendant Passion
Fall and Spring: 3 units
Spend 8 weeks creating your own collection of unique Borosilicate (hard glass) pendants. Learn to melt and manipulate glass while absorbing a number of different flameworking techniques and building a solid flameworking foundation. Some of the many techniques covered include compression, donut hole, dot stacks, and wrap and rake. This class is suitable for all levels, whether you are a beginner or a more experienced flameworker seeking to hone your torch and pendant-making skills. Class tuition includes 2 hours of open-studio time to be used during the 8-week course period. This will help you become familiar with the studio itself and learn the process of studio rental beyond class hours. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please send Dan Barrett at dbarrett@andrew.cmu.edu to register. Spaces are limited. Course fee is $175. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

62-252 Marble Madness
Intermittent: 3 units
Learn how to create a perfect sphere in soft Italian glass. You will begin with the basics of gathering and shaping the sphere. Then you will explore a number of decorative techniques and make various types of marbles from an onion skin, cat’s eye, vortex and implosion to name a few. No experience is required but more advanced students will also benefit. The class fee includes 2 hours of open studio time per student to be used during the same class session. This will help students become familiar with the studio and learn the simple process of studio rental outside of class hours. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Course fee is $175. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.
Course Website: https://www.pittsburghglasscenter.org

62-256 Introduction to Coldworking
Fall and Spring: 3 units
Learn about all of the equipment in the cold shop including belt sanders, flat grinders, dremels, lathes, the sandblaster, and the diamond saw. These tools can be used to create intricate patterns and textures on the surface of a variety of glass objects. You will complete several personalized projects. Students with prior glass experience will be provided items to cold work, but students with existing work they want to refine from other studios are welcome as well. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please register for this course in person at CFA Room 100. Spaces are limited. Course fee is $125. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

62-265 Alternative Photo Processes
Spring: 10 units
This experimental photo-printmaking hybrid introduces students to 19th century, non-silver and alternative photographic printing techniques. One-of-a-kind, hand-applied processes include: Van Dyke, cyanotype, salted paper, POP, albumen, platinum & palladium and bromoil. Students will produce large format imagery by use of traditional large format shooting, analogue negative enlarging and/or digital negative methods. In addition to the printing techniques, the class considers how to unite process with concept.
Prerequisites: 62-141 or 51-265 or 60-141
62-270 Stained Glass Table Lantern  
Fall and Spring: 3 units  
Over the course of 8 weeks, students will create a three-panel stained glass table lantern using the Tiffany’s fusing method. This class is a great start for beginners and will cover all the basics of class while also offering a new approach for those with previous experience. Students will choose from pre-selected patterns that match their skill level and will leave the class with a finished project that will light up any room. Class tuition includes 1 session of open-studio time per student to be used during the 8-week course period if needed to complete your project. This will help you become familiar with the studio itself and learn the process of studio rental beyond class hours. Projects are designed to be completed within the class time allotted; therefore, any studio time outside of class will need to be paid for as a studio rental. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Course fee is $220. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

62-275 Fundamentals of Computational Design  
Fall and Spring: 9 units  
As analog mechanisms; as metaphors; as bodily extensions or prosthetics; as material systems; as building envelopes; as partners or slaves of humans. This course takes computers outside the box and outlines a journey of discovery revealing computation as the connective tissue encompassing multiple facets of architecture and design culture and experience. Addressing conceptual and practical aspects of the relationship between computation and design, the course explores the fundamentals of generative and rule-based systems for designing and making, environmental simulation and responsiveness, and basic approaches to creative data processing, visualization, and manipulation. The course offers a holistic view of computation, exploring the different roles computing plays in the design of our artificial environments. The course is driven by themes, each combining state of the art examples, historical insight, and hands-on computational exploration. 
Prerequisite: 48-100

62-306 Music-Cinema-Culture  
Fall: 9 units  
This course reviews the first 100 years of the twentieth century’s original art form whose advent has brought about tremendous social and cultural changes. Students screen selected films, learning first the basics of film theory, cinema’s working structures and the function of music. Ultimately, they analyze, in the form of a written essay, the function and value of the music in a particular film and the cultural impact such music has had on society. The work of the course involves attendance at screening and practical discussions. Students are expected to present one report consisting of a critical review of the reading assigned. A final examination dealing with some film theory, music, and cultural politics will conclude the course.

62-314 The Art of Personal Finance  
Fall and Spring: 6 units  
Money is an inevitable part of our everyday lives. Managing the money we earn and living within our means is essential to ensure that we have the freedom to do what we want to do with our lives. However, even if we successfully eliminate debt and save for the future, true financial freedom will not exist unless we have a plan to guide us on our way. In this course, students will create a simple one-page financial plan that they can use to guide them through their next several years as they cultivate the skills that will ensure their artistic success. Additionally, they will develop the tools needed to support the execution of the plan and create a sourcebook of information they can refer to in the future as their lives (and their financial plans) change. For DRAMA students only.

62-315 iDeATe: Shaping the Built Environment: Experiments in Geometry and Matter  
Fall  
Shaping the Built Environment is a project based design-research seminar immersed in physical prototyping. SBE investigates adaptive dynamic behaviors inspired by natural processes and biomimetics as a basis for design ideas. Students are introduced to computational design thinking, material research, performance based design and digital fabrication techniques. Design process is centered on contemporary digital modeling techniques to incorporate environmental information into iterative design processes and form making. The objective of this seminar is to speculate about translation of performative contingencies into shaping material systems informed by data sets and simulation. We engage design processes in which systems' performance metrics underpin creative exploration of organization and form. The seminar results in the design and prototype of an individually proposed project. Students are immersed in digital parametric tools and contemporary digital fabrication processes, including 3D printing, CNC milling, vacuum forming and mold casting.

62-325 View Camera  
Intermittent: 10 units  
The nature of a 4x5” view camera alters both the process of making a photograph and the qualities of the resulting image. The slow, even cumbersome, process of photographing with a large format camera encourages a methodical, studied approach. The larger negative size and the ability to control the exposure and development of each sheet of film make possible an image of extraordinary clarity and detail. Through a series of exercises followed by a self-selected project, students in this class will learn the technical aspects, and master the use of, the view camera. Topics include perspective and focal plane control, bellows extension factor, and basic B&W sheet film handling and processing. Students should enter this course already possessing a working knowledge of photographic processing and printing. Prerequisites: 62-141 and any 200 level photo course or consent of instructor.

Prerequisites: 62-141 or 62-205 or 62-241 or 62-245 or 62-265 or 62-326 or 62-337 or 62-381
62-326 Photographic Narrative
Intermittent: 9 units

Most photographs tell stories. We see photographs in newspapers, magazines, snapshot albums, on the web, in books, and in posters. In these contexts photographs often work with words to convey meaning, whether they are shown with captions, news stories, or just with titles. Photographs can work without words, too, to create purely visual narratives. In this course, students will make two series of photographs: one that is fiction and one that is non-fiction. In addition to making photographs, students will determine the context in which their photo-stories will be seen. Students may make photo books, for example, or decide that their images will be seen on a website. While students are making photographs, we will explore the rich traditions of photographic story-telling that range from the world-oriented work of photo-journalist W. Eugene Smith to the documentarians such as Walker Evans, Nicholas Nixon, and Alec Soth. We will look at photographers, too, who constructed private worlds, such as Duane Michals, Cindy Sherman, Bruce Charlesworth, and Laurie Simmons. As students explore both fiction and non-fiction through photographs, we will look at the interesting interplay between words and photographic images; how images are paced and scaled to create tempo; how photographs are sequenced to tell stories; and other formal elements involved in creating visual narratives. Prerequisite: a college level photography course or consent of instructor. Prerequisites: 51-134 or 60-141 or 62-141

62-330 Italian Cinema after La dolce vita: Fellini at 100
Summer: 9 units

This course examines the oeuvre of Italian film master Federico Fellini (1920-2020) on the occasion of the centenary of his birth. Films like La dolce vita (1960) and Otto e mezzo (1963) offer a stunning social commentary on the Italian worldview of the 1960s while also revealing new ways to look at cinema. Fellini’s films and the unforgettable music by Nino Rota (1911-1979) that enhances them, will be discussed. This course is dedicated to exploring and appreciating Fellini’s dream-like themes and their uplifting messages about real life. Ultimately, the composition of a collage-type, collective paper will bring the course to a close.

62-332 Teaching and Learning
Spring: 3 units

In this course, students will learn about effective strategies for teaching architecture and the built environment. Topics include the cognitive differences between novices and experts, instructional techniques, and goal alignment. As part of the coursework, each student will implement these teaching strategies to design and teach a lesson. Elements of developmental psychology, learning theories, and classroom practices will inform the architectural education lesson. Teaching and learning techniques can be generalized for communication with clients, practice, and the community.

62-347 Hot Glass II
Fall and Spring: 3 units

Now that you’re hooked on hot glass, how do you keep the momentum going? By enrolling in Hot II, you will become more proficient working with glass. Refine and vary the cup and bowl shape in the first few weeks before moving on to more complex shapes. Explore basic methods of color application and learn how to troubleshoot common problems. The class fee includes 1 hour of studio rental time per class (or 2 hours with a partner), so that students can become familiar with the studio and learn the simple process of studio rental outside of class hours. Hot Glass I, 24 hours of hot shop experience, or permission of the instructor required. You may take this course more than once before moving on to Hot Glass III. Course is taught at the Pittsburgh Glass Center. Registration for Pittsburgh Glass Center classes can only be done on or after your scheduled registration day. Spaces are limited. Registration is done on a first come, first served basis. Please email Dan Barrett at dbarrret@andrew.cmu.edu to register. Course fee is $290. Not eligible for PCHE Cross Registration. Prerequisite: 62-247

Course Website: https://www.pittsburghglasscenter.org

62-358 Art and Biology
Intermittent: 9 units

A studio-laboratory art-making course designed to explore interactions between art and biology. It is an opportunity for students interested in interdisciplinary concepts to work both in a studio art environment and a biological laboratory. Students have the opportunity to experiment creatively with scientific media such as electron and video-probe microscopy.

62-360 Photographers and Photography Since World War II
Spring: 9 units

Invented in 1839, photography was a form of visual expression that immediately attracted a large public following. Starting around 1900, photography was practiced with two dominant strands. One of these firmly believed in the power of photographs to provide a window on the world, and was led by Lewis Hine, whose documentary photographs for the National Child Labor Committee helped to ameliorate living and working conditions for thousands of immigrant children. The other strand adhered to the philosophy of Alfred Stieglitz who adamantly affirmed that photographs were first and foremost reflections of the soul and were art objects, equal to painting, drawing and sculpture. These two schools of thought guided photographers throughout the twentieth century. This course explores in depth the tremendous range of photographic expression since World War II and examines in particular the contributions of significant image-makers such as Helen Levitt, W. Eugene Smith, Robert Frank, Diane Arbus, Garry Winograd, Charles ‘Teenie’ Harris, Cindy Sherman, Carrie Mae Weems, Nan Goldin, James Nachtwey, and many others. Classes include a slide lecture, student presentation, and video segments that introduce a focused selection of images by major photographers in an attempt to understand their intentions, styles, and influences.

62-361 Trajectories in Photography: From its Prehistory to 1945
Fall: 9 units

This course explores the development and practice of photography in relation to the massive social and political changes of the 19th and early 20th centuries. Topics will address modernity’s embrace of the visual, photography’s role in the rationalization of geographies and peoples, the promises of photography as a new technology; the position of photography in relation to developments in art; the emergence of photojournalism and documentary photography and the use of photography for advocacy; photography in relation to mass media; the photography of spirits and costumed animals. The course draws from various disciplinary perspectives including art history, anthropology, history, and science and technology studies. The course will include instructor lecture and student presentation. Class discussion will be an integral aspect of the class. No prerequisites.

62-362 IdeATE: Electronic Logics & Creative Practice
Intermittent: 12 units

Electronic Logics & Creative Practice investigates the fundamentals of electronic computation as metaphors for art and interaction. Students explore technology through a creative lens, as conceptual and physical material to be manipulated and synthesized, by examining the basis of digital computation alongside contemporary and new media art practices. There are three main units: Gates (the logical building blocks of computers), Flow (ways in which signals ‘flow’ through physical and electronic systems), and Arrows (the stacked layers of indirectness used in modern computer systems). These major themes are addressed through lecture, readings, and the creation of individual and collaborative works. Throughout the semester students complete a series of quick thematic exercises and three larger-scale projects; these works are reviewed through meetings, group critique, and documentation. Our toolbox includes 7400-series logic chips, the Arduino electronics platform, software, wood, laser cut acrylic, found objects, props, projections, and glue. We address technical engineering subjects (e.g. Karnaugh maps) alongside art and performance theory. Students deepen conceptual skills while increasing the scale and ambition of creative output. The course culminates in an end-of-semester showcase where students publicly exhibit their work.

62-371 Photography, The First 100 Years, 1839-1939
Fall: 9 units

Photography was announced to the world almost simultaneously in 1839, first in France and then a few months later in England. Accurate ‘likenesses’ of people were available to the masses, and soon reproducible images of faraway places were intriguing to all. This course will explore the earliest image-makers Daguerre and Fox Talbot, the Civil War photographs organized by Mathew Brady, the introduction in 1888 of the Kodak by George Eastman, the critically important social documentary photography of Jacob Riis and his successor, Lewis Hine, the Photo-Sccession of Alfred Stieglitz, the Harlem Renaissance of James VanDerZee, the precisionist f64 photographers Ansel Adams, Imogen Cunningham, and Edward Weston, and other important photographers who came before World War II. The class will be introduced to 19th century processes, such as the daguerreotype, tintype, and ambrotype, as well as albumen prints, cyanotypes, and more.
62-375 Large Format Photography: The Antiquarian Avant-Garde
Intermittent: 10 units
This course takes part in the anti-digital movement by exploring the roots of photography. Students will shoot with an array of large format cameras and use 19th and 21st century processes to create one-of-a-kind photographic imagery. Course topics include view camera techniques, experimental printing processes, pinhole lensless photography, and contemporary tintypes. Prerequisites: As listed or equivalent or consent of instructor. Prerequisites: 62-141 or 60-141

62-376 Meaning in Images
Intermittent: 4.5 units
Images abound in our culture. This course takes a critical look at many different kinds of photographic images to understand how they operate in our culture to inform, persuade, and entertain various audiences. The content for this course will be generated from looking at, thinking about and discussing issues discovered while studying well-known to lesser-known images that range from photographs used in ad campaigns, to photographs that are used in scientific representation, to snapshots in family photo albums, to photographs that are used to show social injustices, to photographs that exist in museum collections. Readings will be assigned and short writing exercises will be required throughout the semester. In addition, photography assignments will be given. Design majors will have preference. Requirement: a digital camera.

62-418 Theater Architecture II
Spring
CMU’s Theater Architecture Program is a multi-disciplinary collaboration of the College of Fine Arts’ Schools of Architecture and Drama and Heinz College’s Department of Arts Management. Founded in 2008, it is led by Hal H. Hayes, AIA, Studio Professor of Architecture, and Dick Block, Professor and Associate Head of Drama, with participation and collaboration by Drama & Architecture professor Cynthia Limauro and Heinz College associate dean Kathryn Heidemann. The program is an intensive semester comprised of a coordinated design studio in Architecture, a multi-disciplinary theater architecture seminar, live performance, attendance, venue tours, research and analysis, and meetings with professionals in the design, construction and operation of theaters and performance production. The curriculum includes research into the history and development of theater building typology, contemporary best practices and future trends of theater architecture, space programming, planning and design of theater buildings. The theaters that are the subject of the design projects are based on real projects and include the active participation of the theaters’ artistic and administrative leadership, the professional design teams engaged in the project, public officials and potential users of the proposed facility. Endowed support for the Theatre Architecture Program is provided by CMU Drama alumnus Len Auerbach, ASTC and J.R. Clancy, Inc., Logistical support and project participation has been provided by Alvin Alley American Dance Theater, Arup, H3 Hardy Collaborative, HOK, Jazz at Lincoln Center, The Joyce Theater, The New Hazlett Theater, New York City Economic Development Corp., Perkins + Will, Pittsburgh Cultural Trust, Pittsburgh Public Theater, Point Park University, Port Authority of NY and NJ, The Public Theater, Quantum Theater, Related Companies, San Francisco Symphony, Signature Theatre, SOM, Theatre For A New Audience.

62-420 Aesthetics and Critical Judgement
6 units
In this course, we will examine the question of how one judges a work of art. The course will provide an overview of the history of aesthetics in the Western tradition, and in the process we will examine the central questions of: defining beauty, evaluating the artistic object, determining what external factors are relevant to aesthetic judgments (time, culture, biography), and analyzing the inter-relationships between artist, audience, and artistic object. Beyond the knowledge gained, course objectives will include the cultivation of analytical skills in evaluating artistic expression and aesthetic theory, and the development of expository writing and speech skills in aesthetic analysis.

62-442 All about the Patterns
Intermittent: 3 units
Take your fusing to the next level by creating unique patterned glass. You will learn a variety of pattern bar techniques and how to incorporate each into fused platters or decorative wall hangings. Introduction to Fusing and Slumping or 24 hours of fusing experience with permission of the instructor is required. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Course fee is $220. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

62-443 Intermediate Fusing
Intermittent: 3 units
We will focus on perfecting our glass cutting skills and knowledge while revisiting ideas and techniques from introduction to fusing and slumping. Students will learn new ways to make their work unique by exploring color, creating their own art glass and being introduced to pattern bars while continuing to explore the scientific properties of glass and why it behaves the way it does. Students will be allotted a small color credit to their PGC account in order to become familiar with the simple procedure of purchasing materials for studio rental outside of class. Introduction to Fusing and Slumping or 24 hours of fusing experience with permission of the instructor is required. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Course fee is $217.50. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

Course Website: https://www.pittsburghglasscenter.org

62-444 Scratch the Surface: Color Techniques
Intermittent: 3 units
Immerse yourself in a world of endless techniques of color applications. Students will begin building a solid foundation in fusing while focusing on wrap & rake, pin-wheel designs, dot stacks and much, much more. While growing comfortable behind the torch a number of items will be made: marbles, pendants and small sculptures. Join us & get your creative juices flowing! Students will be allotted a small color credit to their PGC account in order to become familiar with the simple procedure of purchasing materials for studio rental outside of class. Flame I, 24 hours experience or permission of the instructor required. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Course fee is $175. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

62-445 Stained Glass Table Lantern
Intermittent: 3 units
Over the course of 8 weeks, you will create a three-panel stained glass table lantern using the Tiffany foiling method. This class is a great start for beginners! It will cover the basics of stained glass while also offering a new approach for those with previous stained glass experience. Students will choose from preselected patterns that match their skill level and will leave the class with a finished project that will light up any room. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Course fee is $217.50. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

Course Website: https://www.pittsburghglasscenter.org

62-446 Hot Glass III
Fall and Spring: 3 units
This class encourages focus on the techniques that interest you as a developing glass artist while still allowing for instructor-guided direction and support to refine basic skills and methodology. As you create unique vessels, learn about a broad range of more complicated techniques, including the use of solid colors, mold-blowing, and the creation of compound shapes. This class can be repeated as content will vary by session. You may also wish to take this class a second time in order to further develop and refine skills before moving on to Hot 4. Basic materials are provided. You will be allotted a $15 materials credit to use during this class session in order to become familiar with the procedure of purchasing materials and securing studio rental beyond class hours. Hot 2, 48 hours of hot shop experience, or instructor permission is required. Course is taught at the Pittsburgh Glass Center. Registration for Pittsburgh Glass Center classes can only be done on or after your scheduled registration day. Spaces are limited. Registration is done on a first come, first served basis. Please email Dan Barrett at dbarrrett@andrew.cmu.edu to register. Course fee is $290. Not eligible for PCHE Cross Registration. Prerequisite: 62-347

Course Website: https://www.pittsburghglasscenter.org

62-447 Hot Glass Open Projects
Fall and Spring: 3 units
There will be no weekly demonstration by the instructor. Students in this class will be encouraged to pursue their own ideas and maximize the available work time each week. Students should come to class with projects in mind and questions for the instructor. 48 hours hot glass class/workshop experience required, or by permission of the instructor. Basic materials provided. Registration can only be done on your scheduled registration day and is done on a first come, first serve basis. Please go to CFA 100 to sign up. Spaces are limited. Not eligible for PCHE Cross Registration. Course taught at the Pittsburgh Glass Center.

Prerequisite: 62-347

Course Website: https://www.pittsburghglasscenter.org

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62-450 Flame I: Introduction to Flameworking  
Fall and Spring: 3 units  
Learn flame shop essentials and be introduced to a variety of creative techniques while working with both Moretti (soft) and Borosilicate (hard) glass. Begin with a solid rod of glass and melt it into a molten ball that can be manipulated into little treasures, such as beads, pendants, marbles, chains, and sculptures. Over the course of 8 weeks, learn color application, hand control, and annealing. The instructor will also provide one-on-one troubleshooting. Class tuition includes 2 hours of open-studio time to be used during the 8-week course period. This will help you become familiar with the studio itself and learn the process of studio rental beyond class hours. Course is taught at the Pittsburgh Glass Center. Registration for Pittsburgh Glass Center classes can only be done on or after your scheduled registration day. Spaces are limited. Registration is done on a first come, first served basis. Please email Dan Barrett at dbarrett@andrew.cmu.edu to register. Course fee is $175. Not eligible for PCHE Cross Registration.  
Prerequisite: 62-453  
Course Website: https://www.pittsburghglasscenter.org

62-459 Intro to Stained Glass  
Fall and Spring: 3 units  
Explore the Tiffany method of stained glass while creating your very own panel from a variety of provided patterns. Learn the basic skills of cutting and shaping sheet glass, foiling the pieces, and soldering them together to create a mosaic-like whole. Once you master the pattern supplied and understand the intricacies of the process, you can begin to create luminous panels of your own design. Course is taught at the Pittsburgh Glass Center. Registration for Pittsburgh Glass Center classes can only be done on or after your scheduled registration day. Spaces are limited. Registration is done on a first come, first served basis. Please email Dan Barrett at dbarrett@andrew.cmu.edu to register. Course fee is $220. Not eligible for PCHE Cross Registration.  
Course Website: https://www.pittsburghglasscenter.org

62-464 Earring Clinic with Michael Mangiafico  
Intermittent: 3 units  
Explore the world of mandrel flameworked hanging style glass earrings through melting colorful soda lime glass that was manufactured in Italy. We will explore, make and incorporate traditional Venetian Zanferico that’s fancy glass canes into delicate ornaments for the ears. Pursue the anatomy of a well-proportioned earring all the while playing with sparkly dichroic coated glass and learning how to put together a ‘good loop for the pendant.  
Course Website: https://www.pittsburghglasscenter.org

62-471 Photography/Print Workshop  
Intermittent: 10 units  
In this course in Photography and Print, students will develop semester-long individual projects in contemporary photography, printmaking, artists books and/or multiples. Students will work in photography (traditional), alternative or digital processes (process), or print media (silkscreen, lithography, intaglio, monotype, etc), considering the ways one extends into the other, and the way that lens-based imagery might intersect with the hand-made. Readings, regular discussion, critique, field trips, and visiting artists will enhance the conversation and research. As a workshop, this course is for students who are ready to explore their work more deeply and create ambitious self-driven projects  
Prerequisite: 62-141

62-473 Books, Zines, and Multiples  
Intermittent: 10 units  
In this course, we will explore the possibilities for working with books, zines, and multiples as democratic prints, sculptural objects, site for time-based narratives, drawing, writing, documentation and so on. Students will be encouraged to experiment with a range of approaches to subject matter and form, with an eye on the relationship between originals and copies.  
Prerequisite: 62-475  
Course Website: https://www.pittsburghglasscenter.org

62-475 ACTIVATED ANAMORPHS: Performative Inhabitables and Interactive Prostheses  
Fall and Spring: 10 units  
This interdisciplinary studio course is centered around the relationship between wearable sculpture, prosthetic apparatus, DIY costume, movement, and identity-based performance. The course emphasizes hands-on experience, the development of visual skills, craftsmanship, conceptual development, and performance techniques. Class time will be spent designing and fabricating performative devices that alter, augment, mask, and transform the body and its inherent abilities. Various lectures, workshops, activities, presentations, and critiques will be included as an integral part of the learning process. Guest instructors from across the College of Fine Arts and outside of the institution will also provide lectures, and workshops that offer students multiple perspectives and techniques. Students will work in a variety of media, unveiling the meanings expressed through materials and investigating new ways to interact with our physical environment(s) through explorations in the adaptation, translation, enhancement, exaggeration, modification, and mutation of the human body. The course will involve student collaboration across disciplines, as well as rehearsals and public performances TBD.  
Course Website: https://courses.ideate.cmu.edu/62-475

62-478 IDeATe: digiTOOL  
Fall and Spring: 6 units  
This course serves as an introduction to the fundamental concepts, processes, and procedures to utilize digital and traditional equipment within the IDeATe facilities in Hunt Library. After completion, participating students should leave with a thorough understanding of 3D modeling, 3D printing, laser cutting, engraving, and basic finishing techniques. Students will learn how to operate in a safe, responsible, and efficient manner. This comprehension and experience proves useful for all creative disciplines, and participants are certified for future fabrication equipment access.  
Course Website: https://courses.ideate.cmu.edu/62-478
62-483 Growing Theatre Community Outreach  
Fall and Spring: 6 units  
Growing Theater engages students and mentors in the development of a collaborative theater experience. Through Mentor Role Modeling, Growing Theater uses drama as a medium to expose at-risk population of fifth graders from a local school to a supportive learning environment that is shared, creative, confident, patient and respectful. Growing Theater Mentors will broaden students’ personal and professional outlooks by guiding them through this theatrical process. The resulting play is performed in May at CMU. This course is open to all students, not just Drama majors.

62-661 Interaction and Expression using Pausch Bridge Lighting  
Fall and Spring: 3 units  
Working in cross-disciplinary teams, students will explore light as art, interactive design and programming using a Phasor lighting control system. Students will explore the use of light and interaction using the actual Randy Pausch Memorial Bridge. Students will develop final projects that will be exhibited on the actual Randy Pausch Memorial Bridge.

62-707 Introduction to Computational Geometry and Algorithmic Modeling  
Fall: 6 units  
This course will introduce concepts and strategies for the modeling and development of computational geometry for 3D printing purposes and introduce algorithmic thinking using the Rhinoceros McNeel platform and Grasshopper plugin. This course is intended for students with no or little 3-D modeling skills to advance their abilities in modeling, digital prototyping and visual communication.

Course Website: http://ideate.cmu.edu/about-ideate/departments/college-fine-arts/ideate-variational-geometry-i/

62-708 Theater Architecture I  
Spring: 6 units  
CMU's Theater Architecture Program is a multi-disciplinary collaboration of the College of Fine Arts' Schools of Architecture and Drama and Heinz College's Department of Arts Management. Founded in 2008, it is led by Hal H. Hayes, AIA, Studio Professor of Architecture, and Dick Block, Professor and Associate Head of Drama, with participation and collaboration by Drama & Architecture professor Cynthia Limauro and Heinz College associate dean Kathryn Heidemann. The program is an intensive semester comprised of a coordinated design studio in Architecture, a multi-disciplinary theater architecture seminar, live performance attendance, venue tours, research and analysis, and meetings with professionals in the design, construction and operation of theaters and performance production. The curriculum includes research into the history and development of theater building typology, contemporary best practices and future trends of theater architecture, space programming, planning and design of theater buildings. The theaters that are the subject of the design projects are based on real projects and include the active participation of the theaters' artistic and administrative leadership, the professional design teams engaged in the project, public officials and potential users of the proposed facility. Endowed support for the Theatre Architecture Program is provided by CMU Drama alumnus Len Auerbach, ASTC and J.R. Clancy, Inc.. Logistical support and project participation has been provided by Alvin Alley American Dance Theater, Arup, H3 Hardy Collaborative, HOK, Jaz at Lincoln Center, The Joyce Theater, The New Hazlett Theater, New York City Economic Development Corp., Perkins + Will, Pittsburgh Cultural Trust, Pittsburgh Public Theater, Point Park University, Port Authority of NY and NJ, The Public Theater, Quantum Theater, Related Companies, San Francisco Symphony, Signature Theatre, SOM, Theatre For A New Audience.

62-714 Galleries & Auction Houses: Economics of the Art Market  
6 units  
This class surveys the for-profit art gallery model. Topics include exploration of the business model and common practices of for-profit art galleries and the primary and secondary markets for art sales. Art Appraisals auctions and auction galleries artist procurement art collectors and investor cultivation as well as a profile of galleries will be discussed in detail. Students will be required to work an art auction and attend the opening receptions for local exhibitions. There will be a non-required trip to the gallery districts of New York City to visit galleries and talk to gallery directors and staff. Corporate art collections will also be discussed as well as how to set prices artist commissions artist agreements consignment sales and inventory will also be topics covered by this course.

62-715 IdeaTe: Shaping the Built Environment: Experiments in Geometry and Matter  
Fall  
Shaping the Built Environment is a project based design-research seminar immersed in physical prototyping. SBE investigates adaptive dynamic behaviors inspired by natural processes and biomimetics as a basis for design ideas. Students are introduced to computational design thinking, material research, performance based design and digital fabrication techniques. Design process is centered on contemporary digital modeling techniques to incorporate environmental information into iterative design processes and form making. The objective of this seminar is to speculate about translation of transformative contingencies into shaping material systems informed by data sets and simulation. We engage design processes in which systems' performance metrics underpin creative exploration of organization and form. The seminar results in the design and prototype of an individually proposed project. Students are immersed in digital parametric tools and contemporary digital fabrication processes, including 3D printing, CNC milling, vacuum forming and mold casting.

62-718 Theater Architecture II  
Spring  
CMU’s Theater Architecture Program is a multi-disciplinary collaboration of the College of Fine Arts’ Schools of Architecture and Drama and Heinz College’s Department of Arts Management. Founded in 2008, it is led by Hal H. Hayes, AIA, Studio Professor of Architecture, and Dick Block, Professor and Associate Head of Drama, with participation and collaboration by Drama & Architecture professor Cynthia Limauro and Heinz College associate dean Kathryn Heidemann. The program is an intensive semester comprised of a coordinated design studio in Architecture, a multi-disciplinary theater architecture seminar, live performance attendance, venue tours, research and analysis, and meetings with professionals in the design, construction and operation of theaters and performance production. The curriculum includes research into the history and development of theater building typology, contemporary best practices and future trends of theater architecture, space programming, planning and design of theater buildings. The theaters that are the subject of the design projects are based on real projects and include the active participation of the theaters’ artistic and administrative leadership, the professional design teams engaged in the project, public officials and potential users of the proposed facility. Endowed support for the Theatre Architecture Program is provided by CMU Drama alumnus Len Auerbach, ASTC and J.R. Clancy, Inc.. Logistical support and project participation has been provided by Alvin Alley American Dance Theater, Arup, H3 Hardy Collaborative, HOK, Jaz at Lincoln Center, The Joyce Theater, The New Hazlett Theater, New York City Economic Development Corp., Perkins + Will, Pittsburgh Cultural Trust, Pittsburgh Public Theater, Point Park University, Port Authority of NY and NJ, The Public Theater, Quantum Theater, Related Companies, San Francisco Symphony, Signature Theatre, SOM, Theatre For A New Audience.

62-775 ACTIVATED ANAMORPHS: Performative Inhabitables and Interactive Prostheses  
Fall and Spring: 10 units  
This interdisciplinary studio course is centered around the relationship between wearable sculpture, prosthetic apparatus, DIY costume, movement, and identity-based performance. The course emphasizes hands-on experience, the development of visual skills, craftsmanship, conceptual development, and performance techniques. Class time will be spent designing and fabricating performative devices that alter, augment, mask, and transform the body and its inherent abilities. Various lectures, workshops, activities, presentations, and critiques will be included as an integral part of the learning process. Guest instructors from across the College of Fine Arts and outside of the institution will also provide lectures, and workshops that offer students multiple perspectives and techniques. Students will work in a variety of media, unveiling the meanings expressed through materials and investigating new ways to interact with our physical environment(s) through explorations in the adaptation, translation, enhancement, exaggeration, modification, and mutation of the human body. The course will involve student collaboration across disciplines, as well as rehearsals and public performances TBD. This section is open to graduate students only.