TECHNICS (TECH)

TECH-223 Lost Wax Casting for Jewelry - (3 Credits)
Students will learn all aspects of wax working and lost wax casting in a scale appropriate to jewelry. This process will enable students to create metal models and rubber molds for multiple component parts used in fabrication finished pieces of jewelry or small-scale objects.

TECH-225 Jewelry Beyond Metal - (3 Credits)
In this course, students will work with alternative materials for the design and fabrication of small scale, wearable objects suitable for jewelry. Students will learn to manipulate a variety of materials such as wood, plastics, rubber and cement in combination with advanced cold metal connections and adhesives, thermal forming and carving to create samples and finished pieces.

TECH-227 Illustration: New Media I - (2 Credits)
The goal of this course is to analyze the current trends in styles employed in today's illustration field. The course also attempts to predict the directions which will be favored in the future. In addition, the student begins forming an individual vision through the development of drawing as a personal language.

TECH-228 Illustration: New Media II - (2 Credits)
This course focuses on drawing the human form (nude, fashion, and environmental) during the class session. In addition, five homework assignments, a sketch book and a portfolio composed of projects executed in diverse media are created. Student participation in classroom critiques is encouraged to further develop the individual's understanding of graphic design and illustration.

TECH-323 Metalsmithing for Table Top - (3 Credits)
In Metalsmithing, students will explore the properties of non-ferrous metals in greater depth. By practicing the fundamentals of forming using traditional and contemporary smithing techniques, chasing, repousse and anticlastic raising, students will create metal objects suitable for jewelry, sculpture or product design. Tool-making and advanced joining will be addressed for specific fabrication needs.

TECH-325 Color on Metal - (3 Credits)
Color on metal will introduce students to an array of advanced techniques for applying color to metal surfaces suitable for small scale and wearable objects. Traditional enameling, patina and resin applications, power coating and anodizing will be explored through demonstration and the execution of samples and finished pieces.

TECH-501 Drawing Anatomy I - (3 Credits)
Through observation and knowledge of the muscular-skeletal system and its functional kinetics, students are encouraged to express the human form in graphic language. The structural study of the human form enables a comprehensive and informative visual experience that subdues copying dependency and develops the selective force of expressive drawing. (Graduate level)

TECH-505 Kinetic Sculpture - (3 Credits)
Kinetic sculpture is art in any media that depends on motion * for its effect. This course presents the cross section of art, technology and science as it pertains to movement. Weekly lectures and demonstrations will introduce a series of motion principles involving; natural forces, wind, water, gravity, electricity of direct interaction with the viewer. Through assignments students will explore various principles of motion and research artists who implore these principles to achieve their formal and / or conceptual ends. Students will ultimately develop a final three-dimensional project based on one or a combination of these principles.

TECH-507 Painting Processes - (3 Credits)
Painting Processes offers a deep exploration of the technical and practical aspects of painting materials. Methods of instruction will include lectures, demonstrations, student research, and class discussions. Most importantly, students will engage in 'hands on\" interactions with the materials.

TECH-508 Wheel Throwing - (3 Credits)
The Potter's Wheel is an essential tool used in ceramics for thousands of years. Yet, work made on the Wheel today still feels fresh and contemporary. This course will teach you technical fundamentals needed to create work on the Potter's Wheel.

TECH-509 Ceramics I - (3 Credits)
This course explores ceramic processes through the development of form: coil, slab, pinch and wheel; and surface: slips, stains underglaze and glaze. Students will explore basic skill building in clay and develop their conceptual thinking in the medium through content driven class assignments and critiques.

TECH-510 Ceramics II - (3 Credits)
This class introduces students to the fabrication of ceramic multiples through moldmaking and casting with liquid clay(slip). Students will learn how to translate ideas and concepts, functional or sculptural, into clay while learning fundamental moldmaking skills and processes. Finishing will include glazing and firing. Projects are focused on skillbuilding, but also delve into concerns of objectmaking and strength of concept.

TECH-511 Ceramics III - (3 Credits)
Our experience with ceramics is paradoxically ancient and modern. Because clay has the remarkable ability to assume almost any form, it continues to elude and amaze us. This course will teach students advanced techniques needed to continue to master an investigation into ceramics.

TECH-512 Ceramics IV - (3 Credits)
This advanced studio will support the exploration of ceramics as a powerful expression of ideas in painting and sculpture. Class projects, discussions, and assigned readings will help develop students abilities toward critical thinking and writing about ceramic objects.

TECH-515 Clay & Glazes - (3 Credits)
Students will investigate the origins of clay and glaze and their chemical formulas, behaviors, and kiln transformations.

TECH-516 Pop-up Paper Engineering - (2 Credits)
This course covers the fundamentals of paper structure and movements as a 3-D and 4-D way to illustrate images or ideas. Pop-ups, or movables as they are historically called, have remained popular since the 18th century, because the viewer is required to be an active participant in the process. Because the artwork develops as the viewer opens the card or book in which the construction has been placed, the viewer feels that he/she takes part in the creation of art.

TECH-519 Woodworking I - (3 Credits)
This course introduces students to an array of woodworking and related fabrication techniques and processes. The use of hand, power and machine tools is taught through lectures, demonstrations and hands-on experience. Topics include basic woodworking techniques, safety procedures, wood identification, joinery, construction methods, shaping, turning, and finishing. Assigned and independent projects allow exploration while applying specific processes and techniques. Whether functional or sculptural, the goal of this course is to give students the knowledge to conceive and realize ideas in wood.

TECH-521 Slip Casting - (3 Credits)
Slip Casting I is an introduction to slip casting ceramics. Slip casting is a method of producing multiple objects in ceramics. Students will learn how to translate their ideas, functional or sculptural, and concepts into clay, while learning fundamental mold making skills and processes. Throughout the semester, students will learn how to produce plaster molds, cast their objects in liquid slip, finish, and fire their work. Projects are focused on skillbuiding, but also delve into concerns of objectmaking and strength of concept.

TECH-525 Plastics I - (3 Credits)
This course introduces students to the medium of thermoplastics where they will learn the materials and techniques of plastics fabrication including cutting and joining, vacuum forming, drape and blow injection, foams, thermosetting plastics and casting.

TECH-527 Casting and Moldmaking I - (3 Credits)
This course will give students the knowledge and the tools to be able to replicate an object in one material in a different material such as plaster, plastic, cement, clay and other non-metallic materials. Students will be assigned exercises on basic mold-making principles, beginning with piece mold construction, continuing to applications and uses of various flexible molding techniques and ending with the waste mold technique.

TECH-529 Foundry I - (3 Credits)
This course is an intensive, hands-on, exploration of the lost wax foundry process and related technologies. Students are guided through the sequential stages of this foundry process, from concept realization, to the preparation of a casting master, to refectory mold, to metal pour, to finished casting. Participants will follow traditional and contemporary procedures form using hand, electric and pneumatic tools. Participants will actively engaged in this masterful process to produce one finished cast bronze metal sculpture of 3D form.

TECH-531 Welding, Metal Fabrication, & Forge I - (3 Credits)
This hands-on course introduces the fundamentals of direct metal fabrication. Instruction and demonstrations are offered in basic processes such as welding, brazing, cutting, and shaping using the oxy-acetylene torch, shielded electric arc (MIG, TIG, Stick), plasma, various machine tools, and the forge.

TECH-533 Sheet Metal Shaping - (3 Credits)
This course will teach students how to make three-dimensional forms from sheet metal. Students will be able to produce a variety of volumetric forms for various purposes, from the simple to the complex, from abstract sculptural forms to functional applications.

TECH-545 Art of the Book I - (3 Credits)
This hands-on intensive class explores an array of traditional & experimental book structures essential to the production of conventional editions as well as complex, unique sculptural books. Students will create their own books based on the study of historic book structures and hands-on examination of numerous contemporary artist books. Central to this studio class is an emphasis on both technique and innovation so that students may explore the conceptual and material basis of the artist book.

TECH-546 Art of the Book II - (3 Credits)
This hands-on intensive class builds on the knowledge and skills that students have acquired from taking one of the introductory-level book classes at Pratt. Central to this studio class is an emphasis on both technique and innovation so that students may explore the conceptual and material basic of the 'artist book'. Students will produce a complex unique artist book and a small artist book edition.

TECH-547 Wood Fabrication & Components - (3 Credits)
This course introduces basic wood turing and bending techniques. Students will gain experience utilizing a variety of hand and power tools and equipment through lectures, technical demonstrations, and hands on experience in accordance with shop safety procedures. Students will apply and expand their knowledge through assigned projects.

TECH-563 Clay As Canvas - (3 Credits)
In this course Students learn how to develop forms in whiteware clay to create an individualized canvas for painting. The course covers application of color and /or photographic images to clay, silk screening on clay, and the use of ceramic stains, engobes, china paints, overglaze, airbrushing, acrylics and enamel paints. The focus is on developing individual projects.

TECH-574 Digital Tools for Object Makers - (3 Credits)
Through a series of hands-on exercises and projects, students will learn fundamental digital tools suitable for the design, modeling, rendering and production of objects. Students will primarily utilize Rhino in the design process, to generate technical drawings, create templates and produce files suitable for various CAM operations.

TECH-577 Introduction to Jewelry - (3 Credits)
This fundamental course is an introduction to basic direct metal fabrication techniques used to create small scale, wearable objects using non-ferrous metals. Design development is addressed as an extension of studio work with special attention paid to issues relating to scale and the body.

TECH-579 Machine Sewing and Needle Arts - (3 Credits)
This course instructs students in machine sewing and needle arts. The course will introduce fundamental sewing techniques needed to execute textile based fine arts, soft sculpture and soft industrial design projects. Students who complete the course will be certified to use basic sewing machinery in designated Fashion Design studios.