CONSERVATION COURSES FOR ART HISTORIANS AND ARCHAEOLOGISTS

The following three (3) courses fulfill the Foundations II requirement for art history students.

THE TECHNICAL CONNOISSEURSHIP OF WORKS OF ART ON PAPER
(Seminar, 3 points) FINH-GA.2303.001 [#2245]
(Independent Study, 1 point) FINH-GA.3545.001 [#1792]
Margaret Holben Ellis
Tuesday 10:00 AM – 12:00 PM

The physical and chemical properties of works of art on paper will be considered as an inherent aspect of art historical connoisseurship. Concurrent with the close study of both traditional and modern media and techniques, students will carry out complete technical examinations of one print and one drawing for final presentation to the class. Emphasis will be placed on the correlation of physical evidence as it relates to authenticity, original function, artist’s intent and present-day aesthetics.

The course is open to all art history, archaeology, and conservation students; enrollment is limited to 12 students. This course may be taken in fulfillment of the Foundations II requirement for art historians. Art history MA and PhD students must also register for FINH-GA.3545.001 for one additional point. Students must have the permission of the instructor before registering for this course.

CULTURAL HERITAGE IN TIMES OF ARMED CONFLICT
(Colloquium, 3 points) FINH-GA.2320.001 [#22013]
(Independent Study, 1 point) FINH-GA.3545.002 [#1973]
Dr. Norbert S. Baer
Tuesday 3:00 PM – 5:00 PM

Armed conflict, in its extreme case, war, remains a fundamental aspect of human behavior. While the central focus of the colloquium will be the preservation of cultural property, both movable and immovable, the historical record and modern writings examining the theory of war, conventions regarding the prosecution of war will provide background and context for the discussion of case studies involving individual conflicts, cities and monuments. An essential model to be considered is that of preparation, response and recovery as demonstrated in societal engagement with natural and environmental disasters. When considering the post-war recovery effort, the role of reparations, rebuilding and restitution after recent conflicts will be evaluated in response to modern conservation theory.

The course is open to all art history, archaeology, and conservation students; enrollment is limited to 10 students. This course may be taken in fulfillment of the Foundations II requirement for art historians. Art history MA and PhD students must also register for FINH-GA.3545.002 for one additional point. Students must have the permission of the instructor before registering for this course.
TOPICS IN TIME-BASED MEDIA CONSERVATION
(Lecture, 3 points) FINH-GA.2321.001 [#22014]
(Independent Study, 1 point) FINH-GA.3545.003 [#21725]

Conservation Center faculty and consultants
Coordinator: Christine Frohnert
Monday 3:00 PM – 5:00 PM

The course will examine one of the newest and fastest emerging fields in art conservation in both theory and practice: time-based media art. Technology-based artworks are referred to as time-based media (TBM) works, and are characterized by having a durational element, such as sound, slide, film, video, software, performance, light, movement, or internet, that unfolds to the viewer over time. Other terms commonly used for this new discipline are technology-based art, electronic media art, or media art. The conservation of TBM artworks is of increasing concern to the profession, not only because of the preservation challenges of rapidly obsolescing components, but also because of the artworks' very specific relationships to time, space, and concept. Conservators and curators must implement new conservation knowledge, examination techniques and strategies to preserve these artworks as well as their respective materials and technologies. An historical overview of the development of TBM art will set the basis for a closer look at the conservation challenges of media such as film, slide, video, light, sound, kinetic, interactive installations, as well as digitally-born, computer-based, and Internet art. The significant set of issues posed by the examination and the conservation of TBM, as well as issues that arise during the acquisition phase, will be discussed through case studies. Emphasis will be put on the decision-making processes based on ethical standards in conservation. The main resources and research projects worldwide that focus on TBM art conservation will be introduced.

The course will take advantage of the exceptional expertise in TBM art conservation by inviting 10 local and international scholars to present their area of research during a semester-long public lecture series. The course will meet twice a week, once during the scheduled class time and again for larger public lectures to be held on Monday evenings, from 6:00 PM – 7:00 PM. These events will allow input and to open a dialogue with a larger professional audience of TBM conservators, curators, archivists, computer scientists, artists and engineers from the greater New York City area.

The course is open to all art history, archaeology, and conservation students. This course may be taken in fulfillment of the Foundations II requirement for art historians. Art history MA and PhD students must also register for FINH-GA.3545.003 for one additional point.
COURSES FOR CONSERVATORS

MATERIAL SCIENCE OF ART & ARCHAEOLOGY I
(Lecture, 3 points) FINH-GA.2101.001 [#19527]
Dr. Norbert S. Baer
Thursday 3:00 PM – 5:00 PM

The course extends over two terms and is related to Technology and Structure of Works of Art I and II. Emphasis during this term is on problems related to the study and conservation of organic materials found in art and archaeology from ancient to contemporary periods. The preparation, manufacture, and identification of the materials used in the construction and conservation of works of art are studied, as are mechanisms of degradation and the physicochemical aspects of conservation treatments.

Enrollment is limited to conservation students and other qualified students with the permission of the faculty of the Conservation Center. This course is required for first-year conservation students.

TECHNOLOGY & STRUCTURE OF WORKS OF ART I: ORGANIC MATERIALS
(Lecture and Laboratory, 3 points) FINH-GA.2103.001 [#19525]
Conservation Center faculty and consultants
Coordinator: Michele Marincola
Tuesday & Thursday 10:00 AM – 12:00 PM (occasionally 10:00 AM – 1:00 PM)

The course introduces first-year conservation students to organic materials and the methods used to produce works of art, archaeological and ethnographic objects, and other historical artifacts, as well as to aspects of their deterioration and treatment histories. Emphasis is placed on the accurate identification of materials and description of techniques, the identification and evaluation of subsequent alterations, and an understanding of treatment history. As much as is practical and possible, students learn by looking at and examining objects directly. Each student is required to give three oral or written reports per semester on objects in the study collection and at The Metropolitan Museum of Art. In addition, grading will be based on a final exam. Classes may be a combination of lecture and laboratory. In order to accommodate field trips or laboratory exercises, some sessions may last longer than two hours and are arranged by the instructor with the class at the beginning of the term.

Enrollment is limited to conservation students and other qualified students with the permission of the faculty of the Conservation Center. This course is required for first-year conservation students.
INSTRUMENTAL ANALYSIS I
(Lecture and Laboratory, 3 points) FINH-GA.2105.001 [#21682]
Dr. Marco Leona
Monday 10:00 AM – 12:00 PM

The course provides an introduction to instrumental methods of examination and analysis that find frequent use in the field of conservation. As many of these methods invoke the use of x-rays, a significant part of the course is devoted to an understanding of their properties and applications. Methods of x-ray analysis, including radiography, diffraction, and spectrometry, are reviewed and accompanied by hands-on demonstrations and laboratory exercises aimed toward developing student capability for independent use. Equipment housed in both the Conservation Center and The Metropolitan Museum of Art is utilized and made available to the students. Proficiency is gained through analytical projects, homework assignments, and classroom discussion.

Enrollment is limited to conservation students and other qualified students with the permission of the faculty of the Conservation Center. This course is required for second-year conservation students.

PREVENTIVE CONSERVATION
(Lecture and Laboratory, 3 points) FINH-GA.2108.001 [#2232]
Hannelore Roemich and Steven Weintraub
Friday 2:00 PM – 5:00 PM

The course introduces students to all relevant issues of the museum environment: temperature and relative humidity, gaseous and particulate pollutants, light, and biological attack. The essential role of these parameters in the process of deterioration of cultural property is investigated. Guidelines for the proper storage, display, and transport of art objects are reviewed. Practical exercises include environmental monitoring of various sites and the evaluation of preventive conservation strategies. Cost-benefit analysis and risk assessment, emergency preparedness, and disaster response are exercised on selected case studies. Grading is based on an assigned laboratory experiment, a written report and an oral presentation. Students are also requested to participate in a practical exercise on show case refurbishment.

Enrollment is limited to conservation students and other qualified students with the permission of the faculty of the Conservation Center. This course is required for second-year conservation students.
EASEL PAINTINGS I
(Seminar and Laboratory, 3 points) FINH-GA.2201.001 [#1310]
Dianne Dwyer Modestini
Hours to be arranged

In the course of the semester, each student completes the consolidation, cleaning, filling, retouching, and varnishing of an Old Master painting drawn from Samuel H. Kress Collections in museums and universities across the United States. Examination, documentation of condition, and comparative study of other works by the same artist and school accompany the treatment. The student must provide a full report, including photographic records, other examination findings, and analytical results as indicated. The making of cross sections and their analysis is incorporated into the course in addition to imaging with X-ray radiography and Infrared Reflectography. Approaches to cleaning, compensation, and issues in connoisseurship relating to the particular painting are emphasized.

Students must have satisfactorily completed Technology and Structure of Works of Art. Priority is given to those students intending to specialize in paintings conservation, and enrollment is limited to advanced students in conservation. Students must have the permission of the instructor before registering for this course.

EASEL PAINTINGS III: STRUCTURAL TREATMENT OF PAINTINGS ON CANVAS
(Seminar & Laboratory, 3 points) FINH-GA.2203.001 [#21679]
Kristin Patterson
Hours to be arranged

This course addresses various approaches to the conservation problems encountered with paintings on fabric and focuses primarily on treatments for the support itself, although consolidation of the preparation and paint layers, presented in Easel Paintings II, will be readdressed. The topics include methods for flattening distortions and buckling, tear repair, making inserts, strip lining and other types of edge reinforcement, the application of protective facing, stretching a lining canvas, removal and remounting of paintings on their stretchers or strainers, alternatives to relining.

Students must have satisfactorily completed Technology and Structure of Works of Art I. Priority is given to students intending to specialize in paintings conservation, and enrollment is limited. Students must have the permission of the instructor before registering for this course.
THE CONSERVATION OF ASIAN & ARCHAEOLOGICAL OBJECTS
(Seminar & Laboratory, 3 points) FINH-GA.2218.001 [#23193]
Lawrence Becker
Thursday, 1:00 PM – 4:00 PM

This course will address the conservation treatment of Asian and archaeological objects, with a focus on South, Southeast, and East Asia, with examples from other areas also included. Issues affecting archaeological objects from different burial environments will be discussed. The course will also cover contemporaneous works that survived above ground in shrines, temples, or other contexts. Materials covered include metals (particularly gold, silver, and copper alloys), stone, ceramics, vitreous materials, wood, and other organic materials. Discussions of case studies and critical review of past or ongoing treatments will be included. The history of conservation practice as it relates to Asian and archaeological materials, as well as discussion of the materials favored and the distinctive technological choices made by Asian artists and craftsmen and how these choices have affected the history of the objects and ultimately influence their conservation, will be integrated into these discussions. Materials and methods of conservation, covering topics such as adhesives and consolidants, corrosion inhibitors, cleaning, structural issues, matte surfaces, biological attack, etc., and traditional methods employed in Asian cultures will also be covered.

Enrollment is limited to advanced students in conservation with the permission of the instructor required before registration.

APPLYING VALUES-BASED DECISION-MAKING IN OBJECTS CONSERVATION
(Seminar & Laboratory, 3 points) FINH-GA.2219.001 [#23194]
Michele Marincola
Wednesday, 10:00 AM – 1:00 PM

Works of art and artifacts are assigned values—aesthetic, cultural, spiritual, personal narrative, political, monetary—that shift in significance according to context. And yet conservation decision-making has often been carried out as if its activities are neutral, fixed, and generally applicable as long as the modern tenets of conservation are followed. This course explores the values we attach to cultural heritage, how they are assessed, and how they impact our decisions in documentation, analysis, handling and display, and treatment. Each week students are assigned readings for discussion that investigate significance and values in different types of objects. In addition, each student receives a work of art or artifact for examination and conservation to apply values-based decision-making in the formulation and execution of a treatment.

Enrollment is limited to advanced students in conservation with the permission of the instructor required before registration.
CONSERVATION STRATEGIES FOR NATURAL SCIENCE COLLECTIONS
(Seminar & Laboratory, 3 points) FINH-GA.2237.001 [#23195]
Fran Ritchie and Julia Sybalsky
Wednesday, 4:00 PM – 7:00 PM

This course will introduce students to a general overview of considerations and methods in the conservation of the diverse materials found in natural science collections. Students will complete 2-3 major independent projects in which they will be expected to complete all aspects of treatment, including examination, analysis, and documentation. Students will also complete 1-2 minor independent or group projects. Weekly sessions will include lecture(s) and hands-on components with regular in-class review of project progress and discussion of required readings. One or more field trips related to course material may also be scheduled. Topics covered will include mammalian and ornithological taxidermy; invertebrate collections; skins, hides and other animal materials; bone and osteological mounts; paleontological specimens; fluid collections; and geological materials. Each student will present a final talk (10-15 minutes) on their work throughout the course.

Enrollment is limited to advanced students in conservation with the permission of the instructor required before registration.

THE CONSERVATION TREATMENT OF PRINTS & DRAWINGS I
(Seminar and Laboratory, 3 points) FINH-GA.2240.001 [#1714]
Margaret Holben Ellis
Friday 10:00 AM – 1:00 PM

The materials and techniques of works of art on paper are reviewed with attention given to those characteristics that are vulnerable to inappropriate conservation treatments. Basic conservation treatments are introduced—surface cleaning, washing, drying, tear repair, and flattening—with emphasis on examination and documentation. Each student is expected to complete several partial exercises and at least one, full conservation treatment, including all testing, research, treatment, and documentation.

Enrollment is limited to advanced students in conservation. Students must have the permission of the instructor before registering for this course.
SPECIAL TOPICS IN THE CONSERVATION & EXHIBITION OF RARE BOOKS & MANUSCRIPTS
(Seminar and Laboratory, 3 points) FINH-GA 2244.001 [#1870]
Maria Fredericks
Hours to be arranged

Depending on the student’s previous experience, a treatment project will be chosen to build on existing skills in the examination, documentation and repair of historic book structures, and/or the creation of a new conservation binding. The project may consist of in-depth treatment of one single object, or stabilization of a group of items that present related conservation problems. The challenges inherent in the exhibition and loan of bound materials will be addressed in the context of the active programs at the Morgan Library & Museum. Students will be instructed in the design and specification of exhibition supports for books, and in the criteria used to evaluate loan requests and facilities reports in relation to the vulnerabilities of bound materials. Students will submit written reports of treatment together with supporting illustrative materials. A presentation at the annual student conference or a professional organization is encouraged.

Enrollment is limited to advanced students in conservation following the library and archive track with the permission of the instructor required before registration. A written project proposal must be approved by both faculty and supervising conservator. Students must have satisfactorily completed History of Book Structures Practicum.

THE TREATMENT OF BOUND MATERIALS IN THE RESEARCH LIBRARY & ARCHIVE
(Seminar and Laboratory, 3 points) FINH-GA 2245.001 [#1871]
Alexis Hagadorn
Hours to be arranged

Technical and aesthetic considerations of various methods in the conservation of bound works are considered within the context of the large collection setting. Treatment options, housing and storage are discussed in relation to examples from research library and archive collections, as well as examples treated in individual student projects. The interactions between the special collections book conservation laboratory, library public services, and the traditional library preservation activities of collection management and reformatting/digitization are given special emphasis. The student will carry out treatments of bound materials under the direction of Columbia University Library conservators. Treatments will be selected to enhance the student’s expertise as necessary. By the end of the course, the student should have completed at least one complex book treatment, such as a leather reback or board reattachment, a full-leather binding, washing, guarding and re-sewing and re-binding a textblock. The student will also gain experience in a range of treatments applied to the artifact in general library collections, and collection-level stabilization treatments such as leather consolidation, simple board reattachment, and cloth case rebacks. Weekly discussions with the conservators will introduce the student to
collection-wide re-housing, exhibition and imaging projects ongoing in the lab, as well as the conservator’s role in protecting collection items through all phases of use and storage within the research library. A presentation at the annual student conference or a professional organization is encouraged.

*Enrollment is limited to advanced students in conservation following the library and archive track with the permission of the instructor required before registration. A written project proposal must be approved by both faculty and supervising conservator. Students must have satisfactorily completed History of Book Structures Practicum.*

**INDIVIDUALIZED INSTRUCTION: TREATMENT OF DETERIORATED WORKS OF ART I**  
(Seminar and Laboratory, 3 points) FINH-GA.2280.001 [#1712]  
*Conservation Center faculty and consultants*  
Hours to be arranged

The student is assigned specific deteriorated objects related to their field of special interest. The student examines and records their condition and then recommends and performs courses of treatment. A review is made of published records of treatment of related works. Students submit written reports of treatment together with supporting illustrative materials.

*Enrollment is limited to advanced students in conservation. A written project proposal must be approved by both faculty and supervising conservator.*

**INDIVIDUALIZED INSTRUCTION: EXAMINATION & ANALYSIS I**  
(Seminar and Laboratory, 3 points) FINH-GA.2282.001 [#1713]  
*Conservation Center faculty and consultants*  
Hours to be arranged

This course involves the instrumental and scientific analysis of materials of a specific nature. Emphasis is placed on research to develop new methods of examining, preserving, and restoring works of art exhibiting particular types of structural failure. The results lead to a publishable paper.

*Enrollment is limited to advanced students in conservation. A written project proposal must be approved by both faculty and supervising conservator/conservation scientist.*