# Architecture & Interior Design (ARC)

# ARC 101. Beginning Design Studio. (5)

Introduction to spectrum of influences which determine environmental form. Emphasis placed upon development of understanding and appreciation of our man-made environment. Methods of communication and development of visual vocabulary capable of understanding and expressing three-dimensional form and space emphasized. Open to majors only.

# ARC 102. Beginning Design Studio. (5)

Introduction to spectrum of influences which determine environmental form. Emphasis placed upon development of understanding and appreciation of our man-made environment. Methods of communication and development of visual vocabulary capable of understanding and expressing three-dimensional form and space emphasized. Open to majors only.

Prerequisites: ARC 101 and ARC 113 or permission of instructor. Co-requisite: ARC 114 or permission of instructor.

# ARC 103. Shop Methods and Materials. (1)

An exploration and study of building materials and the tools and techniques used to shape them.

Co-requisite: ARC 101, ARC 501, ARC 601, or ARC 701.

# ARC 105. Introduction to Architecture. (3)

Introduction to spectrum of influences which determine environmental form. Emphasis placed upon development of understanding and appreciation of our man-made environment. Methods of communication and development of visual vocabulary capable of understanding and expressing three-dimensional form and space emphasized. Course supports transfers into Architecture + Interior Design, and others interested in exploring Architecture + Interior Design as majors.

# ARC 107. Global Design. (3)

Introduces the role and influence of design on people and environments within a contemporary global context. Open to students in all majors. IIA, IIIB. PA-3A, PA-4C.

# ARC 113. Methods of Presentation, Representation and Re-Presentation. (2)

Introduction to various graphic media as tools of environmental design. Emphasis is placed on use and integration of traditional and digital media as tools of 3-dimensional analysis and synthesis in design process and representation. Includes orthographics, perspective, sketching, drafting, photography, rendering, and web design. Open to majors only.

Co-requisite: ARC 101 or by permission of Instructor.

# ARC 114. Methods of Presentation, Representation and Re-Presentation. (2)

Introduction to various graphic media as tools of environmental design. Emphasis is placed on use and integration of traditional and digital media as tools of 3-dimensional analysis and synthesis in design process and representation. Includes orthographics, perspective, sketching, drafting, photography, rendering, and web design. Open to majors only.

Prerequisites: ARC 101 and ARC 113 or by permission of Instructor. Co-requisite: ARC 102 or by permission of Instructor.

# ARC 177. Independent Studies. (0-6; maximum 10)

# ARC 188. Ideas in Architecture. (3)

Study of the relationship between architecture and the cultural, social, and environmental contexts in which it exists through selected historical and contemporary examples. Primarily intended for non-majors. (Does not meet requirements for major in Architecture or Interior Design). IIA, IIB. PA-3A.

# ARC 201. Architecture Studio. (5)

Design of the environment as a creative process requiring a language and methods similar yet distinct from other arts. Design projects in man-made environment at different scales, and in natural and man-made environment interface. Introduction to paths in the environmental design curriculum and career opportunities. Open to majors only.

Prerequisite: ARC 101-102.

# ARC 202. Architecture Studio. (5)

Design of the environment as a creative process requiring a language and methods similar yet distinct from other arts. Design projects in man-made environment at different scales, and in natural and man-made environment interface. Introduction to paths in the environmental design curriculum and career opportunities. Open to majors only.

Prerequisites: ARC 201 and ARC 213. Co-requisite: ARC 214.

# ARC 203. Interior Design Studio. (5)

Introductory problems in interior design integrating aesthetic, social, technical, and graphic communication requirements. Emphasis on design theory, process, programming, and human factors. Focus on residential and small-scale commercial building types. Open to majors only.

Prerequisites: ARC 102 and ARC 114. Co-requisite: ARC 213.

# ARC 204. Interior Design Studio. (5)

Introductory problems in interior design integrating aesthetic, social, technical, and graphic communication requirements. Emphasis on design theory, process, programming, and human factors. Focus on residential and small-scale commercial building types. Open to majors only.

Prerequisites: ARC 203 and ARC 213. Co-requisite: ARC 214.

# ARC 211. Introduction to Landscape and Urban Design. (3)

Introduction to principles and elements of the larger environment: landscape and urban design. Co-requisite for architecture majors: ARC 202; co-requisite waived for nonmajors.

# ARC 212. Principles of Environmental Systems. (3)

Understanding of the basic principles that inform the design of environmental and structural systems and their integration into building design. V. PA-1A.

Co-requisite: ARC 211, ARC 201 or 203; co-requisite and prerequisite waived for nonmajors.

# ARC 213. Graphic Media III. (2)

Introduction to the use of graphic media as tools of architectural design. Emphasis placed on the integration of traditional and digital media in the design process. Includes CAD, rendering techniques, perspective, sketching and modeling.

Prerequisites: ARC 113 and ARC 114 or permission of instructor. Co-requisite: ARC 201 or 203.

# ARC 214. Graphic Media IV. (2)

Introduction to the use of graphic media as tools of architectural design. Emphasis placed on the integration of traditional and digital media in the design process. Includes 3-D modeling and rendering software, advanced rendering techniques, perspective sketching and modeling.

Prerequisites: ARC 113, ARC 114, and ARC 213 or by permission of instructor.

Co-requisite: ARC 202 or 204.

#### ARC 221. History of Architecture I. (3)

Thorough and systematic survey of the history of architecture, urban design, and allied arts across global contexts. Non-majors welcome. IIA, IIB. PA-3A, PA-3B.

# ARC 222. History of Architecture II. (3)

Thorough and systematic survey of the history of architecture, urban design, and allied arts across global contexts. Non-majors welcome. IIA, IIB. PA-3A, PA-3B.

# ARC 225. Design: Behavior, Perception, Aesthetics. (3)

Study of perception and psychological response to the built environment. Emphasis on cultural differences, design for special populations, ergonomics, and anthropometrics.

# ARC 277. Independent Studies. (0-6; maximum 10)

# ARC 301. Architecture Studio. (6)

Study of design processes and methods of implementation in the solution of architectural and other environmental design problems at an intermediate level of complexity.

Prerequisite: ARC 201-202; open to majors only.

### ARC 302. Architecture Studio. (6)

Study of design processes and methods of implementation in the solution of architectural and other environmental design problems at an intermediate level of complexity. Prerequisite: ARC 201-202; open to majors only.

# ARC 303. Interior Design Studio. (6)

Intermediate problems in interior design integrating aesthetic, social, technical, and graphic communication requirements. Emphasis on retail, institutional, hospitality, and preservation and reuse project types.

Prerequisite: ARC 203-204 or ARC 201-202; open to architecture majors with approval of instructor.

# ARC 304. Interior Design Studio. (6)

Intermediate problems in interior design integrating aesthetic, social, technical, and graphic communication requirements. Emphasis on retail, institutional, hospitality, and preservation and reuse project types.

Prerequisite: ARC 203-204 or ARC 201-202; open to architecture majors with approval of instructor.

# ARC 309. Furniture Design and Construction. (3)

Exploration of the process of designing, detailing, and constructing furniture and millwork. Introduction to the materials of architectural millwork and the technologies of construction. Studio exercises provide experience in both design and execution of furniture and millwork.

Prerequisite: third-year standing or approval of instructor; required for interior design majors; open to nonmajors with approval of instructor.

#### ARC 321. History of Interiors. (3)

Thorough and systematic survey of interior design from prehistoric times to present. Emphasis on the social and cultural influences on the design and evolution of interior environments. Prerequisite: ARC 221-222.

ARC 340. Internship. (0-20; maximum 3)

#### ARC 377. Independent Studies. (0-6; maximum 10)

#### ARC 401. Architecture Studio. (6)

Study of design processes and methods of implementation in the comprehensive solution of complex environmental design problems. Prerequisite: ARC 301-302; open to majors only.

# ARC 402. Architecture Studio. (6)

Study of design processes and methods of implementation in the comprehensive solution of complex environmental design problems. Prerequisite: ARC 301-302; open to majors only.

#### ARC 402C. Senior Studio Capstone Experience. (6)

This is a culminating studio in which the exploration of professional issues is placed in dialogue with questions raised by liberal learning. Students will be expected to examine how technical and aesthetic issues interact with professional, social, political, and cultural issues. A weekly seminar component will treat a common set of readings selected to help students compare their discoveries and interrogate their perceptions about their work. SC.

Prerequisite: Intended for architecture majors who have completed 7 semesters of design studio; students with extensive training and background in related design areas may petition the studio faculty for admission and selection will be based on the strength of an interview and a design portfolio.

#### ARC 403. Interior Design Studio. (6)

Comprehensive studio integrating all programmatic, technical, and professional requirements of a complex project. Emphasis on space planning, systems furniture design, and the preparation of construction drawings and specifications for a commercial office project. Open to architecture majors with approval of instructor. Prerequisites: ARC 303, 304 or ARC302.

# ARC 404/ARC 504. Seminars. (1-3)

Courses in three of the primary curricular areas: communication process; history and theory; environmental systems/practice. Offerings vary. May include: housing, contemporary architecture theory and practice, vernacular architecture, urban studies, architectural theory, exploration of graphic media, advanced work in building systems, etc. Seminar descriptions available at departmental office during preregistration each semester. Nonmajors encouraged to seek course work in their area of interest.

#### ARC 405/ARC 505. Seminars. (1-3)

Courses in three of the primary curricular areas: communication process; history and theory; environmental systems/practice. Offerings vary. May include: housing, contemporary architecture theory and practice, vernacular architecture, urban studies, architectural theory, exploration of graphic media, advanced work in building systems, etc. Seminar descriptions available at departmental office during preregistration each semester. Nonmajors encouraged to seek course work in their area of interest.

# ARC 406/ARC 506. Seminars. (1-3)

Courses in three of the primary curricular areas: communication process; history and theory; environmental systems/practice. Offerings vary. May include: housing, contemporary architecture theory and practice, vernacular architecture, urban studies, architectural theory, exploration of graphic media, advanced work in building systems, etc. Seminar descriptions available at departmental office during preregistration each semester. Nonmajors encouraged to seek course work in their area of interest.

#### ARC 408. Interior Design Studio. (6)

Summative studio integrating liberal learning and specialized knowledge in a single, complex project of the student's choosing. Open to interior design majors only. SC. Prerequisite: ARC 403.

# ARC 410/ARC 510. Statics & Strengths of Materials. (3)

An introduction to two dimensional engineering statics and mechanics of materials. Topics covered include the study of rigid bodies in static equilibrium and the study of the mechanics of materials with emphasis on stress and strain relationships.

# ARC 411/ARC 511. Structural Design. (3)

Development of basic applied knowledge in the design of structural elements and systems using common constructional materials in accordance with relevant code requirements. Prerequisite: ARC 410/ARC 510.

# ARC 412/ARC 512. Structural Design. (3)

Development of basic applied knowledge in the design of structural elements and systems using common constructional materials in accordance with relevant code requirements. Prerequisite: ARC 410/ARC 510.

#### ARC 413/ARC 513. Environmental Systems I. (3)

Understanding of the basic principles that inform the design of environmental systems, with an emphasis on the building envelope and energy-efficient systems, heat gain and loss, alternative energy systems, the design and integration of climate control systems (heating, ventilating, air-conditioning), and plumbing and fire prevention systems.

#### ARC 414/ARC 514. Environmental Systems II. (3)

Understanding of the basic principles that inform the design of environmental systems, with an emphasis on lighting and power/ data systems. Course topics include acoustics, life-safety systems, and building service systems.

# ARC 417/ARC 517. Architectural Materials. (3)

Introduction to materials and criteria for selection in architectural structures.

Prerequisite: ARC 212.

#### ARC 418/ARC 518. Construction Methods. (3)

Systematic approach to construction. Investigation of systems, concepts, and system building. Prerequisite: ARC 417/ARC 517.

# ARC 419. Materials of Interior Design. (3)

Exploration of the various materials and finishes available to the interior designer, their inherent characteristics, and the ways in which they can be combined into construction assemblies. Emphasis on interior finish materials and textiles.

Prerequisite: ARC 212 or permission of instructor.

# ARC 424/ARC 524. Seminar on Modern Architecture in Latin America. (3)

The course combines general background readings on the subject with specific readings on a selected group of countries, architects and projects based on a thematic organization. The faculty presents introductory lectures, while class members will present the results of individual and team research and analysis as assigned. Some of the analysis will be graphical, some will be written; all presentations will require illustrations of the work(s) in question. Cross-listed with LAS.

#### ARC 426/ARC 526. Architecture and Society. (3)

Examination of the relation between design professions and varying social-economic orders, with special emphasis given to the effect of this order on theory and practice of architecture.

# ARC 427/ARC 527. The American City Since 1940. (3)

Examination of the American city and its physical transformation since 1940. Studies how different experiences of the city are conditioned by issues of class, race, gender, culture. Arc427 is a hybrid structure with face to face and online classes taught between Oxford and Miami University's Center for Community Engagement in Over-The-Rhine (CCE-OTR). Students can be in either location.

# ARC 435/ARC 535. Theory and History of Landscape Architecture. (3)

Examination of the role of the landscape architect in the environmental design process through discussion of history, methodology, and practice of contemporary landscape design.

#### ARC 436. Independent Research & Programming. (3)

Seminar course focuses on the cultivation and discipline necessary to conduct independent research investigating real-world issues from multiple perspectives, including gathering, analyzing, and synthesizing information from various sources in order to develop credible and valid evidence-based arguments (qualitative and quantitative research) as foundation for design decision-making. Course designed in tandem with ARC 408 Interior Design Studio; this course provides the research framework to deeply explore a topic, problem, or issue of individual interest, and to develop a formal project proposal (scope, size, scale, location, program, design intention, etc.) that will serve as the basis for a highly developed interior design solution for a complex facility in the spring interior design (capstone) studio. Prerequisite: ARC 303 or ARC 304.

#### ARC 441/ARC 541. Professional Practice. (3)

Awareness of current legal problems and professional ethics relative to handling building projects from feasibility studies through development drawings, contract documents, bidding, and construction observation.

Prerequisite: fourth year standing.

#### ARC 444. Professional Practice in Interior Design. (3)

Investigation of processes, practices, and ethics involved in interior design profession. Course emphasizes integration of specifications, cost estimating, office and project management, and contract writing into the design process.

Prerequisite: fourth-year standing or approval of instructor.

# ARC 451/ARC 551. Contemporary Architectural Theory and Practice. (3)

This seminar explores and critiques contemporary theories and practices that inform current domestic and global architectural works by considering the intellectual, cultural, and technological forces that shape them.

### ARC 477. Independent Studies. (0-6; maximum 10)

ARC 490/ARC 590. Independent Studies. (1-3)

**ARC 582. Architectural Design Studio. (6)** Design Studio for M.Arch. Graduate Students.

**ARC 583. Architectural Design Studio. (6)** Design Studio for M.Arch. Graduate Students.

**ARC 601. Architecture Studio. (6)** Professional-level architectural studio; variable topics.

#### ARC 602. Architecture Studio. (6)

Professional-level architectural studio; variable topics. Prerequisites: ARC 601 or by permission of instructor.

#### ARC 613. Graphic Media II. (2-3; maximum 3)

Course taken in the Fall in conjunction with ARC582 studio. Objective includes the full breadth of design communication techniques such as hand-based processes, digital 2D processes and 3D modeling and introduces modeling software, as well as time-based processes such as video, animation and web presentation techniques. In addition to skill based learning objectives, ARC613 supports architecture design communication based in history and contemporary theory. The graphic media sequence of ARC 612, ARC 613, ARC 614 encompass creative expressivity, design analysis and representation through analytical, orthographic, and speculative drawings, media, and models.

#### ARC 614. Graphic Media III. (2-3; maximum 3)

Course completed in Spring in conjunction with ARC583 studio. Objective continues the full breadth of design communication techniques such as hand-based processes, digital 2D processes and 3D modeling and modeling software, as well as time-based processes such as video, animation and web presentation techniques. In addition to skill based learning objectives, ARC614 supports architecture design communication based in history and contemporary theory. The graphic media sequence of ARC612, ARC613, ARC614 encompass creative expressivity, design analysis and representation through analytical, orthographic, and speculative drawings and models.

# ARC 621. History of Architecture I. (3)

Thorough and systematic survey of the history of architecture, urban design, and allied arts across global contexts.

#### ARC 622. History of Architecture II. (3)

Thorough and systematic survey of the history of architecture, urban design, and allied arts across global contexts.

#### ARC 634. Architectural Theory. (3)

Introduction to techniques and procedures involved in methodical architectural research. Each student undertakes research project on a particular aspect of design. Open to majors only.

#### ARC 636. Design & Research Methods. (3)

Essentials of architectural and cultural theory and possible research methods in support of theses and scholarly activity. Prerequisites: ARC 634 or by permission of instructor.

# ARC 677. Independent Studies. (0-6; maximum 10)

#### ARC 690. Independent Studies. (1-3)

#### ARC 701. Pre-Thesis Design Studio. (6)

Comprehensive, professional-level architectural studio with visiting critics. Open to majors only. (6) Students engage in design issues facilitated through a series of thesis preparatory problems during the first half of the term. Preparatory problems are conducted when possible with visiting scholars and may involve travel to engage significant scholars and design problem settings. The second half of the term involves the presentation of the written thesis research document to a panel of nationally recognized critics and a final end of the semester presentation focusing on the student's thesis program and site design.

Prerequisites: ARC 601; ARC 602 or by permission of instructor.

#### ARC 702. Thesis Design Studio. (6)

Students select a major field of interest and pursue in-depth study and research into special areas of concentration, such as architectural design, environmental controls, architectural structures, or urban and regional planning. Open to majors only.

Prerequisites: ARC 636; ARC 701 or by permission of instructor.