Fall 2020 Course Descriptions as of 04/05/2020 08:10 PM

Information in Browse Course Catalog is subject to change. Information is term specific. Please refer to the appropriate term when searching for course content. Key to Course Descriptions may be found at: http://rcs.registrar.arizona.edu/course_descriptions_key.

Architecture (ARC)

ARC 100: JTED Architectural Foundation Course (3 units)

Description: Introduction to fundamental design skills found at the University level, including: understanding of ordering principles, visual analysis, site analysis, programmatic ordering, technical and freehand drawing and use of digital tools to establish a critical framework for thinking and making.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Enrollment in a JTED program.

ARC 101A: Foundation Studio IA (3 units)

Description: Introduces fundamentals of design and architecture through drawing, modeling,

and digital methods with an introduction to history + theory of the built environment.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Studio Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Admission to Pre-Architecture

ARC 101B: Foundation Studio IB (3 units)

Description: Introduces fundamentals of design and architecture through drawing, modeling,

and digital methods with an introduction to history + theory of the built environment.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Studio Required

Course typically offered: Main Campus: Fall, Spring

Enrollment requirement: ARC 101A

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

May Be Offered Departments may offer this component in some semesters. See the Schedule of

Classes for term-specific offerings.

ARC 102: Foundation Studio II (6 units)

Description: Development of ordering systems skills via model building, technical drawing, and

the introduction of digital tools, to establish a critical framework for thinking and making.

Grading basis: Regular Grades

Career: Undergraduate

Other Fee: \$100 fee will be applied for students enrolled in Summer session.

Course Components: Lecture Required Studio Required

Course typically offered: Main Campus: Spring, Summer

Enrollment requirement: ARC 101A and ARC 101B.

ARC 121: Physical Principles of the Built Environment (2 units)

Description: An introduction to the physical principles used in the design of the built environment, including thermodynamics, structural efficiency, and biophysical design.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered: Main Campus: Spring, Summer

Field trip: None

Honors Course: Honors Contract **Honors Course:** Honors Contract

ARC 131A: Thinking about Architecture I (1 unit)

Description: The course provides the first-half overview of the role of architecture in the design

of the built environment using examples of notable buildings and structures.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered: Main Campus: Fall, Spring

Field trip: None.

Honors Course: Honors Contract **Honors Course:** Honors Contract

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 131B: Thinking about Architecture II (1 unit)

Description: The course provides the second-half overview of the role of architecture in the

design of the built environment using examples of notable buildings and structures.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: ARC 131a | Thinking About Architecture

Field trip: none.

Honors Course: Honors Contract **Honors Course:** Honors Contract

ARC 160C1: Architecture and Society (3 units)

Description: The built environment has, 'a permanent and profound impact on (our) personal health, productivity and happiness, and on community life.' The purpose of this course lay the foundation of architectural literacy. The basis of this knowledge is found in understanding the relationship between a society and the forms it creates. This is accomplished through studying the major components that effect architecture: region, culture, and technology. the course follows these factors through the history of western civilization, from ancient Greece to contemporary Europe and America. Greater emphasis is given to the contemporary period because radical changes in technology and resources make this information more pertinent to the present.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Discussion May Be Offered

Lecture Required

Course typically offered:

Main Campus: Fall, Spring, Summer

Enrollment requirement: Enrollment not allowed if you have previously taken TRAD 103

"Architecture and Society" (Topic 1). **General Education:** TRAD 103

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 160D1: Sonora (3 units)

Description: Multi-disciplinary intro to the Sonoran Region of Southern Arizona and Northwest Mexico. Through a series of presentations by scientists, poets, historians, folklorists, architects and other passionate observers, the course engages students with meaningful dialogue

concerning one's position and obligation to a specific place.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Discussion May Be Offered

Lecture Required

Course typically offered:

Main Campus: Fall, Spring, Summer

Enrollment requirement: Enrollment not allowed if you have previously taken TRAD 104

"Sonora" (Topic 26).

General Education: TRAD 104

ARC 195A: Introduction to Architecture (1 unit)

Description: This course will provide the student with the basic tools to evaluate architecture in the world around them relative to historical precedents, and understand the role of the architect

in creating these forms.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Colloquium Required

Course typically offered: Main Campus: Fall, Spring

Freshman Colloquia: Freshman Colloquia

ARC 201: Design Studio I: Site, Form, + Space (6 units)

Description: Explores the design of buildings and sites, from concept to form and space. Investigates domestic and public domains and implications of habitation and civic life

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Admission to professional phase.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 202: Design Studio II: Making Meaning (6 units)

Description: Explores generative and poetic design processes that reveal the meaning of place

through material, spatial, structural, and environmental connections.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: C or better in ARC 201.

Field trip: Field trip

ARC 210: Building Information Modeling for Engineers (3 units)

Description: This course focuses on the role of Building Information Modeling (BIM) in Architecture and Engineering. Students will learn the fundamental processes of BIM based on 3D computer drafting, including site analysis and data extraction, basic model building, dimensioning, planning, and elevations, parametric modeling, documentation, and 3D rendering.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Also offered as: ARCE 210 Course typically offered: Main Campus: Spring

Enrollment requirement: (ENGR 102A and ENGR 102B) or ENGR 102. College of

Engineering students only.

ARC 220: History of Applied Building Technology (3 units)

Description: This course will provide an overview of global architectural history from the Industrial Revolution to today with an emphasis on how architects apply historical knowledge in contemporary practice.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: 2 courses from Tier One -

Traditions/Cultures.

General Education: Tier 2 Humanities

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 221: Construction I (3 units)

Description: This first of 6 required courses in the Technology Stream focuses on application of

physical principles in the design and performance of buildings and sites.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Workshop Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: This course is open to students in the B.Arch degree and to others by permission of instructor.

ARC 222: Building Technologies I (3 units)

Description: This course introduces fundamentals of structural and environmental forces and

flows in building design for environmentally adaptive systems.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Workshop Required

Also offered as: ARCE 222 Course typically offered: Main Campus: Spring

Recommendations and additional information: ARC 221. Open to majors only.

ARC 223: Building Technology III, EAS I (3 units)

Description: This course introduces fundamentals of environmentally adaptive architectural design, including bioclimatics, electromagnetics, fluid physics, and the related interactions with

materials, form, and spatial composition.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Laboratory Required

Lecture Required

Also offered as: ARCE 223 Course typically offered: Main Campus: Spring

Recommendations and additional information: ARC 221.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 231: HISTORY+THEORY I (3 - 4 units)

Description: Considers the creation, use and interpretation of ancient and medieval architecture from a variety of perspectives, including environmental, functional, material,

structural, formal, socio-political, and cultural.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: May Be Offered Discussion

> Lecture Required

Co-convened with:

Course typically offered:

Main Campus: Fall

ARC 232: History+Theory II (3 - 4 units)

Description: Explores cultural, social, technological, and ideological influences on the built environments of global cultures, from the earliest habitations through the Renaissance.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Discussion May Be Offered

> Required Lecture

Co-convened with:

Course typically offered: Main Campus: Spring

ARC 241: Techne I (3 units)

Description: This course investigates analog and digital techniques for the development of

architectural ideas in fabrication and representation.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Required Lecture Workshop Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Admission to professional phase.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 242: Techne II (3 units)

Description: This course teaches intermediate fabrication and design skills, related to wood,

ceramics, and plastics, with a focus on digital fabrication.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required Workshop Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Acceptance into the B.Arch professional

program.

Enrollment requirement: Students must complete ARC 241.

ARC 294: Practicum (1 - 4 units)

Description: The practical application, on an individual basis, of previously studied theory and

the collection of data for future theoretical interpretation.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 294 Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 299: Independent Study (1 - 4 units)

Description: Qualified students working on an individual basis with professors who have

agreed to supervise such work.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 299
Course typically offered:

Main Campus: Fall, Spring, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 299H: Honors Independent Study (1 - 3 units)

Description: Qualified students working on an individual basis with professors who have

agreed to supervise such work. **Grading basis:** Regular Grades

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 299H Course typically offered:

Main Campus: Fall, Spring, Summer

Enrollment requirement: Student must be active in the Honors College.

Honors Course: Honors Course **Honors Course:** Honors Course

ARC 301: Design Studio III: Integrations of Place (6 units)

Description: Investigates the integration of buildings and place through the intersection of physical and cultural landscapes, including environmentally-responsive questions and

resolutions.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: C or better in ARC 202.

Student Engagement Activity: Creative Expression

Student Engagement Competency: Innovation and Creativity

ARC 302: Design Studio IV: Urban I Housing (6 units)

Description: Investigates multi-family housing and design for urban contexts. Multi-use programs are developed from social, conceptual, typological, and technical perspectives.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: C or better in ARC 301.

Student Engagement Activity: Creative Expression Student Engagement Competency: Sustainability

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 303: Investigating the Exhibition (3 units)

Description: This course will examine contemporary exhibitions in the Americas and Europe with the intention of sensitizing the student to the connections between art, design and architecture.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered: Main Campus: Fall, Summer

General Education: Tier 2 Humanities

ARC 304: Visual Literacy: Communication in Photography, Graphics, Art, and

Architecture (3 units)

Description: Using historical, theoretical, and contemporary material this course will examine still and moving photography, graphics, and art as critical tools of formal and conceptual communication.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered: Main Campus: Spring, Summer

General Education: Tier 2 Arts

ARC 321: Building Technologies II (3 units)

Description: This course focuses on elements of building technology: principles of structural behavior; force and vector analysis; staticequilibrium, and environmentally adaptive architectural design.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required Workshop Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Successful completion of ARC 222 |

BUILDING TECHNOLOGIES I or permission of instructor.

Student Engagement Activity: Professional Development

Student Engagement Competency: Professionalism

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 322: Building Construction II (3 units)

Description: This fourth of 5 required courses in the Technology Stream focuses on the fundamental integration of environmentally adaptive systems in small-scale buildings.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required Workshop Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Successful completion of ARC 221 |

BUILDING CONSTRUCTION I or permission of instructor.

Student Engagement Activity: Professional Development

Student Engagement Competency: Professionalism

ARC 325: History of Modern Architecture (3 units)

Description: This course is a historical and theoretical survey of significant developments in modern architecture since the industrial revolution. It will consider the impact of changing philosophies and technologies that have impacted the modern view of the built environment. Special focus will be placed on 19th-century historicism, early 20th-century avant-gardes, and Post-WWII practices that embraced sociology and new types of technology.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Equivalent to: ARC 325 Also offered as: ARH 325 Course typically offered: Main Campus: Fall, Spring

Home department: Division of Art History

General Education: Tier 2 Arts **Honors Course**: Honors Contract **Honors Course**: Honors Contract

⁻CC represents a Correspondence Course offering

ARC 326: Practice I (2 units)

Description: Introduces site analysis and site design principles relating to the physical,

biological, cultural and regulatory attributes of a site.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Admission to professional phase; Concurrent

registration, ARC 201. Prereq: BArch major or permission of instructor

Student Engagement Activity: Professional Development Student Engagement Competency: Professionalism

ARC 330: On Light and Lighting (3 units)

Description: This course focuses on Light and Lighting in its various forms from Technology and Science, via the Human Condition to the Built Environment. The Students will hear about Theory, History and Culture; Physics and Optics; Science and Technology. Hands on design exercises will enable the Students a basic knowledge for documentation, to develop channels of communication and language, tools to evaluate data and synthesize the information.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Also offered as: ARCE 330 Course typically offered: Main Campus: Spring

Field trip: Site Visit 1: Biosphere II Transportation Cost varies (Shared \$10-50)Site Visit 2: SMOCA Transportation Cost Varies (Shared \$15-60)Site Visit 3: Kitt Peak Transportation Cost Varies (Shared \$10-50)

Enrollment requirement: Adv Stdg: Engineering and ENGR 211M .College of Engineering students only.

ARC 332: History+Theory III: Modern and Contemporary Architecture (3 - 4 units)

Description: The study of modern, postmodern, and contemporary architecture through examination of works and theories and their impact on the discipline of architecture.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Discussion May Be Offered

Lecture Required

Co-convened with: ARC 533 Course typically offered:

Main Campus: Fall

Recommendations and additional information: Successful Completion of ARC 232 | History II or permission of instructor.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 333: Forms of Critical Inquiry and Expression (3 units)

Description: Bridges the Core and Research Path stages of the curriculum, inviting students to

position their work theoretically and historically and to postulate a career trajectory.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Discussion Required Lecture Required

Course typically offered: Main Campus: Spring

Field trip: None

Enrollment requirement: Successful completion of ARC 231 and 232 and 332 or permission of

the instructor.

ARC 336: Practice II (3 units)

Description: Introduces students to contracts, office practices, and ethical issues facing the profession, with focus on pre-design and programming methodologies, including problem

seeking and goal identification. **Grading basis:** Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Professional Phase or permission from

instructor.

Field trip: None

ARC 341: Techne III (3 units)

Description: This course teaches the development of digital communication tools and techniques for the study, design, representation and construction of architectural ideas.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Workshop Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: ARC 241; Concurrent registration, ARC 301.

Student Engagement Activity: Professional Development Student Engagement Competency: Professionalism

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 343: Art and Archaeology of Ancient Egypt (3 units)

Description: Art and archaeology of the Egyptian civilization from the beginning of the

Pharaonic Period to the Alexandrian Age.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Equivalent to: ANTH 334, ANTH 343, ARC 343, ARH 334, ARH 343, ART 334, CLAS 334,

NES 343

Also offered as: ANTH 343, ARH 343, CLAS 343, MENA 343

Course typically offered:

Main Campus: Fall, Spring, Summer

Home department: Religious Studies and Classics

ARC 392: Directed Research (1 - 6 units)

Description: Individual or small group research under the guidance of faculty.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Independent Study Required

Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 394: Practicum (3 units)

Description: The practical application, on an individual basis, of previously studied theory and

the collection of data for future theoretical interpretation.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 394 Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 399: Independent Study (1 - 3 units)

Description: Qualified students working on an individual basis with professors who have

agreed to supervise such work.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 399 **Course typically offered:**

Main Campus: Fall, Spring, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

May Be Offered Departments may offer this component in some semesters. See the Schedule of

Classes for term-specific offerings.

ARC 399H: Honors Independent Study (1 - 3 units)

Description: Qualified students working on an individual basis with professors who have

agreed to supervise such work. **Grading basis:** Regular Grades

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 399H Course typically offered:

Main Campus: Fall, Spring, Summer

Enrollment requirement: Student must be active in the Honors College.

Honors Course: Honors Course **Honors Course**: Honors Course

ARC 400A: Senior Engineering Design Studio (6 units)

Description: Students will use design thinking and architectural design processes to understand how a building is designed and readied for the engineering component of

construction documentation. **Grading basis:** Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Field trip: local field trips

Enrollment requirement: Adv Stdg: Engineering. ARCE 340 and CE 333, and completed prior

or co-registered for ARCE 408A.

ARC 401: Design Studio VI: Comprehensive Integration (6 units)

Description: Develops a comprehensive building for an urban site, addressing complex contextual and performative criteria with the integration of urban design, space, construction, and building systems.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: C or better in ARC 302. Concurrent

enrollment in ARC 441.

Student Engagement Activity: Professional Development Student Engagement Competency: Professionalism

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

May Be Offered Departments may offer this component in some semesters. See the Schedule of

Classes for term-specific offerings.

ARC 403: Art and Architecture of the Islamic World (3 units)

Description: Principal achievements in Islamic architecture 680-1600, AD/CE, understand the

achievements in social/cultural contexts, become familiar with vocabulary and basic methodologies of the field, and consider historical evolution of our knowledge and

understanding of this architecture. **Grading basis:** Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Equivalent to: ARC 403, ARH 403 **Also offered as:** ARH 403, MENA 403

Co-convened with:
Course typically offered:
Main Campus: Spring

Home department: School of Middle Eastern and North African Studies

ARC 410E: Options Studio I (6 units)

Description: This course applies the fundamental skills and knowledge acquired in the CORE phase of the degree to ambiguous or complex situations involving collaboration, research, or actual practice settings. Coming immediately after Milestone 2, these studios initiate the RESEARCH+APPLICATION phase of the degree. This studio may belong to a Phase 3 (P3) research cluster, may include actual project work for a client, or may involve study abroad opportunities.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: C or better in ARC 401. Successful passage

of milestone 2.0.

Field trip: Optional field trip(s).

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 421: Building Technologies III (3 units)

Description: This final of 5 required courses in the Technology Stream focuses on the comprehensive integration of advanced, large-scale environmentally-adaptive and structural

building systems.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Workshop Required

Course typically offered:

Main Campus: Fall

Enrollment requirement: Successful completion of ARC 322 | BUILDING CONSTRUCTION II,

or permission of instructor.

Student Engagement Activity: Professional Development

Student Engagement Competency: Sustainability

ARC 441: Practice III (3 units)

Description: Introduces students to the technical drawings and supporting documentation

needed to convey design intent to the various parties involved in realizing built work.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Equivalent to: ARCH 439 Course typically offered:

Main Campus: Fall

Recommendations and additional information: Co-requisite of ARC 401.

Student Engagement Activity: Professional Development **Student Engagement Competency:** Professionalism

ARC 451B: Design Studio VII: Application (6 units)

Description: Application of previously-learned core design skills to design research, foreign contexts, collaborative methods, multi-disciplinary work, design/build problems, or urban design

outreach.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: C or better in ARC 451A.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 452H: Honors Design Studio VIII: Senior Project (6 units)

Description: Independent and/or faculty coordinated design of a comprehensive Capstone project through which students delineate an architectural position, and situate it in historical and

contemporary practice.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Studio Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: C or better in ARC 451B. Successful

completion of ARC 498, capstone prep.

Enrollment requirement: Student must be active in the Honors College.

Honors Course: Honors Course **Honors Course:** Honors Course

ARC 459: Ethics and Practice (3 units)

Description: The purpose of the course is to acquaint the advanced student with the practical

issues architects face in professional practice.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 559 Course typically offered: Main Campus: Spring

Recommendations and additional information: Successful passage of Milestone 2.

Student Engagement Activity: Leadership

Student Engagement Competency: Professionalism

ARC 461A: Water Efficiency in Buildings (3 units)

Description: Learn methods and advanced techniques that conserve urban water usage while promoting water harvesting, water reuse, and water energy generation technologies in and

around buildings.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 561A Course typically offered: Main Campus: Spring

Recommendations and additional information: Upper division undergraduate student, graduate standing or permission of instructor.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 461D: Computer Energy Analysis (3 units)

Description: A comprehensive course that teaches students energy conservation and passive solar architecture and up-to-date computer energy simulation techniques. The course promotes students learning through field investigation of existing buildings and/or new design projects.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Equivalent to: ARCH 463 Co-convened with: ARC 561D Course typically offered:

Main Campus: Fall

Student Engagement Activity: Professional Development

Student Engagement Competency: Sustainability

ARC 461E: Sustainable Design and the LEED Initiative (3 units)

Description: A comprehensive course that focuses on sustainable design through energy conservation, passive solar architecture, and advanced computer energy simulation techniques. Develop thorough understanding of "Green Building Design"; currently the fastest growing segment of the building industry. Master advanced computer energy analysis using the industry standards DOE's eQUEST software. Learn about the LEED' "Leadership in Energy and Environmental Design" Green Building Rating System for New Construction and become a LEED' Accredited Professional.

Required

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture

Workshop Required

Equivalent to: ARCH 483
Co-convened with: ARC 561E
Course typically offered:
Main Campus: Spring

Student Engagement Activity: Professional Development

Student Engagement Competency: Sustainability

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 4611: Materials: Properties and Tests (3 units)

Description: Three modules: (1) materials: classifications, physical properties, phenomenal (aesthetic) properties, and fabrication processes; (2) laboratory tests (probes) for empirical verification; and (3) selection of appropriate materials in the design and production of architectonic functional components (details)-preferably at full size.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Fourth-year standing or higher.

ARC 461J: Materials: Modeling (3 units)

Description: Modeling must not operate by precepts, but by the culture of experimentation, eliciting aesthetic and rational judgment in the free play between mind and matter. The play must be heuristic, inducing its own sense (or meta-logic) from the activity itself. The products must include in themselves their own meter for evaluation.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 561J Course typically offered:

Main Campus: Fall

Recommendations and additional information: Third-fifth year or graduate status. Familiarity with material crafts recommended.

ARC 461K: Energy and the Environment (3 units)

Description: A fully online course that fosters awareness and thorough understanding of the qualitative and quantifiable environmental forces that contribute to energy use in buildings. The course introduces basics for understanding solar energy and light, climate and microclimate, and human thermal comfort as related to the built environment.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 561K Course typically offered: Main Campus: Summer

Online Campus: Fall, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 461L: Energy Use in Buildings (3 units)

Description: Understand the quantitative and qualitative factors that contribute to energy flows

and consumption in buildings' thermal performance.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 561L Course typically offered: Main Campus: Summer Online Campus: Fall

Recommendations and additional information: Graduate or upper division standing. Access to internet connection and digital camera, purchase of non-contact laser-guided Infrared Temperature Gun (from ARC461k/561k), and U-12 HOBO© Data Logger (temp/RH/light/external) from Onset Computers for \$130.

ARC 461M: Energy Efficient Design (3 units)

Description: Focuses on principles of energy efficient design through investigation of buildings, divided into four categories: baseline, passive design, active design, and net-zero building.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 561M Course typically offered: Main Campus: Spring Online Campus: Spring

Recommendations and additional information: ARC 461K, ARC 461L

ARC 461N: Energy Auditing and Modeling (3 units)

Description: Focuses on principles of energy efficient design through investigation of buildings,

divided into two categories: energy modeling and energy auditing.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 561N Course typically offered: Main Campus: Spring Online Campus: Spring

Recommendations and additional information: ARC 461K and ARC 461L

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 461P: Environmental Science Laboratory (3 units)

Description: This comprehensive course focuses on understanding sustainable design through investigation of the most important environmental design principles including thermal comfort,

daylight, shading, and ventilation. **Grading basis:** Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Workshop Required

Co-convened with: ARC 561P Course typically offered:

Main Campus: Fall

Recommendations and additional information: Required for upper division undergrads.

Student Engagement Activity: Professional Development

Student Engagement Competency: Sustainability

ARC 461Q: Special Topics in Architectural Research (3 units)

Description: Directed research based course on emergent topics of interest to the profession. Students will develop problem-solving skills while conducting research on pre-selected topics.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 561Q Course typically offered: Main Campus: Spring

Student Engagement Activity: Discovery

Student Engagement Competency: Innovation and Creativity

ARC 471F: Introduction to Heritage Conservation (3 units)

Description: An overview of the interdisciplinary paradigms, principles, programs, and players

in the field of heritage conservation ranging from local to international contexts.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Also offered as: LAR 471F

Co-convened with:
Course typically offered:

Main Campus: Fall

Home department: School of Landscape Architecture and Planning

Student Engagement Activity: Professional Development **Student Engagement Competency:** Interdisciplinarity

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 471N: Arid Region Urbanism: Arizona/Sonora (3 units)

Description: Students will investigate and understand the cultural, historical and environmental dimensions of city-building in arid regions, with an emphasis on the Arizona/Sonora border

region.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Seminar Required

Co-convened with: ARC 571N Course typically offered:

Main Campus: Fall

Student Engagement Activity: Intercultural Exploration
Student Engagement Competency: Global and Intercultural

ARC 471S: History + Theory of Architecture IV: Contemporary Architecture and Urban

Theory (3 units)

Description: This course explores major intellectual paradigms in contemporary architectural

and urban theory.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 571S Course typically offered:

Main Campus: Fall Online Campus: Fall

Recommendations and additional information: ARC 332 or permission of instructor.

ARC 481E: Architecture in the Mediterranean (3 units)

Description: Develop awareness of architecture, places and spaces in new cultures. Experience uses of space, materials, structural techniques and cultural expression. Highest priority placed on recording new and different experiences emphasizing creativeness, character and expression.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Equivalent to: ARCH 443
Co-convened with: ARC 581E
Course typically offered:
Main Campus: Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 481F: Biomimetics (3 units)

Description: This course emphasizes the study and application of biological principles as

essential design parameters, Biomimetics.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Co-convened with: ARC 581F Course typically offered: Main Campus: Spring

Recommendations and additional information: ARC 341. Familiarity (and interest) with parametric software and digital fabrication processes.

ARC 4811: Introductory Building Information Modeling (BIM) Design and Documentation (4 units)

Description: This course teaches fundamentals of Building Information Modeling (BIM) and its emerging place in professional practice. REVIT is used to teach design and construction documentation.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Laboratory Required

Co-convened with: ARC 5811 Course typically offered: Main Campus: Summer

Recommendations and additional information: Completion of the 2nd year of the B.Arch degree or permission of instructor.

ARC 481J: Advanced Building Information Modeling (BIM) Design and Documentation (4 units)

Description: This course teaches advanced Building Information Modeling (BIM) and its emerging place in professional practice. REVIT is used to teach design and construction documentation.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Laboratory Required

Co-convened with: ARC 581J Course typically offered: Main Campus: Summer

Recommendations and additional information: Completion of ARC 481I Introductory Building Information Modeling (BIM) Design and Documentation, or approval of instructor.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 491: Preceptorship (1 - 3 units)

Description: Specialized work on an individual basis, consisting of instruction and practice in actual service in a department, program, or discipline. Teaching formats may include seminars,

in-depth studies, laboratory work and patient study.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 491 Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 492: Directed Research (1 - 6 units)

Description: Individual or small group research under the guidance of faculty.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Independent Study Required

Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 493: Internship (1 - 3 units)

Description: Specialized work on an individual basis, consisting of training and practice in

actual service in a technical, business, or governmental establishment.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated for a maximum of 3 units.

Equivalent to: ARCH 493 Course typically offered:

Main Campus: Fall, Spring, Summer

Recommendations and additional information: Fourth year or above.

Student Engagement Activity: Professional Development Student Engagement Competency: Professionalism

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 493L: Legislative Internship (1 - 12 units)

Description: Working experience at the Arizona State Legislature; responsibilities draw upon student's area of major expertise and include preparing written and oral reports, summarizing legislative proposals, and providing information to legislators and legislative committees.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 493L **Course typically offered:**

Main Campus: Fall, Spring, Summer

ARC 494: Practicum (3 units)

Description: The practical application, on an individual basis, of previously studied theory and

the collection of data for future theoretical interpretation.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 494 Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 495H: Honors Colloquia (1 unit)

Description: This course examines scholarship in architectural design, education, and practice.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Colloquium Required **Repeatable:** Course can be repeated a maximum of 3 times.

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Third year (junior) standing or permission of

instructor.

Enrollment requirement: Student must be active in the Honors College.

Honors Course: Honors Course **Honors Course:** Honors Course

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 496A: Design Communications Elective (3 units)

Description: This course explores a specific Design Communications topic in depth; may be

taken up to four times under different topics by permission of Stream Coordinator.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 596A Course typically offered: Main Campus: Fall, Spring

ARC 496B: History + Theory Elective (3 units)

Description: This course explores specific History and/or Theory of Architecture topics indepth; it may be taken up to four times under different topics by permission of the Stream

Coordinator.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 571B Course typically offered: Main Campus: Fall, Spring

Field trip: Field trips may be required, depending on topic.

ARC 496C: Practice Elective (3 units)

Description: This course explores specific Practice topics in depth; it may be taken up to four

times under different topics by permission of the Stream Coordinator.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: Course typically offered: Main Campus: Fall, Spring

Field trip: depends on topic and faculty

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ARC 496D: Technology Elective (3 units)

Description: This course explores specific Technology topics in depth: it may be taken up to

four times under different topics by permission of the Stream Coordinator.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 596D Course typically offered: Main Campus: Fall, Spring

ARC 497: Project Inquiry (3 units)

Description: Research into issues relevant to the discipline and of interest to the student, with

programming, site analysis, and other preparatory work for ARC 498.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Workshop Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Must receive C or better in ARC 451a to take this course. This course must be taken in the semester immediately preceding ARC 498. Must receive C or better to advance to ARC 498.

ARC 497A: Research Methods (3 units)

Description: An interdisciplinary survey of research methods applicable to research in

Architecture, Planning, and Landscape Architecture.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Workshop Required

Equivalent to: ARCH 496B Co-convened with: ARC 597A Course typically offered:

Main Campus: Fall

Recommendations and additional information: 5th-year or graduate standing.

Student Engagement Activity: Discovery

Student Engagement Competency: Professionalism

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-CC represents a Correspondence Course offering

ARC 497B: Special Topics in Architecture (3 units)

Description: The practical application of theoretical learning within a group setting and involving an exchange of ideas and practical methods, skills, and principles. Students may take

497B/597B up to four times provided the topics are different.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Workshop Required **Repeatable:** Course can be repeated a maximum of 4 times.

Equivalent to: ARCH 497B Co-convened with: ARC 597B Course typically offered:

Main Campus: Fall, Spring, Summer

Student Engagement Activity: Discovery

Student Engagement Competency: Global and Intercultural

ARC 497D: Reading Architecture (3 units)

Description: The course provides a philosophical framework to find meaning and creative

potentials in a close reading of contemporary architecture.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Workshop Required

Co-convened with: ARC 597D Course typically offered:

Main Campus: Fall

Recommendations and additional information: M.Arch students, B.Arch students in 4th-Year and above. 3rd Year B.Arch and other CAPLA graduate students by permission of instructor.

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⁻CC represents a Correspondence Course offering

ARC 497J: Documentation and Interpretation of the Historic Built Environment (3 units)

Description: Examines methods to document buildings, districts and cultural landscapes and methods to interpret historical and architectural significance. Focuses on historic built environments of Greater Southwest including semester-long service-learning project applying

documentation and interpretation methodologies.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Workshop Required

Equivalent to: LAR 497J, PLG 497J, PLN 497J

Also offered as: LAR 497J, PLG 497J

Co-convened with: LAR 597J Course typically offered: Main Campus: Spring

Recommendations and additional information: ARC 471F or consent of instructor.

Home department: School of Landscape Architecture and Planning

Enrollment requirement: ARC 471F

Student Engagement Activity: Community Partnership Student Engagement Competency: Diversity and Identity

ARC 497K: The Portfolio: Advanced Graphics, Presentation, Layout, and Design (3 units) Description: The development of an individual portfolio, comprised of improved past work, that demonstrates the student's philosophy, design, graphic skills, digital literacy, and technical abilities.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Workshop Required

Co-convened with: ARC 597K **Course typically offered:**

Main Campus: Fall

Recommendations and additional information: ARC 302 or permission of instructor.

ARC 497V: Affordable Housing and Community Development (3 units)

Description: The course focuses on housing and community development issues. Its purpose is to understand the nature of housing development, particularly for the lower income sectors of the community, and its relation to community development.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Workshop Required

Also offered as: PLG 497V

Co-convened with:

Course typically offered:

Main Campus: Fall

Home department: Planning

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 498: Capstone Studio (3 - 6 units)

Description: Development of an architectural project that embodies a student's architectural

position, situated historically and addressing contemporary issues

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: C or above in ARC 451B and ARC 497, taken in the semester immediately preceding this course.

Field trip: Students travel to project site at least once to conduct appropriate research. All travel costs for group/individual work vary by topic and are the responsibility of the student inclusive of transportation, food, accommodations, and incidentals.

ARC 498H: Honors Thesis (3 units)

Description: An honors thesis is required of all the students graduating with honors. Students ordinarily sign up for this course as a two-semester sequence. The first semester the student performs research under the supervision of a faculty member; the second semester the student writes an honors thesis.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated for a maximum of 6 units.

Equivalent to: ARCH 498H Course typically offered: Main Campus: Spring

Enrollment requirement: Student must be active in the Honors College.

Honors Course: Honors Course **Honors Course:** Honors Course

Writing Emphasis: Writing Emphasis Course

ARC 499: Independent Study (1 - 4 units)

Description: Qualified students working on an individual basis with professors who have

agreed to supervise such work.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered:

Main Campus: Fall, Spring, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 499H: Honors Independent Study (1 - 4 units)

Description: Qualified students working on an individual basis with professors who have

agreed to supervise such work. **Grading basis:** Regular Grades

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: ARCH 499H Course typically offered:

Main Campus: Fall, Spring, Summer

Enrollment requirement: Student must be active in the Honors College.

Honors Course: Honors Course **Honors Course**: Honors Course

ARC 503: Art and Architecture of the Islamic World (3 units)

Description: Principal achievements in Islamic architecture 680-1600, AD/CE, understand the achievements in social/cultural contexts, become familiar with vocabulary and basic methodologies of the field, and consider historical evolution of our knowledge and understanding of this architecture. Graduate-level requirements include a 6-10 page comparative essay on a set group of readings designed for each group.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Equivalent to: ARC 503, ARH 503 **Also offered as:** ARH 503, MENA 503

Co-convened with:
Course typically offered:
Main Campus: Spring

Home department: School of Middle Eastern and North African Studies

ARC 509A: Immersion Studio: Advanced (4 units)

Description: An immersive skills development studio for advanced architectural design, focusing on architectural character, tectonics, land and settlement ethics, site integration, and climatic-appropriate responses.

Grading basis: Regular Grades

Career: Graduate

Course Components: Studio Required

Course typically offered: Main Campus: Summer

Recommendations and additional information: Admission to the MArch II program.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 509B: Immersion Seminar: Advanced (3 units)

Description: An immersive skills development seminar focusing on architectural

communication thinking, media, and techniques. Course topics and assignments will directly

support ARC 509A.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required Lecture Required

Course typically offered: Main Campus: Summer

Recommendations and additional information: Required for M.Arch. II students.

ARC 510A: Design Studio I: Immersion (4 units)

Description: Introduction to essential methods of visual communication, spatial design, and

material manipulation.

Grading basis: Regular Grades

Career: Graduate

Course Components: Studio Required

Course typically offered: Main Campus: Summer

Recommendations and additional information: Must receive B or higher to advance to subsequent studio.

ARC 510B: Design Studio II (6 units)

Description: Design of buildings with emphasis on fundamental design and visual

communication skills, spatial integration and tectonic assembly.

Grading basis: Regular Grades

Career: Graduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Must receive B or higher to advance to

subsequent studio.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 510C: Design Studio III (6 units)

Description: Formulation of architectural proposals informed by and embodying ethical relationships with the land, based upon observation and analysis of phenomena in the Sonoran

Desert region.

Grading basis: Regular Grades

Career: Graduate

Course Components: Studio Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Must receive B or higher to advance to subsequent studio.

Field trip: Field journeys are required to induce first hand experience in natural events and phenomena and provide the initial empirical basis for design / construction proposals. Other scheduled participation will be specified with each topic.

ARC 510D: Advanced Design Studio I (6 units)

Description: Design of medium scale public buildings accommodating varying spatial, structural and environmental characteristics, with emphasis on site ~ building interface, accessibility and sustainability.

Grading basis: Regular Grades

Career: Graduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Must receive B or higher to advance to subsequent studio.

ARC 510E: Advanced Design Studio II (6 units)

Description: Comprehensive design of buildings with emphasis on systems logic, efficient utilization of resources, and rigorous definition of appropriate interface between site, program and technical systems.

Grading basis: Regular Grades

Career: Graduate

Course Components: Studio Required

Course typically offered: Main Campus: Spring

Enrollment requirement: Pre-req ARC 510D. Co-req: ARC 521D and ARC 541, unless excused by instructor.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 510F: Advanced Design Studio III (6 units)

Description: Application in "vertical" studios of core skills and knowledge previously gained. Topics may include urban, interdisciplinary, advanced technologies, design build, competitions, research, and overseas exchange.

Grading basis: Regular Grades

Career: Graduate

Course Components: Studio Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Must receive B or higher to advance to subsequent studio.

ARC 521A: Integrated Technologies I (3 units)

Description: Introduction to principles of structures, materials and methods of construction, and environmentally adaptive systems as integrated technologies.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required Lecture Required

Course typically offered:

Main Campus: Fall

Field trip: Local field trips in the Tucson area. Any out of state field trips may be organized in coordination with the concurrent design studio.

Enrollment requirement: Concurrent enrollment in ARC 510B, and admission to M.Arch III.

ARC 521B: Integrated Technologies II (3 units)

Description: This course introduces fundamentals of small to medium building structures,

materials and methods, and environmentally adaptive architectural design.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Pre-Requisite- ARC 521A or admission to M. Arch II.Co-Requisite- ARC 510C

Field trip: Out-of-town trips may be organized in coordination with the concurrent design studio, at the option of the Instructor. Costs associated with required field trips will be the responsibility of the student.

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-CC represents a Correspondence Course offering

ARC 521C: Integrated Technologies III (3 units)

Description: Advanced structures, materials and methods of construction, and environmentally

adaptive systems as integrated technologies.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: ARC 521 A+B or admission to M. Arch II. ARC 510D.

Field trip: Local field trips in the Tucson area. Any out of state field trips may be organized in coordination with the concurrent design studio.

ARC 521D: Integrated Technologies IV (3 units)

Description: This course covers advanced concepts of medium to large scale building structures, materials and methods of construction, and environmentally adaptive systems designs

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required

Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Pre-Requisite-ARC 521A, 521B, and 521C, or advanced placement to M. Arch II. Co-Requisite ARC 510E.

Field trip: Out-of-town trips may be organized in coordination with the concurrent design studio, at the option of the Instructor. Costs associated with required field trips will be the responsibility of the student.

ARC 526: Site Analysis and Planning (2 units)

Description: This course introduces students to the study of context in which architecture is to be developed. This course complements ARC 527 Architectural Programming as the first of the pre-design studies.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Field trips may be planned in lieu of guest lecturers if project sites are available.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 527: Architectural Programming (1 unit)

Description: Architectural Programming is a process for collecting and synthesizing information used for building design; this includes: working with clients, goal identification, and establishing quantitative requirements.

Grading basis: Regular Grades

Career: Graduate

Course Components: Discussion May Be Offered

Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Admission to the M.Arch. III, MLA or MS Planning.

ARC 529: Introduction to the Built Environment (3 units)

Description: An introduction to major cultural and theoretical issues that have shaped the built environment, including aspects of planning, landscape architecture, and architecture, through a series of in-depth, interdisciplinary, thematic explorations.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Also offered as: LAR 529, PLG 529

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Admission to the M.Arch, LAR or PLG graduate programs.

ARC 531: History and Theory I (4 units)

Description: Please change course description to: Considers the creation, use and interpretation of ancient and medieval architecture from a variety of perspectives, including environmental, functional, material, structural, formal, socio-political, and cultural.

Grading basis: Regular Grades

Career: Graduate

Course Components: Discussion Required Lecture Required

Co-convened with: Course typically offered: Main Campus: Fall

Recommendations and additional information: Admission to M.Arch. III, MLA or MS

Planning.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 532: History+Theory II (4 units)

Description: Explores cultural, social, technological, and ideological influences on the built environments of global cultures, from the earliest habitations through the Renaissance.

Grading basis: Regular Grades

Career: Graduate

Course Components: Discussion Required Lecture Required

Co-convened with:
Course typically offered:
Main Campus: Spring

Recommendations and additional information: Admission to M.Arch. III, MLA or MS Planning.

ARC 533: History+Theory III: Modern and Contemporary Architecture (4 units)

Description: The study of modern, postmodern, and contemporary architecture through

examination of works and theories and their impact on the discipline of architecture.

Grading basis: Regular Grades

Career: Graduate

Course Components: Discussion Required Lecture Required

Co-convened with:

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Successful Completion of ARC 532 | History II or permission of instructor.

ARC 540A: Design Communication I (3 units)

Description: This course emphasizes the development of digital communication techniques for the analysis and presentation of architectural ideas. Essential methods of digital drawing are investigated through a series of interrelated exercises. Material exploration of the design research case studies will be developed and interrogated concurrently with our digital production.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Course typically offered: Main Campus: Summer

Recommendations and additional information: Admission to M.Arch III, MLA, or MS

Planning.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 540B: Design Communication II (3 units)

Description: This course promotes the further development of communication techniques for the study and presentation of architectural ideas. Advances in digital modeling, animation and rapid prototyping allow architects to investigate, test and assemble their designs in the computer. This data can then be used to generate drawings, presentation images, analytical information, as well as a direct export to fabricate an output. This course will be an overview of all these methodologies culminating in an architectural assembly.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: ARC 540A or consent of instructor.

ARC 540C: Design Communication III (3 units)

Description: This course provides a comprehensive introduction to advanced digital technologies in architecture with a specific focus on parametric modeling for design applications. Graduate students will be required to include a more extensive research component with their project and complete more in-depth exercises.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: ARC 540A and ARC 540B

ARC 541: Contract Documents (3 units)

Description: Introduces students to the technical drawings and supporting documentation needed to convey design intent to the various parties involved in realizing built work.

Grading basis: Regular Grades

Career: Graduate

Course Components: Discussion May Be Offered

Lecture Required

Course typically offered: Main Campus: Spring

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 550C: Ethics and Practice (4 units)

Description: Introduces students to contracts, office practices, and ethical issues facing the profession, with focus on pre-design and programming methodologies, including problem

seeking and goal identification. **Grading basis:** Regular Grades

Career: Graduate

Discussion **Course Components:** Required Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: ARC 541.

ARC 561A: Water Efficiency in Buildings (3 units)

Description: Learn methods and advanced techniques that conserve urban water usage while promoting water harvesting, water reuse, and water energy generation technologies in and around buildings. Graduate students are required to submit case studies and various calculations in each module.

Grading basis: Regular Grades

Career: Graduate

Course Components: Required Lecture

Co-convened with: ARC 461A **Course typically offered:**

Main Campus: Spring

Recommendations and additional information: Upper division undergraduate student, graduate standing or permission of instructor.

ARC 561D: Computer Energy Analysis (3 units)

Description: A comprehensive course that teaches students energy conservation and passive solar architecture and up-to-date computer energy simulation techniques. The course promotes students learning through field investigation of existing buildings and/or new design projects. Graduate-level requirements include writing short essays on development exercises and presenting simple payback and lifecycle cost analysis on projects.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 461D Course typically offered:

Main Campus: Fall

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 561E: Sustainable Design and the LEED Initiative (3 units)

Description: A comprehensive course that focuses on sustainable design through energy conservation, passive solar architecture, and advanced computer energy simulation techniques. Develop thorough understanding of "Green Building Design"; currently the fastest growing segment of the building industry. Master advanced computer energy analysis using the industry standards DOE's eQUEST software. Learn about the LEED' "Leadership in Energy and Environmental Design" Green Building Rating System for New Construction and become a LEED' Accredited Professional. Graduate-level requirements include an additional research report on selected passive solar systems.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Workshop Required

Co-convened with: ARC 461E Course typically offered: Main Campus: Spring

ARC 5611: Materials: Properties and Tests (3 units)

Description: Three modules: (1) materials: classifications, physical properties, phenomenal (aesthetic) properties, and fabrication processes; (2) laboratory tests (probes) for empirical verification; and (3) selection of appropriate materials in the design and production of architectonic functional components (details)-preferably at full size. Graduate-level students must submit an elaborate architectonic artifact and summary, and an abstract and paper, with submission proof to an architectural journal.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 4611 Course typically offered:

Main Campus: Fall

Recommendations and additional information: Fourth-year standing or higher.

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-CC represents a Correspondence Course offering

ARC 561J: Materials: Modeling (3 units)

Description: Modeling must not operate by precepts, but by the culture of experimentation, eliciting aesthetic and rational judgment in the free play between mind and matter. The play must be heuristic, inducing its own sense (or meta-logic) from the activity itself. The products must include in themselves their own meter for evaluation. Graduate-level requirements include an abstract with proof of submission to an architectural journal or scholarly conference.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 461J Course typically offered:

Main Campus: Fall

Recommendations and additional information: Third-fifth year or graduate status. Familiarity with material crafts recommended.

ARC 561K: Energy and the Environment (3 units)

Description: A fully online course that fosters awareness and thorough understanding of the qualitative and quantifiable environmental forces that contribute to energy use in buildings. The course introduces basics for understanding solar energy and light, climate and microclimate, and human thermal comfort as related to the built environment. Graduate-level requirements include completion of an additional 2-page report to be uploaded with each skill development exercise.

Required

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture

Co-convened with: ARC 461K

Course typically offered:
Main Campus: Summer

Online Campus: Fall, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 561L: Energy Use in Buildings (3 units)

Description: Understand the quantitative and qualitative factors that contribute to energy flows

and consumption in buildings' thermal performance.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 461L Course typically offered: Main Campus: Summer Online Campus: Fall

Recommendations and additional information: Graduate or upper division standing. Access to internet connection and digital camera, purchase of non-contact laser-guided Infrared Temperature Gun (from ARC461k/561k), and U-12 HOBO© Data Logger (temp/RH/light/external) from Onset Computers for \$130.

ARC 561M: Energy Efficient Design (3 units)

Description: Focuses on principles of energy efficient design through investigation of buildings, divided into four categories: baseline, passive design, active design, and net-zero building.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 461M Course typically offered: Main Campus: Spring Online Campus: Spring

Recommendations and additional information: ARC 561K, ARC 561K

ARC 561N: Energy Auditing and Modeling (3 units)

Description: Focuses on principles of energy efficient design through investigation of buildings,

divided into two categories: energy modeling and energy auditing.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 461N Course typically offered: Main Campus: Spring Online Campus: Spring

Recommendations and additional information: ARC 561K and ARC 561L

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 561P: Environmental Science Laboratory (3 units)

Description: This comprehensive course focuses on understanding sustainable design through investigating some of the most important environmental design principles including; Thermal

Comfort, Daylight, Shading, Ventilation, etc.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required Lecture Required

Co-convened with: ARC 461P

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Required for MS - Arch, elective for M.Arch. and MLA academic programs.

ARC 561Q: Special Topics in Architectural Research (3 units)

Description: Directed research based course on emergent topics of interest to the profession. Students will develop problem-solving skills while conducting research on pre-selected topics. Graduate-level requirements include generating more complete findings on subject matter and generating publishable reports or scholarly journal articles and take a leading role in answering questions and facilitating development of research project.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 461Q Course typically offered: Main Campus: Spring

ARC 571F: Introduction to Heritage Conservation (3 units)

Description: An overview of the interdisciplinary paradigms, principles, programs, and players in the field of heritage conservation ranging from local to international contexts. Graduate-level requirements include an in-depth research paper focusing on a particular concept or methodology utilized in preservation practice.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Equivalent to: LAR 571F

Also offered as: LAR 571F. PLG 571F

Co-convened with: ARC 471F Course typically offered:

Main Campus: Fall

Home department: School of Landscape Architecture and Planning

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 571N: Arid Region Urbanism: Arizona/Sonora (3 units)

Description: Students will investigate and understand the cultural, historical and environmental dimensions of city-building in arid regions, with an emphasis on the Arizona/Sonora border region. Graduate students will write a research paper on a topic of their interest, to be determined in consultation with the instructor.

Grading basis: Regular Grades

Career: Graduate

Course Components: Seminar Required

Co-convened with: ARC 471N Course typically offered:

Main Campus: Fall

ARC 571S: History + Theory of Architecture IV: Contemporary Architecture and Urban

Theory (3 units)

Description: This course explores major intellectual paradigms in contemporary architectural and urban theory. Graduate-level requirements include more weight placed on papers, plus a final research project.

Required

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture

Co-convened with: ARC 471S Course typically offered:

Main Campus: Fall Online Campus: Fall

ARC 581E: Architecture in the Mediterranean (3 units)

Description: Develop awareness of architecture, places and spaces in new cultures. Experience uses of space, materials, structural techniques and cultural expression. Highest priority placed on recording new and different experiences emphasizing creativeness, character and expression. Graduate-level requirements include a research paper.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 481E Course typically offered: Main Campus: Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 581F: Biomimetics (3 units)

Description: This course emphasizes the study and application of biological principles as essential design parameters, Biomimetics. Graduate-level requirements include an expectation for students to become familiar with the ideas and texts references referenced in readings as well as making correlations between the various texts.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Co-convened with: ARC 481F **Course typically offered:** Main Campus: Spring

Recommendations and additional information: ARC 540B. Familiarity (and interest) with parametric software and digital fabrication processes.

ARC 5811: Introductory Building Information Modeling (BIM) Design and Documentation (4 units)

Description: This course teaches fundamentals of Building Information Modeling (BIM) and its emerging place in professional practice. REVIT is used to teach design and construction documentation. Graduate students are required to submit a critical essay regarding the role of BIM in architectural practice based on the reading and coursework.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required

Co-convened with: ARC 4811 Course typically offered: Main Campus: Summer

ARC 581J: Advanced Building Information Modeling (BIM) Design and Documentation (4 units)

Description: This course teaches advanced Building Information Modeling (BIM) and its emerging place in professional practice. REVIT is used to teach design and construction documentation. Graduate students are required to fabricate and document a physical model as part of the Final Project.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required

Co-convened with: ARC 481J Course typically offered: Main Campus: Summer

Recommendations and additional information: Completion of ARC 581I Introductory BIM Design and Documentation, or approval of instructor.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 591: Preceptorship (1 - 3 units)

Description: Specialized work on an individual basis, consisting of instruction and practice in actual service in a department, program, or discipline. Teaching formats may include seminars,

in-depth studies, laboratory work and patient study.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 593: Internship (1 - 3 units)

Description: Specialized work on an individual basis, consisting of training and practice in

actual service in a technical, business, or governmental establishment.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated for a maximum of 3 units.

Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 594: Practicum (3 units)

Description: The practical application, on an individual basis, of previously studied theory and

the collection of data for future theoretical interpretation.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required

Course typically offered:

Main Campus: Fall, Spring, Summer

⁻CC represents a Correspondence Course offering

ARC 596A: Design Communications Elective (3 units)

Description: This course explores a specific Design Communications topic in depth; may be taken up to four times under different topics by permission of Stream Coordinator. Graduate students are expected to demonstrate a higher level of leadership, focus, and depth in completing all course components and should show a level of synthesis between the texts and ideas they submit over the semester.

Grading basis: Regular Grades

Career: Graduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 496A Course typically offered: Main Campus: Fall, Spring

ARC 596B: History + Theory Elective (3 units)

Description: This course explores specific History and/or Theory of Architecture topics indepth; it may be taken up to four times under different topics by permission of the Stream

Coordinator.

Grading basis: Regular Grades

Career: Graduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 471B Course typically offered: Main Campus: Fall, Spring

ARC 596C: Practice Elective (3 units)

Description: This course explores specific Practice topics in depth; it may be taken up to four

times under different topics by permission of the Stream Coordinator.

Grading basis: Regular Grades

Career: Graduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 496C Course typically offered: Main Campus: Fall, Spring

Field trip: depends on topic and faculty

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 596D: Technology Elective (3 units)

Description: This course explores specific Technology topics in depth; it may be taken up to four times under different topics by permission of the Stream Coordinator. Graduate students are expected to demonstrate a higher level of leadership, focus, and depth in completing all course components and should show a level of synthesis between the texts and ideas they submit over the semester.

Grading basis: Regular Grades

Career: Graduate

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 496D Course typically offered: Main Campus: Fall, Spring

ARC 597A: Research Methods (3 units)

Description: An interdisciplinary survey of research methods applicable to research in Architecture, Planning, and Landscape Architecture. Graduate-level requirements include an additional assignment of seeking out a granting agency applicable to their research topic and following their application guidelines in the completion of this assignment.

Grading basis: Regular Grades

Career: Graduate

Course Components: Workshop Required

Equivalent to: LAR 597A, PLG 597A, PLN 597A

Also offered as: LAR 597A, PLG 597A

Co-convened with: ARC 497A Course typically offered:

Main Campus: Fall

ARC 597B: Special Topics in Architecture (3 units)

Description: The practical application of theoretical learning within a group setting and involving an exchange of ideas and practical methods, skills, and principles. Students may take 497B/597B up to four times provided the topics are different.

Grading basis: Regular Grades

Career: Graduate

Course Components: Workshop Required **Repeatable:** Course can be repeated a maximum of 4 times.

Co-convened with: ARC 497B Course typically offered:

Main Campus: Fall, Spring, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 597D: Reading Architecture (3 units)

Description: The course provides a philosophical framework to find meaning and creative

potentials in a close reading of contemporary architecture.

Grading basis: Regular Grades

Career: Graduate

Course Components: Workshop Required

Co-convened with: ARC 497D Course typically offered:

Main Campus: Fall

Recommendations and additional information: M.Arch students, B.Arch students in 4th-Year and above. 3rd Year B.Arch and other CAPLA graduate students by permission of instructor.

ARC 597J: Documentation and Interpretation of the Historic Built Environment (3 units) Description: Examines methods to document buildings, districts and cultural landscapes and methods to interpret historical and architectural significance. Focuses on historic built

environments of Greater Southwest including semester-long service-learning project applying documentation and interpretation methodologies. Graduate-level requirements include transforming a service-learning project into web-accessible format to integrate into Preservation

Studies website.

Grading basis: Regular Grades

Career: Graduate

Course Components: Workshop Required

Equivalent to: LAR 597J, PLG 597J, PLN 597J

Also offered as: LAR 597J, PLG 597J

Co-convened with: ARC 497J **Course typically offered:** Main Campus: Spring

Recommendations and additional information: ARC 471F/571F or consent of instructor.

Home department: School of Landscape Architecture and Planning

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ARC 597K: The Portfolio: Advanced Graphics, Presentation, Layout, and Design (3 units)

Description: The development of an individual portfolio, comprised of improved past work, that

Description: The development of an individual portfolio, comprised of improved past work, that demonstrates the student's philosophy, design, graphic skills, digital literacy, and technical abilities. Graduate deliverables will be supplemented with a "postscript reflection" that critically examines the potential of the work to open and propel additional explorations and avenues of inquiry.

Grading basis: Regular Grades

Career: Graduate

Course Components: Workshop Required

Co-convened with: ARC 497K Course typically offered:

Main Campus: Fall

Recommendations and additional information: ARC 510D, LAR 610, or permission of

instructor.

ARC 597V: Affordable Housing and Community Development (3 units)

Description: The course focuses on housing and community development issues. Its purpose is to understand the nature of housing development, particularly for the lower income sectors of the community, and its relation to community development. Graduate-level requirements include individual projects and a longer research paper.

Grading basis: Regular Grades

Career: Graduate

Course Components: Workshop Required

Also offered as: PLG 597V

Co-convened with:

Course typically offered:

Main Campus: Fall

Home department: Planning

ARC 599: Independent Study (1 - 5 units)

Description: Qualified students working on an individual basis with professors who have agreed to supervise such work. Graduate students doing independent work which cannot be classified as actual research will register for credit under course number 599, 699, or 799.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered:

Main Campus: Fall, Spring, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

ARC 601: Research Studio (6 units)

Description: Research studio for graduate students in architecture and landscape architecture intended to provide a heuristic framework of investigation with the aim of incorporating the major areas of graduate concentration in the Master's Program of Architecture, included but not limited to, design and energy conservation, urban design and infrastructure, materials and technologies, and preservation studies. Design research inquiry centered on the Sonoran Desert region as the setting for architectural interventions.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture May Be Offered

Studio Required

Course typically offered:

Main Campus: Fall

ARC 900: Research (1 - 8 units)

Description: Individual research, not related to thesis or dissertation preparation, by graduate

students.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered:

Main Campus: Fall, Spring, Summer

ARC 909: Master's Report (1 - 8 units)

Description: Individual study or special project or formal report thereof submitted in lieu of

thesis for certain master's degrees.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered:

Main Campus: Fall, Spring, Summer

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ARC 910: Thesis (1 - 8 units)

Description: Research for the master's thesis (whether library research, laboratory or field observation or research, artistic creation, or thesis writing). Maximum total credit permitted

varies with the major department.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered:

Main Campus: Fall, Spring, Summer

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⁻CC represents a Correspondence Course offering