

Syracuse University
School of Architecture

Interim Progress Report for Year Two
November 30, 2018

Interim Progress Report
Syracuse University
School of Architecture
Bachelor of Architecture (162 undergraduate credit hours)
Master of Architecture (non-preprofessional degree plus 110 credit hours)
Year of the previous visit: 2016

Chief administrator for the academic unit in which the program is located:

NA (no change)

Provost:

Michele G. Wheatly

President of the institution:

NA (no change)

Individual submitting the Interim Progress Report:

NA (no change)

Name of individual(s) to whom questions should be directed:

NA (no change)

Current term of accreditation:

Eight Years

1. Progress in Addressing Not-Met Conditions and Student Performance Criteria

II.2.2 Professional Degrees and Curriculum (B. Arch. only)

2016 Team Assessment: The team found this condition to be **Not Met** in the B. Arch program. The NAAB requires 45 general studies credits, and this program has 42. This was confirmed in the School of Architecture handbook and in discussions with the school's administration. Note: The program stated that the university regulates the number of general studies courses, and the 162 total credit hours for the B. Arch program exceed the NAAB minimum required total credit hours.

Syracuse University, 2018 Response: The school revised the BArch curriculum, increasing general studies credits by 3, for a total of 45. These credits need to be liberal arts electives in the College of Arts and Sciences. This change was approved September 2018 by NYSED and Syracuse Architecture will require this new curriculum beginning Fall 2019.

B.1 Pre-Design

2016 Team Assessment: Evidence of student achievement at the prescribed level was not found in student work for key elements of this criterion. While certain components of pre-design (such as site analysis and code review) were found in the student work, in both the B. Arch and M. Arch coursework, the team **did not find evidence of the ability to prepare a comprehensive architectural project program** that included many of the requirements of this criterion.

Syracuse University, 2018 Response:

UNDERGRADUATE CURRICULUM Design V, Arc 307_ In order to address the requirement to evidence student ability to prepare a comprehensive architectural project program, ARC 307: Design V will require a Program Preparation Workshop. The product of this assignment will be a graded document that will be a point of reference for the student design project which follows it. As of November 1, 2018, discussion and planning of this assignment are have concluded. Implementation is slated for fall term 2019.

Please see Appendix for updated Arc 307 Syllabus and Program Preparation Workshop abstract.

GRADUATE CURRICULUM Design III, Arc 606_ The Pre-Design SPC is explicitly included as a Learning Outcome for ARC 606, a core studio in the MArch program. Focused on the instruction of design and design-research tools within the disciplinary area of 'Design Futuring,' students are required to use human-centered design approaches to understand a scenario set in the future, for which they are challenged to bring no assumptions about architectural practice or design production. For these scenarios, students subsequently develop a design brief and a detailed program, and then, in the culminating studio project, develop a design using this program.

Please see Appendix for relevant excerpts from the Arc 606 Studio Syllabus, Design Brief/Environment Modeling Assignment, and the Program Template.

B.3 Codes and Regulations

2016 Team Assessment: Evidence of student achievement at the prescribed level was not found in student work for key elements of this criterion. While the team found evidence of the teaching of life-safety standards in coursework, it only found evidence of an understanding of accessibility standards and no evidence of the ability to **apply accessibility standards consistently in integrated design studio work in** both the B. Arch and M. Arch coursework.

Syracuse University, 2018 Response:

UNDERGRADUATE CURRICULUM Design VIII, Arc 409_ In ARC 409, Architectural Design Studio, the class receives instruction in common life safety standards and accessibility requirements. In order to evidence an ability to apply accessibility standards consistently in Integrated Design Studio work, the course will conduct a one day workshop on the topic. To this

end students will develop in a graphic summary of accessibility accommodations in their course designs. This, along with a similar workshop supplement for specification writing, will be part of the final materials due and assessed at the end of the term. In addition, students will be required to note key dimensions and other relationships related to accessibility in their final project drawings. As of November 1, 2018, discussion and planning of this assignment have concluded. Implementation is slated for spring term 2019.

Please see Appendix for updated Arc 409 Syllabus

GRADUATE CURRICULUM Design IV, Arc 607_ The Codes and Regulations SPC is explicitly included as a Learning Outcome for ARC 607, the Integrative Studio. Since it has been brought to our attention that the committee did not see evidence of the consistent application of accessibility standards in integrated design studio work, **we have integrated an accessibility charrette into the studio (attached)** that follows upon an earlier introduction of the spirit and intent of accessibility codes and regulations. The charrette event serves both to culminate the student's instruction in the issues with an applied exercise, and to affirm that students are specifically demonstrating the integration of creative thinking about accessibility in their design work. Discussion and review of students' final design submissions will also serve to assess their application of accessibility standards. As this is the first year we have introduced this particular method, we will look closely at the students' final work to assess the effectiveness of these touchpoints. *See Appendix for updated syllabus and accessibility charrette.*

B.10 Financial Considerations

2016 Team Assessment: Evidence of student achievement at the prescribed level was not found in student work. **Student work at the understanding level was not consistently demonstrated in the areas of building costs, scheduling, and operational/life-cycle costs.** No student work, exams, or case studies were provided to indicate that the students were able to achieve an understanding of project financial considerations.

Syracuse University, 2018 Response:

UNDERGRADUATE & GRADUATE CURRICULUM

Financial considerations are reinforced through lectures and case study examples that include:

1. Project financing methods related to bonding/construction loans/reserves and associated analysis of hard and soft costs for feasibility.
2. Construction Cost Estimating (Probable Costs)
3. Construction Scheduling / Phasing and impacts of partial occupancy, shift work, temporary facilities, and labor agreements/regulations.
4. Sustainability Criteria and the integrated design process for identification of materials/systems/verification and associated rating systems (LEED, CHPS, etc..) including operational/life cycle/payback analysis.

-Financial Considerations are evaluated for understanding through quizzes, exams (short essay and multiple choice), and the group case study research/analysis/presentation activities.

See Appendix for samples of quizzes and exams. Case study research is not included but can be provided upon request.

2. Changes or Planned Changes in the Program

Syracuse University, 2018 Response:

Changes to the Undergraduate Curriculum _Effective Fall 2019

The changes to the five-year Bachelor of Architecture degree program are in response to several emerging factors. First, the addition of three general education credits in the Arts & Sciences to meet NAAB requirements. Second, six credits in Directed Research Topics, ARC 498, will replace the two-course, nine-credit sequence Thesis Preparation, ARC 505, and Thesis, ARC 508, currently the capstone for the B. Arch. degree. The traditional thesis emphasized individual creativity and invention in the field of architectural design. Directed Research will involve students in collaborative research endeavors directed in a variety of professional and academic areas that better reflect the diverse professional pathways in the evolving and increasingly specialized, collaborative, and multi-faceted field of architecture. Finally, the professional elective requirement will be reduced by six credits, reducing the overall BArch credit requirement 156 credit hours. *See Appendix for a PDF which compares curriculums.*

Changes to the Graduate Curriculum_Effective Fall 2015

The changes to the Master of Architecture degree program improve the existing curriculum in the following ways: the revised graduate curriculum will span three years instead of three and a half years. A shorter program will make study at Syracuse more appealing to prospective students. The number of credits for each technology and structures course is reduced from four to three to align with all the other graduate courses in the program. ARC 505 (Thesis Preparation) is atomized throughout the curriculum as a series of five one-credit ARC 650 (Architectural Research) courses. The distribution of architectural research courses throughout the program will help students to become proficient in architectural research and help them develop a research agenda well in advance of their thesis semester. In addition to ARC 639, a second required history course (ARC 631) replaces one of the three required history electives. This change will give students a more thorough foundation in history. It will address the deficiency in global coverage identified by the National Architectural Accreditation Board (NAAB) panel during the last accreditation visit. It also mirrors the existing theory sequence (ARC 641 and ARC 642 for a total of 6 credits). Graduate theses will take place in the same semester (Spring) as undergraduate, consolidating thesis as a school-wide capstone experience. Finally, a summer program in New York or abroad taking place in the second year will become integral to the program. *See Appendix for a PDF which compares curriculums.*

Faculty Retirements and Succession Planning: Since 2016, three senior faculty have retired, including Professor Bruce Abbey, Professor Randall Korman, and Professor Arthur McDonald. In each case, an international search was conducted for replacements, resulting in new tenure track hires as follows: Assistant Professor Gregory Corso (Abbey); Assistant Professor Britt Eversole (Korman); and Assistant Professor Marcos Parga (McDonald). In addition, the following tenure track faculty have been hired since 2016: Assistant Professor Junho Chun; Assistant Professor Molly Hunker; Assistant Professor Mitesh Dixit; and Assistant Professor Jiong Abingo Wu. *Please see Appendix for short bios of new faculty.*

Changes in Administration: In Fall 2017, Associate Professor Brian Lonsway replaced Associate Professor Jean Francois Bedard as Graduate Program Chair, and Associate Professor Lawrence Davis replaced Associate Professor Timothy Stenson as Undergraduate Program Chair. *Please see Appendix for short bios of new administrators.*

Changes in enrollment: The B. Arch. program experienced significant growth in both the Fall 2017 and Fall 2018 cohorts. In Fall 2017, 137 new first year students entered the program and in Fall 2018 154 students entered the program, exceeding the established target of 120. Moving forward, the intention is to keep enrollment targets at 120 first year students. The M. Arch.

program has experienced a slight decline in incoming classes, with 29 students entering in Fall 2019 vs. the target of 35.

Changes in financial resources: The result of enrollment increases in the B. Arch program, offset by a slight decline in M. Arch. enrollment, is an overall increase in gross tuition revenue for Fall 2019 in the amount of \$751,000. Moreover, the university has made funding available to the School in support of hiring an Associate Dean for Research, and an Assistant Professor in Architectural Technology, as part of a new initiative known as “Invest Syracuse”. Those two searches are currently in process. Further, the School exceeded fundraising targets in FY18, raising \$1.9M, and is on track in reaching the FY19 goal of \$1.1M.

Changes in physical resources: Since 2016, significant improvements have been made to facilities in Slocum Hall, as follows:

New digital fabrication lab created in 2017 and enhanced with soundproofing and security additions in 2018

Renovated studios and furnishings in 026 Slocum, 124 Slocum and 126 Slocum to allow for more flexible use of space, completed 2018.

Reading room renovation, renamed King + King Library, including upgrades in HVAC, lighting, storage, furnishings, security and technology.

3. Summary of Activities in Response to Changes in the NAAB Conditions

Syracuse University, 2018 update: Not Applicable

4. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses)

Syracuse University, 2018 update:

Please see Appendix, following this section

APPENDIX

Junho Chun

Assistant Professor

Junho Chun's research interests include structural design and topology optimization under natural hazard, random vibrations, systematic treatment of uncertainty, reliability and risk analysis, and resilient infrastructure design.

Previous work experience includes working for 3 years as a structural engineer at architectural and engineering firm Skidmore, Owings and Merrill (SOM), LLP, in Chicago. There he was involved in diverse aspects of structural design from schematic designs to construction documents. He participated in projects around the world including 510-meter Busan Lotte Town Tower in Korea; 303-meter Jiangxi Nanchang Greenland Central Plaza, Jiangxi, China; 211-meter China Merchants Tower in Shenzhen, China; 303-meter Ninth Avenue Tower in New York, City, as well as the international design competition for 640-meter Seoul Light Digital Media City Tower in Seoul, Korea.

Greg Corso

Assistant Professor

Greg Corso is a designer from California. He is co-captain of the design and research collaborative, SPORTS. Greg received both his Bachelor of Arts and Master of Architecture from the University of California, Los Angeles (UCLA). He has worked in art and architecture studios in the United States and Europe including Studio Gang, JDS Architects, and Cliff Garten Studio and has been a fellow at the MacDowell Colony. Greg has taught architecture and design at Woodbury University, The University of Illinois at Chicago, and is currently an Assistant Professor at Syracuse University, School of Architecture. SPORTS is the award-winning multidisciplinary architecture and design collaborative of Molly Hunker and Greg Corso, based in Syracuse, NY. They approach architecture in a playful way by balancing rigor and research with amusement and curiosity. Deeply engaging, their work promotes fresh and unexpected experiences in the built environment. Since forming in 2010, SPORTS has designed and constructed a number of large-scale architectural installations and pavilions around the country and they have been exhibited, reviewed, and published widely. Recently, SPORTS was highlighted as a "Firm to Watch" by Architectural Record and as "Next Progressives" by Architect Magazine. Among others, SPORTS is the recipient of multiple "Best of Design" Awards from Architect's Newspaper, a 2017 ACSA Faculty Design Award, and a 2017 Arch League Prize from the Architectural League of NY.

Lawrence C. Davis

Associate Professor
Undergraduate Chair

The primary subject of inquiry for Lawrence Davis in his practice, research and much of his teaching is the study of the exurban built environment. His seminar 'Theories and Analysis of Exurbia' examines the underlying social, cultural and technical circumstances that shape this ubiquitous terrain over the last 250 years. He received a master of architecture degree from Columbia University after receiving a bachelor of architecture degree from the University of Cincinnati and is a registered architect who maintains an active practice. Prof. Davis is the current chair of the undergraduate program. He first held the position between 2003-07 in addition to being past director of the School's noted study abroad program in Florence from 2008-2012.

Davis' published writings include articles and book reviews in *The Architects Newspaper*, *Architecture Player*, *the Journal of Architectural Education* (JAE), a chapter, 'Philip Johnson's Crystal Cathedral and the Rhetoric of its Free-Form Polyhedron Structure' in *Beyond the Cube: The Architecture of Space Frames and Polyhedra* edited by J. Francois Gabriel, and journal articles on Joze Plecnik in *Architects*

Bulletin, on study abroad curriculum in *Foglio*. and on his own design work in *JAE*, *Architext* and *Architettura*. Davis has delivered papers and lectures to the ACSA, the International Society of Philosophy and Literature, N.U.S.T., in Trondheim, Norway, the Venice Biennale as well as to both general-public and professional audiences in Mexico City, Madrid, Los Angeles, Florence and Syracuse. The lecture titles include, 'Is God in the 'burbs?: The Broadcast Architecture of the Crystal Cathedral', 'Re-Coding the Subject: an Interactive Gallery for the Everson Museum of Art', 'Spare Parts, Reusing the Postwar House and its Lawn,' 'Mixing Metabolisms,' and 'Syracuse as a Eco Knowledge Economy.'

In collaboration with Andrew Klamon, Davis was a finalist for the design of a new town center for Plainfield, Illinois. His design for the Children's Interactive Gallery for the Everson Museum of Art in Syracuse received a citation and was exhibited and presented at the ACSA Annual Conference in Los Angeles. Davis has also collaborated with Studio Ponsi in Florence, Italy and exhibited in Columbus, Cincinnati, Saint Louis, Ithaca, Syracuse, Los Angeles and New York. He has helped to organize student workshops in Spain and Italy and curated both international SU programs and symposia in Italy, Spain, the Netherlands and the United States.

Mitesh Dixit

Assistant Professor

Mitesh Dixit is an architect, philosopher, educator, and noted public speaker with wide interest at the intersection of design within government policy, society, and culture. Dixit's current research is focused on territorial investigations in the area that is currently defined as the Balkans. The research, via a re-interruption of Marx's notion of Alienation, intends to document the intersection of conflicting ideologies at specific moments in the region, to objectively illustrate the effects of ideology in the transformations of the built environment, thereby exposing the relationship between architectural form and the political. Previously, Dixit was on the faculty of TU Delft in the Netherlands as a visiting professor of architecture and urbanism. There, he also served as editor for the Chair of Complex Projects and helped to develop curriculum. Throughout 2016, Dixit lectured internationally, conducted workshops, and seminars on behalf of the US Department of State.

In 2012, Dixit founded DOMAIN Office, an architecture and urbanism studio based in Belgrade, Serbia and Syracuse, New York, led by Dixit and Sandra Subić. The firm works internationally on projects ranging from graphic design, residential, public buildings, and masterplans. DOMAIN operates within the contemporary art realm and has collaborated with artists such as Wim Wenders, Armin Linke, Vincent de Rijk, Ari Versluis (Exactitudes) and Antonio Lopez Garcia, as well as curators including Chris Dercon and Julio Vaquero. Its work has been presented at the Venice Architectural Biennale (2014), Franc Centre Museum in Orleans, France (2014), and MIPIM Conference in Cannes, France (2014), The National University of Singapore (2012), the Inaugural Chicago Architectural Biennale (2015), and STRAND's 5th International Conference 'ON Architecture' in Belgrade, Serbia (2017). DOMAIN has been in numerous publications including *Domus*, *Metropolis* and *Wallpaper*.

After completing undergraduate and graduate work in politics and philosophy, Dixit completed the master of architecture from the Washington University in St. Louis and then began his career at the San Francisco office of Skidmore, Owings, and Merrill. Prior to DOMAIN, Dixit worked with Rem Koolhaas' Office for Metropolitan Architecture as a project leader. While at OMA, Dixit led multiple international projects, such as the MahaNaKhon Tower in Bangkok, Holland Green in London, East Block 30 in Cairo, and the Kuala Lumpur Financial District in Malaysia.

Britt Eversole

Assistant Professor

Britt Eversole joined the School of Architecture as a tenure-track assistant professor of design in fall 2018 where he teaches classes in Architectural Design and Theory.

Before joining Syracuse University as a part-time instructor in 2016, Professor Eversole served as a lecturer and critic at Northeastern University School of Architecture teaching a course in Urban Research.

Prior to Northeastern, he was a lecturer and critic at the University of Michigan Taubman School of Architecture, teaching a course in Architectural Design. Professor Eversole earned his Master of Environmental Design in 2007 and a Master of Architecture in 2004, both at Yale University School of Architecture. He received his Bachelor of Design in Architecture in 1995 from the University of Florida School of Architecture.

Molly Hunker

Assistant Professor

Molly Hunker is a Wyoming-raised designer and educator. She is co-captain of the design and research collaborative, SPORTS. Molly received her Bachelor of Arts degree from Dartmouth College and her Master of Architecture degree from the University of California, Los Angeles (UCLA). She has worked for architecture studios and art workshops along the west coast including Doug Aitken Workshop, Talbot McLanahan Architecture, Weinstein A|U and The LADG. Molly has taught at UCLA, Woodbury University, The University of Illinois at Chicago (UIC) where she served as the inaugural 2013–2014 Douglas A. Garofalo Fellow, and is currently an Assistant Professor at Syracuse University, School of Architecture.

SPORTS is the award-winning multidisciplinary architecture and design collaborative of Molly Hunker and Greg Corso, based in Syracuse, NY. They approach architecture in a playful way by balancing rigor and research with amusement and curiosity. Deeply engaging, their work promotes fresh and unexpected experiences in the built environment. Since forming in 2010, SPORTS has designed and constructed a number of large-scale architectural installations and pavilions around the country and they have been exhibited, reviewed, and published widely. Recently, SPORTS was highlighted as a “Firm to Watch” by Architectural Record and as “Next Progressives” by Architect Magazine. Among others, SPORTS is the recipient of multiple “Best of Design” Awards from Architect’s Newspaper, a 2017 ACSA Faculty Design Award, and a 2017 Arch League Prize from the Architectural League of NY.

Brian Lonsway

Associate Professor

Graduate Chair

Brian is an architectural designer and theorist. His research is centered on the intersections of experience design and design technology: its history, theoretical bases and implications, models of education, and practices. Brian has published theoretical work on the evolution of themed entertainment architecture, shopping centers and megachurches, and on immersive media environments and design computing. His current research is centered on exploring the inherent transdisciplinary of design, and the intersection of disciplinary and professional identities with alternative models of design practice. With Kathleen Brandt, he is a partner in KBL Studios. Their work includes the co-development and co-direction of Thinklab, an experimental media environment and situation room for complex thinking; the conceptualization and design of The Einhorn Next Generation Design Studio; and the co-founding and design of the innovative online journal Public.

Marcos Parga

Assistant Professor

Marcos Parga is an international, award-winning architect and designer, founder and principal at Estudio MAPAA. Previously, he was an associate professor of design at the School of Architecture, Polytechnic University of Madrid, for nine years. He also has been a visiting critic and lecturer at various universities, works as a writer on architecture theory and criticism, and is the promoter and editor-in-chief of the academic and research journal 115Días.

Parga’s PhD dissertation, “The radical option: A travel through Superstudio (2015),” explores the importance of considering what occupied much of the activity of the Florentine collective and their radical colleagues as new forms of architecture that build a productive critical language that delve into the complex fabric of a society in permanent crisis, in an attempt to help renew and reinforce the relevance

and social responsibility of a profession destined to expand beyond the built to nourish and interact with all areas of everyday environment.

Marcos Parga currently conducts a practice based research and an educational strategy that each strive to recover the radical procedures of 50 years ago (as per his thesis), bringing new meaning and inserting them into a conversation about emerging architectural concerns.

Marcos Parga has won several competitions and completed many projects, including the Numancia Sports Hall, the New Headquarters of Juan XXIII Foundation, and the P12-House. His work has been recognized with several prizes in architectural competitions, including the Prize of the IX Contest of Young Spanish Architects Camuñas Foundation.

Jiong Abingo Wu

Assistant Professor

Jiong Abingo Wu is a cross-disciplinary designer and researcher. She earned her Bachelor degree in City Planning at the South China University of Technology and Master of Architecture at the Berlage Institute, Rotterdam, Netherlands. She is currently a Ph.D. candidate in Architecture at the University of California, Berkeley. Her main research area is the history and theory of 20th and 21st century global housing approaches. She focuses on how the state, the market, the designers, as well as the users co-shape housing forms and living experiences. Her core research method is ethnography, supplemented with mapping, archival research, and social media analysis. Her previous research investigates social housing in different political and economic regimes across the globe. Titled "*Living Low- Alternative Housing and Life in Guangzhou Villages-by-the-city*", her dissertation explores housing practices in the urban-rural continuum in China. She argues that the village residents had appropriated housing as spatial agencies to reinvent sets of civic rights and empower themselves. Her new research project explores how the rise of sharing economy shapes the housing practices in the United States and China. Her research has been published as book chapters, conference papers, and exhibitions. Her latest publication is "*Re-exploring the bottom-up: alternative housing practices in Guangzhou*", an exhibition in 2017 Shenzhen and Hong Kong Bi-City Biennale of Urbanism and Architecture.

Jiong practices architectural and urban design in China, the Netherlands, and the United States. She had worked on projects with varied partnerships. She participated in the Greenroom project- a public installation for the city of Rotterdam. She conducted multiple village planning projects in Guangzhou metropolitan area under the provincial commission on the New Socialist Village Planning. Her design work "Miami Pearl" won the first prize in Downtown Miami International Competition in 2011. Prior to joining School of Architecture in Syracuse University, she taught at UC Berkeley and University of Nebraska- Lincoln.

B.ARCH Curriculum: SPC B.1 Pre-Design _Comprehensive Architectural Programming

**School of Architecture
Syracuse University**

ARC 307: Housing Crisis

Fall 2019_proposed

COURSE DESCRIPTION

This semester is focused on leveraging spatial thinking within larger social, political, environmental and economic relations within a specific urban context. It is expected that buildings and extended sites are developed in relation to larger urban strategies, wherein the city is understood as a spatial endeavor and the embodiment of power relations and interdependent networks of relationships. In response to the housing crisis taking place across every major city in the United States and beyond, that has been in part, created by the increasing extremes of wealth and poverty, this studio will focus on housing that will be combined with mixed use programming. This requires consideration of the historical, social, economic, infrastructural, and spatial relationships of housing developments in urban areas.

ARC 307 culminates the five-semester, core curriculum design sequence. A primary goal of this studio is to build upon the pedagogic direction of the first two years with a specific focus on advancing the design development of architectural ideas. An important objective is to build upon the skills, techniques, and design methodologies of earlier studio experiences. It is also expected that students function with increased autonomy.

This semester, an advanced level of design development is expected through an extended semester long project. Design development is understood as a detailed exploration, at multiple scales, stemming from a critical architectural position. Projects this semester should be highly resolved as urban-responsive, spatial constructs with the development of significant exterior surfaces and interior spaces, and with tectonic clarity that conceptually reinforces the project exemplified through a developed set of representations including drawings and models. Appropriate use of structure, construction technique, materials, enclosing systems, and detail are important conceptual considerations.

Research is foregrounded throughout the semester and used as a catalyst for the design process. Each studio section will deploy research in specific ways to broaden design opportunities both theoretical and applied; these inquiries may be material, technological, political, environmental, social, and formal precedent analysis. As a critical component of design inquiry, research is essential to learning. Research should not only be directed at the accumulation of information, but also towards the advancement of your understanding of cultural values, history, form, and conventions that are part of the built environment. To foster the formulation of theoretical positions, critical research and analysis of case studies at multiple scales encourage the semester's synthetic process.

The research of the urban environment and building's purpose will culminate in a workshop that demonstrates an understanding of and an ability to craft the role of critical programming as a vital tool that informs architectural design in shared environments. Far from being a mere list of required functions, programming is understood by architects as an critical tool for connecting a project to larger issues physical, environmental and cultural issues.

ENGAGEMENT

Workshop + Student-led, Studio-wide Discussions

At the end of the analysis portion of the course, students participate in a 2 day workshop that will focus on project programming. Working in groups, students will produce a project program that will define the ensuing term project and as such be the primary reference for the its design. The intent of this exercise is for students to understand and demonstrate an ability to produce and use a project program in the design process.

Each studio will research questions and design issues through different methodologies with particular emphasis in housing. As a result, there will be plurality among faculty approaches. All are useful and it is important to observe how each studio's methods addresses these issues. We will facilitate this process through a student-led, studio-wide discussion providing students, supported by their studio professors, opportunities for more in-depth debate. This will take place during the week of November 5.

Work Expectations

The third year of your architectural education is a critical transition from smaller-scaled projects with greater faculty direction to larger and more urban situated projects that are individually directed. It is expected that students are more independent designers and engage in issues of broad scope. ARC 307 is an opportunity to synthesize your technical and structural knowledge; this assumes that students are sufficiently motivated and informed and that everyone has the experience and knowledge to ask critical questions, abstractly interpret concepts, and test and explore ideas spatially in relation to technologic possibility. In addition to engaging new issues, it is expected that students independently reapply, at the highest standard, the basic propositions and skills learned from the previous years. In this sense, the third year is both reiterative and cumulative.

By this time in your architectural education, students have begun to develop a personal methodology that is efficient and productive. Students should have the ability to initiate the design research process and the skills to quickly evolve your work. As the last semester of the core program, it is also important that this opportunity is used to further develop any areas of lingering deficiency. It is the rare student who has mastered all aspects of the design process. To this end, it will be beneficial to work closely with studio professors in identifying and exercising those skills that you feel need greater development.

Research and Readings

Each faculty member will provide their own list of readings and assign research projects that address issues relevant to their studio. It is expected that students advance their own research interests and projects in order to encourage a broad and lively discourse within the studio.

IMPENDING CERTAINTIES *Hypothetical Futures of Architecture*

Brian Lonsway, blonsway@syr.edu | **Amber Bartosh**, abartosh@syr.edu
Slocum 225, by appt. 326E, Tuesday 12-1 or by appt

Prerequisite: ARC 605 or advanced standing

Audience: 2nd year Graduate Architecture Students or Graduate Students with administrative permission

Description: Architectural design in relation to the city and environment, built & natural. Exercises and projects emphasize environmental, economic, cultural, social, and technological issues as factors in design.

Credits: 6 hrs.

Science and science fiction routinely blend; as our technology advances, what was once magical is now mundane. We swipe our hands over artificially lit surfaces to have objects from all over the world delivered to us by the next dawn. We instruct these artificially lit surfaces to obey our command with our voices. We can, with an instant's notice, communicate with others from around the globe with nothing but an armband, an ear insert, and a small black box in our pocket. There are those in this world who have programmed living mold to follow the branching patterns of formal logic. Others have executed more complex programs of logic with living RNA. Some have even found the ability to transit material instantaneously (i.e., teleportation) from one location to another. As architects of buildings and spaces within these transformations are taking place, we have a responsibility to be adept at considering their impact on our trade. Yet innovations in our field tend to occur in the realms of design tools, design techniques or material assembly. The objects produced from these innovations typically remain as a safe background for these other radical transformations to take place.

This studio takes on the challenge of engaging both the impending certainty that technology will continue to inform and adapt our environments and simultaneously speculates on the hypothetical futures of architecture as a result all the while sustaining an awareness of the existing conditions, economic drivers, social needs, cultural phenomenon, and environmental concerns which are consistently present in architecture.

Project 2.2 Design Brief & Environment Model

Desk crits on 10/9

Pin-up discussion on Thursday 10/11

Review on 10/19

Design Brief

The stories and scenarios you generated from role-playing are, as we've indicated throughout the studio to date, to be seen as documents that provide a window of insights into the realities of a world 50 years hence. Each of the characters you embodied are living in the world you created, and--much as we are today--navigating and negotiating its complexities.

While role-playing, you were developing empathy with these characters in their worlds, much as you would in role-playing a scenario without future speculations. Even as your specific characters' actions in the role-playing event represent only a tiny and very localized subset of actions that are possible in these worlds, you are--as designers of environments these characters occupy--able to form a better picture of their needs and motivations as key stakeholders in your designs. There are important limits to exercises such as this, notably as it remains easy to err on the side of assumptions that such scenario-building is "complete" or "true," but given a thoughtful awareness of these limits, they provide a rich opportunity for designers to engage 'users' rather than merely the clients with whom they typically work.

In the next phase of this project, we are going to shake things up a bit to help mitigate this question of assumptions. You are now to become designers NOT for the scenario you just played out, but for another scenario presented in studio. You will start with the development of a design brief, and then ultimately design a meaningful and relevant architectural response to the needs articulated in this scenario. The first step is to develop the brief itself.

To proceed, and to answer the prompts below, you will have the material presented on 10/4 as your primary source material as well as the stakeholders themselves. For questions you have that are not clearly answered in the visual material, please interview the relevant stakeholders (i.e., characters) from that scenario.

- 1) Identify the primary speculative anomalies which are in effect in the situation/scenario you have selected, and make sure you understand their 'rules of behavior.' Examples of anomalies would be: teleportation, advanced memory capture and storage, or the ability to photograph and rapid prototype. You will benefit from being quite precise about this; create a document for each anomaly, and create simple bulleted lists of their 'rules.' Understanding how they function, the cultural, legal, etc. frameworks that govern them, etc. is essential.
- 2) Name the 'typology' of your project. It will help if this references known typologies, but expands or distorts them. Examples: Biomechanical Hospital and Nursery. Time Travel Station, or Urban Planning Department for Advanced Multi-Modal Transport.

IMPENDING CERTAINTIES Hypothetical Futures of Architecture

ARC 606 :: Bartosh | Lonsway | Dixit :: Fall 2017

- 3) Use the template provided (see Google Drive) to identify the qualitative and quantitative spatial requirements of your project on your way to developing a program. The spatial requirements may occur at any scale, but should be described based on information interpreted from the story. Like a conventional building program, this portion of the brief should identify size/dimensions, function, adjacencies, spatial quality, etc.

PROJECT 2.2 DESIGN BRIEF							
GROUP NAMES							
Team Member 1	Team Member 2	Team Member 3					
SELECTED SCENARIO (LETTER)							
Z							
NAMED TYPOLOGY or TITLE							
Cyborg High School							
ANOMALIES							
Cyborgs exists as a super intelligent medley of biological and robotic parts. All cyborg brains are human.							
WORKING NAME	ACTIVITY/NEED	VERBAL DESCRIPTION	ESTIMATED OCCUPANCY	AREA or VOLUME	ADJACENCIES	FIXTURES &/or PHENOMENA	OTHER
Energy Production Facility for Cyborgs	Space for the cyborgs to feed, allows for flotation of the cyborg bodies while charging "wirelessly"	Private, enclosed zone with limited access and dull light levels that provides excellent energy supply	23..no 24 cyborgs	100 cu.ft	next to cyborg waste facility	Contains anti-gravity energy field	Opaque on all sides, 2 secure access points

B.ARCH Curriculum: SPC B.3 Codes and Regulations _ Accessibility

School of Architecture, Syracuse University

Arc 409: Integrated Building Design Studio

Spring 2019

Instructors: Faculty
Meeting Time: 1:00 PM-5:00PM, Tuesday, Thursday and Friday, Slocum Hall studios
Pre-requisite: ARC 408 and ARC 423 or coreq. ARC 423

SYLLABUS

DESCRIPTION

ARC 409 is a required course in the studio design sequence that addresses design comprehensively; the order of spatial, tectonic, and climatic systems as essential to architectural culture and design processes.

INTRODUCTION

ARC 409 aspires to address the deployment of building systems, materials and construction processes so as to convey coherent values and objectives expressed through architecture (and its effects), and to understand technical and measurable building design and performance. Put another way, students should understand the rich and inescapable relationship between abstract concepts that elevate architecture as a cultural art and the technologies by which it is materialized. It is essential to understand that technical development is not separate from ideation, formal problem solving or design thinking and other design processes; rather, all building technologies provide opportunity to extend intention through tectonic/technologic invention. The pedagogical objective of this integrated, architectural design studio is to provide students of architecture with an educational experience in a design process that links architectural ideas, spatial thinking and building technologies as interdependent, mutually supportive and conceptually expressive.

ARC 409 occupies an important location in the curriculum of the B. Arch studio design sequence; it is both reiterative and introductory. Many of the concepts and techniques acquired in preceding studios and lecture courses will be revisited, both explicitly and implicitly. In ARC 409, as in all studios, knowledge acquired in previous classes and as a result of independent research, will contribute to your emerging, individual identities as architects and designers. A tenet of this studio is that "integrated design" requires a deep and committed level of technical and statutory knowledge, and that when deployed as a partner in design, will result in architecturally sophisticated and developed projects not possible in core level studios. For capable students of architecture, this represents a critical and exciting opportunity to enhance and exercise synthetic design thinking in the manipulation of architectural ideas and strategies that balance interrelated formal, spatial, material, structural and environmental systems.

An objective of ARC 409 is to address the National Architectural Accreditation Board's (NAAB) "integrated design" curriculum requirement. The NAAB asks that every student demonstrate an ability to use investigative skills; is able to understand and translate precedents; understands and is able to integrate codes and regulations; is able to produce appropriate technical documentation; understands basic structural systems and building envelopes, and building materials and assembly systems. Students must demonstrate the ability to integrate component systems such that buildings meet health and safety requirements in a culturally and environmentally responsible manner. However heavy the NAAB requirements for integrated design may seem, they are in fact, a fairly conventional and minimal set of contemporary performance requirements and design expectations. This studio seeks to advance projects beyond conventional, baseline expectations for building performance.

In Arc 409, students are expected to produce a design that complies with applicable building codes, particularly those concerning life safety, egress and accessibility. The implications of emerging techniques in construction and other sectors of industrial manufacturing on building technologies and systems are also explored in the course. In addition, sustainable systems that inform design decisions and affect building tectonics are encouraged. Ultimately, "integrated design" is understood broadly to encompass the processes of design, material and building fabrication and assembly, statutory compliance, and building performance – that together illustrate cultural value and design intent.

The non-design courses you have taken to date will complement, and are relevant, to work in ARC 409; it is important to understand the interrelationships of this course to other classes. Design, theory, history, and significantly, structures and technology classes will be integrated as projects are developed and may be conceptual and inspirational sources.

Though not explicitly coordinated, the work in this course incorporates all areas of the curriculum and should advance exposure to the discipline; both technical and theoretical. Projects should demonstrate that you have the ability to sustain such content and concepts in the design of a compelling building.

LEARNING OBJECTIVES

- Students will demonstrate that the expression of cultural, political and societal ambition, communicated architecturally by the invention of a formal language, is produced by the manipulation of spatial-tectonic relationships, material choices, and the design of building components at all scales.
- Students will develop new design methodologies that allow them to study the tectonic assembly of materials such that they are able to understand with sophistication, the interrelated issues of expression, tactility, performance and composition.
- Students will deploy integrated design approaches that bring together building systems – including spatial, structural engineering, HVAC and exterior envelopes – and are usually considered separately.
- Students will be able to develop and demonstrate that comprehensive environmental systems linked to spatial experiences, with the goal of increasing comfort, energy efficiency and sustainability of built environments.
- Students will be able to demonstrate the relationship between design concepts and basic structural / tectonic solutions.
- Students will be able to identify and describe the components of a critical construction detail.
- Students will be able to research and explain building design in relation to performative building assemblies that include structure, environmental systems, lighting, materials and **accessibility** in support of spatial ambition.

COLLABORATIVE DESIGN

To promote a deeper understanding of the relationship among building technologies and architectural concepts and to allow for more detailed architectural development than a typical semester permits, students will work in pairs on a single project. This is a great opportunity to learn from peers, to teach what you know well, and to produce more work than a single person reasonably can in 15 weeks. Collaborative processes require discussion among colleagues, strategic thinking, the ability to listen, acknowledge and expand on promising ideas and to relinquish individual agendas in service to excellence. This requires time, patience and flexibility, and constructive compromise. To this end, it is critical that everyone is a reliable and hardworking partner. It is likely that you will not be able to anticipate outcome at the beginning of the project. The goal is to produce a thoughtful and developed project that is richer, more complete and more interesting than you might be able to produce on your own. It is best to choose a partner whose interests and talents complement your own. Diverse interests and abilities will promote greater breadth and interesting, challenging discussion.

Time management and dependable document management will be either your biggest ally or your biggest foe; it depends on how well collaborative work practices are maintained. The pace of this studio is rapid. To address all of its required learning objectives, you will find that staying on schedule and working fluidly with a partner is essential. Understanding the collaborative process, constructing mutual expectations, and managing an unusual quantity of documents should contribute dramatically and successfully to your work as a team this term.

LECTURES + WORKSHOPS + CONSULTANTS

Periodically throughout the term, both guest experts and course instructors will provide lectures and/or presentations and public discussions that address the pedagogical focus of the studio and other topics related to the integrative nature of architectural design. These are opportunities that stimulate inquiry and discussion and will enhance basic analytic, integrative and related representational skills connected to building design.

At strategic moments in the semester, structural, mechanical and environmental systems, and building envelope professionals will work with students as projects are being developed. To profit from their expertise, it is essential that on days that they are in studio, your work is developed enough for all consultants to respond meaningfully. These opportunities are important to the progress of your work and should inform both conceptual and technical development. In this sense, technical consultants are collaborators and may be instrumental to the design process.

The class will receive instruction in common life safety standards and accessibility requirements. Understanding is demonstrated by diagramming systems and applied in developed plans and building sections. A one day charrette will test understanding of both accessibility and life safety by demonstration of applicability with regard to building use and construction type.

A similar charrette/workshop that addresses specification writing will be conducted later in the semester. To prepare for

Syracuse University | School of Architecture
ARC 607 - Fall 2018
Instructors: Julie Larsen, Nicole McIntosh and Daniele Profeta

Charrette 1: Accessibility

Introduction

As a supplement to the design work being carried out this semester, there will be a series of charrette problems assigned for completion during a single studio session. In the accessibility one, each team will focus on identifying, clarifying and resolving any issues of accessibility within their design projects.

Accessibility generally covers the way in which the entire building facility allows access to each of its spaces and components without creating onerous barriers to those with physical disabilities. More specifically, building codes and standards in the United States have been amended to include full chapters on accessibility in order to bring building design in compliance with the Americans with Disabilities Act (ADA) of 1990.

Charrette 1 will ask each team to modify their design to provide full accessibility based on a review of the applicable codes and standards.

Process

Each team will present a schematic plan and two schematic sections of their design. Teams will then identify potential areas of non-compliance based on their review and understanding of the relevant standards and design guidelines. At the end of the class session, each team will once again present their schematic designs with newly identified solutions for making the building fully accessible.

Deliverables

Primary Ground Floor Plan + Most relevant Plan, Cross Section, Long Section – scale: 1/16" = 1'-0"

Revised Plans, Cross Section, Long Section (with red lines indicating areas modified) – scale: 1/16" = 1'-0"

Schedule

1:00 – 1:30	Introduction of Charrette 1
1:30 – 2:30	Research of Accessibility Standards / Review provided documents
2:30 – 4:00	Modification of existing drawings
4:00 – 4:30	Pin-Up Revised drawings
4:30 – 5:00	Short Intro to Systems Charrette

Attachments

Ada-aba.pdf
Ansi.a117.1.2009.pdf

ARC 585 B.10 FINANCIAL CONSIDERATIONS

COMPLETE ALL OF THE FOLLOWING QUESTIONS BY CIRCLING THE CORRECT ANSWER.

1. "Project Scope" describes the owner's design requirements including program, site, area and volume, and levels of
 - a) True
 - b) False

2. The Project Manager is responsible for monitoring and maintaining/meeting the project ?
 - I. Budget
 - II. Services
 - III. Scope
 - IV. Schedule
 - a) I and II
 - b) II and III
 - c) I, III, and IV
 - d) I, II, III, and IV

3. The Project Manager has the most control for achieving profitable projects under which fee arrangement ?
 - a) Unit Price Arrangements
 - b) Hourly NTE
 - c) Lump Sum
 - d) Any fee arrangement with a Construction Manager

4. Where would Contingency, Escalation, and Regional Cost Factors normally be allocated in Statements of Probable Costs ?
 - a) Soft Costs
 - b) Hard Costs
 - c) Square Foot Costs
 - d) A/E Fees

5. Where is the location to find a description of the Architect's detailed scope of services on a project ?
 - a) Project Manager's Work Scope
 - b) General Conditions
 - c) Supplementary General Conditions
 - d) Owner – Architect Agreement

6. Why use tracking / monitoring tools on projects ?
 - a) To bill clients for time on Hourly projects
 - b) To proactively understand project conditions so that corrective action can be taken if necessary
 - c) Provides Documentation for any Project Legal Action
 - d) To save time / money during construction administration

7. The "Budget Worksheet" reviewed in class is beneficial, to the Project Manager, for?
 - a) Identifying Phase specific Fee Budgets and Actual time as well as potential future billing activity
 - b) Balancing the Project Expenses and Consultant Fees
 - c) Monitoring the Milestone Schedule as it relates to construction activity
 - d) Tracking accounts receivable

8. Fee overruns on projects can occur because of
 - a) Unrealistic Fee Structures
 - b) Inadequate Project Management
 - c) Scope Creep
 - d) All of the Above

9. There are four (4) elements that must be proven for there to be legal negligence by a design professional. Which one below is NOT one of those four legal elements ?
 - a) Duty
 - b) Breach
 - c) Contract
 - d) Damage

10. Professional Liability insurance does NOT typically cover these types of issues unless it can be proven that they rise to the level of being negligent within the standard of care?
 - a) Errors/Omissions
 - b) Unit Prices
 - c) Allowances
 - d) Alternates

ARC 585 B.10 FINANCIAL CONSIDERATIONS

COMPLETE ALL OF THE FOLLOWING QUESTIONS BY CIRCLING THE CORRECT ANSWER

1. Architect's are directly and legally responsible for preparing which parts of the Project Manual ?

a) I only	I. Specifications
b) II and IV	II. Insurance Requirements
c) II, III, and IV	III. Supplementary and General Conditions
d) I, II, III, and IV	IV. Owner – Contractor Agreement (O/C Contract)

2. If the lowest bid(s) on a project are greater than the budget, the owner has which of the following choices under the provisions of the AIA documents ?
 - I. Agree to waive the budget and pay the overage
 - II. Rebid the project when the market conditions are more favorable
 - III. Require the architect to modify the documents, at no cost to the owner, so that the project can be rebid
 - IV. Abandon the project
 - V. Sue or Terminate the architect for breach of contract
 - a) III only
 - b) IV only
 - c) I, IV, and V
 - d) I, II, III, and IV

3. The Bidding phase (Construction Procurement) is typically what percentage of the Architect's total fee ?
 - a) 0%-1%
 - b) 2%-5%
 - c) 8%-11%
 - d) 11%-13%

4. Bidding methods include all of the following EXCEPT
 - a) Pre-Approved Selective Bidding (Multiple Primes)
 - b) Cost plus a Fee (One Contractor, Multiple Subcontractors)
 - c) Competitive Bidding (Public and Private)
 - d) All of the above are examples of bidding methods used

5. Which item / factor does NOT typically increase the Contractor's bid price adversely ?
 - a) Construction Manager Involvement
 - b) Phased Construction
 - c) AIA Standard Documents (General Conditions, etc..)
 - d) Winter Protection / Heating

6. The Bid Security (Bond or Certified Check) warrants that
 - a) The Owner will receive the "bid security value" if the Contractor withdraws his/her bid without proper cause
 - b) The Owner can be reimbursed for all Contractor construction errors
 - c) The Bid Form, submitted by the Contractor, is free from all errors
 - d) The Contractor will pay all subcontractors through the course of the project

7. The Advertisement for Bids reviewed in class included all of the following EXCEPT
 - a) List of places to review drawings and the project manual
 - b) Bid Document deposit and delivery information
 - c) Supplementary General Conditions
 - d) List of Prime Contracts

8. The Bid Form reviewed in class included which of the following ?
 - a) Alternate Pricing
 - b) Addendum Receipt Verification
 - c) Non-Collusive Bidding Certification
 - d) All of the above were included on the bid form

9. A contractor who can prove a "mathematical error" may withdraw their bid from consideration without penalty.
 - a) True
 - b) False

10. To get the contractor mobilized/started, prior to signing a contract, the owner can issue a "Letter of Intent."
 - a) True
 - b) False

COMPLETE ALL OF THE FOLLOWING QUESTIONS BY FILLING IN THE BLANK OR CIRCLING THE CORRECT ANSWER.

ARC 585 B.10 FINANCIAL CONSIDERATIONS

1. What is the "Standard of Reasonable Care" and how does it relate to the practice of Architecture and liability concerns? _____

2. An unlicensed architectural student, wishing to help out a family friend, designs and produces construction drawings for a new residence. To receive a building permit, in the jurisdiction having authority, they must have the drawings stamped by a licensed architect so the student contacts a local architectural firm. What ethical issues and "Obligations to the Profession" does the contacted architectural firm have for stamping the drawings? _____

3. The owner-architect agreement contains information on the architect's obligation to meet an Owner's budget for a project. If the low bid on a project is \$2,250,000 and the architect's preliminary estimate was \$2,000,000 (which the owner used as their budget to secure financing) What liability / obligation(s) does the architect have and what options might the owner have to deal with this cost overrun ? _____

4. Name TWO (2) of the three types of Liability (Laws) that are associated with RISK. Define what they are and describe how they might or might not apply to the Owner, Contractor, and Architect on any given project.

5. Which of the following “treatments of risk” is most closely associated with the installation of a sprinkler system ?
 - a) Avoidance
 - b) Reduction
 - c) Assumption
 - d) Self-Insure
6. All of the following are “damage” classifications of risk discussed in class EXCEPT
 - a) Bodily Injury (Physical)
 - b) Personal/Emotional Injury (Psychological)
 - c) Property/Monetary Damage (Including loss of use)
 - d) All of the above are classifications of risk
7. Which of the following AIA documents contains information on project specific architectural services ?
 - a) B101
 - b) A101
 - c) G601
 - d) Supplementary General Conditions
8. The legally recognized “Standard of Reasonable Care” can
 - a) Force the architect to achieve a level of perfection on projects
 - b) Be easily modified by small changes in contract language
 - c) Be found in detail within the AIA General Conditions
 - d) Make the architect liable for every change order
9. Professional liability insurance protects the architect against claims for which type of acts ?
 - a) Omissions
 - b) Environmental
 - c) Negligent
 - d) Criminal
10. Which of the following could be viewed as an architectural antitrust action ?
 - a) Price Fixing fees in collusion with other architects
 - b) Boycotting a project so that a specific architect will get the job
 - c) Conducting Architectural Marketing Surveys to “further a restraint of trade”
 - d) All of the above
11. When an architect stamps his or her drawings they are
 - a) Establishing a guarantee for the accuracy of the drawing contents
 - b) Sealing documents that have been prepared under his or her responsible control
 - c) Verifying that they personally produced the documents being stamped
 - d) Assuring the owner that the documents are free from errors and omissions
12. Who is responsible for enforcing the International Building Code ?
 - a) Local and/or state building officials
 - b) Federal government
 - c) Zoning boards
 - d) Local fire departments
13. To have an item of the code legally contested one typically goes through a _____ process ?
 - a) Site Plan Review
 - b) Litigation
 - c) Variance
 - d) Mediation
14. Which of the following are (an) example(s) of Federally regulated construction / building law ?
 - a) OSHA
 - b) International Building Codes
 - c) Building Codes of NYS
 - d) All of the Above
15. An architect’s responsibility for basic services typically includes all of the following EXCEPT?
 - a) Evaluating the Owner’s Budget
 - b) Site visits as appropriate to the stage of construction
 - c) 3D Renderings and Animations
 - d) Evaluating the Owner’s Program

16. The title "Statement (Opinion) of Probable Construction Cost" is used instead of "Cost Estimate" because
- The two documents are completely different
 - Owners value the word "statement"
 - Owner's lawyers make architects use it
 - The word "estimate" infers a certain level of accuracy
17. Which alternate method is preferred by architects to achieve the best value at bidding/ pricing ?
- Add
 - Deduct
 - Contingency
 - None, as alternates add significantly to the cost of a project
18. Alternates are used most commonly to
- Allow flexibility so that the bid costs can be aligned with the project budget
 - Protect the architect from paying for errors and omissions
 - Provide contingency dollars for unforeseen conditions
 - Add significantly to the cost of a project
19. Using what fee arrangement does the project manager have the best opportunity to utilize a simple invoice structure ?
- Retainer with hourly multipliers
 - Hourly
 - Lump Sum
 - Hourly NTE
20. The architect should strive to have close communications with which of the following project related personnel ?
- Local Building Code Official(s)
 - Contractor(s)
 - Client(s)
 - All of the above
21. Which item is an example of a construction cost factor that can add significantly to the construction budget ?
- Architectural and Engineering Fees
 - Deduct Alternates
 - Consulting Fees
 - Temporary Facilities for Winter Construction
22. All of the following are examples of preliminary (Schematic design / DD) cost estimating methods EXCEPT
- Final Contractor Bidding
 - Functional Unit
 - Volume
 - Area
23. Unit Prices are used during bidding to
- Make the contractor responsible for unknown conditions and construction errors
 - Indemnify the architect from errors and omissions
 - Establish set costs for specific work components that might occur
 - Put the contingency dollars in the construction contracts
24. Escalation is used in probable costs to
- Factor in regional construction costs
 - Track allowances
 - Account for inflation over time
 - Budget for change orders
25. Soft costs include
- Contractor overhead and profit
 - Architect / Engineering Fees
 - Construction labor
 - Material Costs
26. A Project Cost Estimate includes which item in addition to what is typically included on a Construction cost estimate ?
- Soft costs
 - Contingency
 - Allowances
 - Escalation

27. Construction Allowances are used sometimes to
- Allocate a fund for items whose level of quality and detail cannot be determined prior to bidding (unknowns)
 - Protect the owner from contractors who do not complete their work
 - Offset architectural fees for additional work
 - Provide specific unit costs for "quantities" of known items
28. Cost control during construction can be accomplished effectively by
- Having clear and accurate drawings and specifications
 - Carefully monitoring contractor work as related to their progress payments
 - Having a well defined process for dealing with change orders
 - All of the above
29. Select the most correct statement. Building codes
- Suggest ideal solutions to technical construction problems
 - Are used to insure that buildings are structurally safe from all types of potential environmental hazards
 - Are concerned with detailed assemblies of construction materials and systems
 - Are concerned with protecting the building occupants and community from health and safety hazards
30. In order to meet an Owner's budget for a project, the architect typically has control over which two items ?
- Budget and Program
 - Building Typology and Site Location
 - Quality and Scope
 - Construction Delivery Method and Financing
31. A provision in a Construction Contract (O/C) that penalizes and deducts money from the contract for each day of a construction delay over the date of substantial completion, is a
- Construction Retainage
 - Cash Allowance
 - Contingency Fund
 - Liquidated Damage
32. Which of the following statements are true concerning preliminary construction estimates during schematic design.....
- Initial estimates are usually based on building area or volume multiplied by historic cost factors
 - Once a preliminary estimate is submitted architects should not revise it
 - If area or volume calculations are used initially, they must be used in all subsequent cost estimates
 - Cost estimates submitted during the construction documents phase should be as detailed as a contractor's
- I only
 - I and III
 - I, II, and III
 - I, II, III, and IV
33. Which of the following items should always be incorporated in a CONSTRUCTION COST estimate ?
- | | |
|-----------------------|----------------------------|
| a) I only | I. Contingency |
| b) I and II | II. Escalation |
| c) I, II and III | III. Regional Cost Factors |
| d) I, II, III, and IV | IV. Soft Costs |
34. According to the B101, in relation to basic services for programming, the architect is responsible for ...
- Accomplishing feasibility studies
 - Creating the program for the Owner's project
 - Evaluating the Owner's program
 - No programming activities
35. The primary advantage of the International Building Code is
- That it will be easier to secure projects in most foreign countries
 - That it provides specific technical/construction information concerning building systems
 - That the code will now be enforced by the Federal Government
 - That there will now be a constant single uniform code for most areas in the United States
36. Who is responsible for prosecuting violators of the ADA law ?
- Zoning Boards
 - State Department
 - Local Code Officials
 - Department of Justice

**Bachelor of Architecture
Curriculum Changes
Effective Fall 2019**

OLD		
COURSE	CH	
54 ch Design	ARC 107	6
	ARC 108	6
	ARC 207	6
	ARC 208	6
	ARC 307	6
	ARC 407	6
	ARC 408	6
	ARC 409	6
	ARC 508	6
12 ch History	ARC 133	3
	ARC 134	3
	ARC HIST	3
	ARC HIST	3
6 ch Theory	ARC 141	3
	ARC 242	3
12 ch Technologies	ARC 121	3
	ARC 222	3
	ARC 322	3
	ARC 423	3
6 ch Structures	ARC 211	3
	ARC 311	3
12 ch Professional Requirements	ARC 181	3
	ARC 182	3
	ARC 505	3
	ARC 585	3
18 ch Professional Electives	PE	3
	PE	3
	PE	3
	PE	3
	PE	3
	PE	3
6 ch Writing Sequence	WRT 105	3
	WRT 205	3
	STRUC PREP	3
MAT 221, 285, 295, or PHY 101	STRUC PREP	3
21 ch Arts and Science Electives	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
12 ch Open Electives	OPEN ELEC	3
	OPEN ELEC	3
	OPEN ELEC	3
	OPEN ELEC	3
	OPEN ELEC	3
Total	162	

NEW		
COURSE	CH	
54 ch Design	ARC 107	6
	ARC 108	6
	ARC 207	6
	ARC 208	6
	ARC 307	6
	ARC 407	6
	ARC 408	6
	ARC 409	6
	ARC 498	6
12 ch History	ARC 133	3
	ARC 134	3
	ARC HIST	3
	ARC HIST	3
6 ch Theory	ARC 141	3
	ARC 242	3
12 ch Technologies	ARC 121	3
	ARC 222	3
	ARC 322	3
	ARC 423	3
6 ch Structures	ARC 211	3
	ARC 311	3
9 ch Professional Requirements	ARC 181	3
	ARC 182	3
	ARC 585	3
12 ch Professional Electives	PE	3
	PE	3
	PE	3
	PE	3
6 ch Writing Sequence	WRT 105	3
	WRT 205	3
MAT 221, 285, 295, or PHY 101	STRUC PREP	3
24 ch Arts and Science Electives	FYE (A&S)	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
	A&S ELEC	3
12 ch Open Electives	OPEN ELEC	3
	OPEN ELEC	3
	OPEN ELEC	3
	OPEN ELEC	3
Total	156	

*Changes highlighted in yellow

Master of Architecture Curriculum Changes

	OLD	Effective Fall 2015	NEW
	COURSE	CH	COURSE
42 ch Design	ARC 604	6	42 ch Design
	ARC 605	6	ARC 604
	ARC 606	6	ARC 605
	ARC 607	6	ARC 606
	ARC 608	6	ARC 607
	ARC 609	6	ARC 608
	ARC 998- Thesis	6	ARC 609
			ARC 998- Thesis
12 ch History	ARC 639	3	12 ch History
	ARC HIST Elec	3	ARC 631
	ARC HIST Elec	3	ARC 639
	ARC HIST Elec	3	ARC HIST Elec
6 ch Theory	ARC 641	3	6 ch Theory
	ARC 642	3	ARC 641
			ARC 642
12 ch Technologies	ARC 621	4	12 ch Technologies
	ARC 622	4	ARC 621
	ARC 623	4	ARC 622
	-	-	ARC 623
			Tech Elective
8 ch Structures	ARC 611	4	6 ch Structures
	ARC 612	4	ARC 611
			ARC 612
12 ch Professional Requirements	ARC 681	3	9 ch Professional Requirements
	ARC 682	3	ARC 681
	ARC 505	3	ARC 682
	ARC 585	3	-
			ARC 585
18 ch Professional Electives	Prof. Elective	3	12 ch Professional Electives
	Prof. Elective	3	Prof. Elective
	Prof. Elective	3	Prof. Elective
	Prof. Elective	3	Prof. Elective
6 ch Open Electives	Open Elective	3	6 ch Open Electives
	Open Elective	3	Open Elective
			Open Elective
			5 ch Research Seminars
			ARC 650.1
			ARC 650.2
			ARC 650.3
			ARC 650.4
			ARC 650.5
			Total 110
		Total 110	

*Changes highlighted in yellow