PROPOSAL FOR 2015-2016 THESIS/SENIOR PROJECT
AMENDED 5/20/15 7PM

The purpose of Thesis is to allow the student to pursue a line of study for an extended period in considerable depth bringing together various skills from studio and classroom that have been acquired over the previous years of study. It is an in-depth study where the topic of investigation is either developed by the student or in collaboration with a faculty member. In both cases the student is expected to work in close consultation with their Thesis Advisor. The Thesis is also a comprehensive summary of what has been learned to date, so technical competence must be exhibited in all aspects of a Thesis project. Thesis projects will not only be judged on the quality of work presented, but also on the processes used to produce it.

The successful Thesis project includes research, program analysis and development, site analysis and selection, preliminary, schematic building design, and systems integration. The expected effort must be commensurate with the time commitment - a yearlong project - and the level of expertise required of a Thesis student.

After a few years of modifying the way we teach the terminal project in Architecture, we are happy to announce a new plan for next year.

The intent is to build on what we do best here at Drexel; integrate the academic with the practical. The faculty feel that what will make this most successful is if the instructors have a vested interest in the project.

CLASS OF 2016 = 28 sixth year students + 1-2 returning students

OPTION 1
Three Faculty Led Projects with 4-6 students in each group
INSTRUCTORS /PROJECTS
   A. Joanne Aitken - A new college residence
   B. Don Jones - Music Venue
   C. Stephen Varenhorst - The Developer Driven project

Review the proposals and select first second and third choice. Every effort will be made to give each student their first or second choice.

12-18 STUDENTS
OPTION 2

Three Independent Thesis Advisors @ 3-4 students each

INSTRUCTORS:
TBD

CRITERIA FOR DOING INDEPENDENT THESIS:

- STRENGTH OF PROPOSAL
- TWO RECOMMENDATIONS FROM STUDIO 4/5 or 6 CRITICS
  (2 recommendations total)

9-12 STUDENTS

2015-2016 Independent Thesis Proposal

In general, the project should be larger than a single-family house. Modest projects, similar to programs attempted in Studio 2 or 3, for example, must include investigations at both Intermediate and Final Reviews that go well beyond those contained in a basic architectural presentation of plans, sections, elevations and three dimensional representation.

A Thesis project which concentrates on issues of large-scale development must include architectural content that demonstrates the relationship of the project to idea, context and built form. The clarity of the problem statement, the relative complexity of the problem, and a judgment of the ability of the student to deal with the problem will determine acceptability. Projects which are poorly defined or which are too open-ended to permit the clear understanding of the limits of the problem will not be accepted. The appropriate architectural content regarding the scale of each Thesis will be determined in discussion with the student’s Thesis Advisor.

All Thesis projects must demonstrate the ability to conduct research and design investigations, create appropriate and meaningful architectural form, and resolve relevant issues of site, structure and construction. New construction should form the basis of a Thesis project. Issues of renovation can be included only as a secondary theme.
OTHER CONSIDERATIONS
The project selected cannot be a real commission for the student, the firm they may be working for or have the clear potential of becoming one. Although it usually takes the form of a real project, the Thesis is an academic exercise and students must follow academic advice in reaching an acceptable and successful result. It is possible, however, to "redo" a recent project that the student feels strongly could have been done better. In any case, the student is responsible for independent thinking, conceptualizing and programming as a significant component of the Thesis.

The Proposal is should be a brief document (two pages maximum), and must follow the outline on the attached page. Mail the Proposal as an attachment to archintr@drexel.edu, as a PDF labeled with your last name – “Smith_2015_2016 Thesis Proposal.”

SELECTION PROCESS
As in previous years, students will be assigned Advisors by the Thesis Faculty and the Thesis Coordinator. The Thesis Coordinator and Advisors will review the Faculty-Led option selections and the Independent Thesis Proposals. Approximately four weeks after the submission due date students can expect to be contacted by their assigned Thesis Advisor who will report that the Proposal has been either Approved, Rejected, or needs Revision or Clarification. A Request for Revision or Clarification will be explained by the Advisor along with a timetable for resubmission. When the Proposal is approved, the student begins the preparation of the Program with the advice of the Thesis Advisor. Students who’s independent Thesis proposal is rejected will be assigned a Faculty Led Project.

DEADLINE: FRIDAY, 26 JUNE 2015 4PM

For students not taking ARCH 431 Programming by Fall 2014, one of the following books is REQUIRED (all are available at Hagerty Library):

REGISTERING FOR THESIS / SENIOR PROJECT 2015-2016

Students currently enrolled have the option to apply for an independent Thesis based on our traditional model, or to enroll in the new Faculty – Led studio.

All students entering the final design studio MUST have completed all pre-requisites:

ARCH 134 or 153  Architectural Representation IV-3D Modeling (Min. Grade C-)
ARCH 143  Architecture and Society III (Min. Grade C-)
ARCH 263  Environmental Systems III (Min. Grade C-)
ARCH 273 or CIVE 263  Materials and Structural Behavior III (Min. Grade C-)
ARCH 363  Studio 6-3 (Min. Grade D)

Regardless of which track a student takes, there are two ways in which a student may register. Two alternatives will be offered for 2015-2016 for students meeting the above requirements:

ARCH 496/497/498  THESIS I, II, III  8 credits per quarter

or

ARCH 493/494/495  SENIOR PROJECT I, II, III  4 credits per quarter

+ 

ARCH 499/499/499  ARCH THESIS SEMINAR I, II, III  1-3 credits per quarter

Students will be assigned an Advisor over the summer prior to registration and will register for the appropriate course. Reminder: students receiving financial aid must register for a minimum of 6 credits to maintain eligibility.

ALL THESIS / SENIOR PROJECT STUDENTS ARE TO BE IN CLASS MONDAY NIGHTS FROM 6PM to 10PM

Contact Rachel Schade, Thesis Coordinator at schadesr@drexel.edu with questions.
2015-2016 DREXEL ARCHITECTURE THESIS/SENIOR PROJECT
Email a completed form to archintr@drexel.edu by FRIDAY 6/26/2015 4PM

OPTION 1

Faculty Led Thesis
(Indicate first second and third choice)

________________ AITKEN / UNIVERSITY RESIDENTIAL HOUSE
________________ JONES / MUSIC VENUE
________________ VARENHORST / DEVELOPER DRIVEN PROJECT

(NOTE: ALL STUDENTS MUST INDICATE THEIR CHOICES FOR THE FACULTY LED THESIS IN THE EVENT THE INDEPENDENT PROPOSAL IS NOT ACCEPTED)

OPTION 2

Independent Thesis Project
Proposal due in two-page format per the attached outline, include recommendations from two studio instructors from Studio 4, 5, or 6

(NOTE: ALL STUDENTS MUST INDICATE THEIR CHOICES FOR THE FACULTY LED THESIS IN THE EVENT THE INDEPENDENT PROPOSAL IS NOT ACCEPTED)

Name: ________________________________________
Student ID: ____________________________________
THESIS PROPOSAL OUTLINE
Student Name and Drexel ID number
Email address (use Drexel address only)
Date

Title of Thesis
Subtitle phrase (Referring to conceptual goal, site, and program)

Thesis Statement
Issues, concepts, questions, described in abstract terms
Discuss methods and types of inquiry you will use
Terms of criticism (how is the project to be judged?)

Program
Why did you select this topic? How is this Thesis going to help you
develop the concepts and ideas?
List major program activities and uses

Site
Why did you select this site? How does the selection of the site support
your conceptual ideas for the project?
Describe physical aspects of the site and the context

Technology
Discuss issues that will be explored in the integration of building
systems with your design.
How will these issues be relevant to your thesis? Can specific
technologies be a means to understand the Thesis issues and
concepts?
Discuss methods and means of inquiry relevant to exploration of these
technologies.

Cultural Context
Define the cultural context of the site
How does your Thesis project fit into existing culture? What other
disciplines will you explore to gain a better understanding of the
issues?
How does your Thesis fit into the larger issue of Architecture in today’s
society?

Resources
Identify a minimum of three sources, including non-architectural
research to support your ideas
Inspiration—list a minimum of three projects that will influence the way
you approach the Thesis project

Biographical Information
Provide information about your current employment status, what other
coursework you intend to pursue during the Thesis year.

DUE FRIDAY, 26 June 2015  TWO PAGE MAXIMUM
Project: New College House  
Faculty Advisor: Joanne Aitken

Studio Goals:
This thesis studio is as much about the design process as it is about the design problem. The design process is structured to produce thoughtfully designed and beautifully detailed projects. The process focuses on research and analysis, design optioning, and design iteration. Digital tools and, importantly, physical models will be used to produce a succession of rapid studies to inform the design at each stage. Using this process, the design solution is evolved by “unpacking” the problem itself in contrast to imposing a solution from outside, often considered the “normal” process. The design problem was selected to have the richness and complexity (i.e., enough possible “design drivers”) to accommodate each student’s individual architectural interests and preferred approach.

Problem:
As part of its College House expansion, the University of Pennsylvania will demolish the existing Stouffer College House (1968, Geddes Brecher Qualls and Cunningham), which no longer meets its needs, to replace it with a new facility on the same triangular site bordered by 38th and Spruce Streets and Woodland Walk. A residential college, as at College House, is a specific housing type based on the social goal of creating an intimate-scale living/learning community within the larger university context. Besides student rooms, a residential college contains social and academic spaces (dining hall, library, lounges, fitness areas, performance and arts spaces) as well as live-in academic and administrative support (Master, Resident Dean, faculty advisors).

Design guidelines:
The studio will accept at face value the University’s design guideline that mandates a project that is both contemporary and visionary: Buildings on the campus reflect many styles, and the essential quality of the campus is one of buildings that speak in their own voice about their purposes and the era in which they were built….New buildings should express the aesthetic ideas of our times, so that as we look back on them they also become a cultural record of ideas about architecture and campus life…. The university should engage architects who…aspire to design each structure so it not only suits its occupants and addresses its physical and historical context, but also contributes to ways of thinking about buildings.

Aspects of the project:
The following aspects of the project will be considered for their potential to influence the design. Each student will make use of one or more of these (or possibly others) as a lens through which – or strategy with which – to define his/her design approach:

Program: Residential colleges in American have a distinct philosophical and architectural history, focused on the social goal of creating an ideal educational community consisting of both faculty and students. The model has proved enormously successful, but was developed early in the last century and is in need of translation for this new century.

Site: A rich site, prominent in the urban context; confined by an unusual geometry; bordered by two major streets and a significant pedestrian walkway; amidst architecturally and historically significant neighbors.

Campus master plan: Arguably, campus master plans represent the epitome of American planning. Penn’s master plans (current and previous) will provide a basis for architectural thinking within a larger context.

Campus architectural history: Though sometimes thought of only in terms of its dark brick buildings, the Penn campus contains a sizable collection of significant architecture that serves as the prelude to all new campus structures.

Plan typology: Campus residential buildings offer distinct plan typologies that will be considered in relation to this site.

Relation of building to landscape: The American college campus is largely defined by the relationship of buildings to landscape, of necessity carried out at Penn within an urban context, and a particular challenge for this triangular site.

Relation of commercial city to bucolic campus ideal: The site straddles the line between city thoroughfares and protected pedestrian greenspace.

Sustainability:
Universities have been the leaders in sustainable design in the US and new projects at Penn should reinforce its leadership position.

Structure/tectonics/materiality/other:
These traditional areas of architectural inquiry could also serve as starting points/design drivers for this project.

**Studio supplements:**

Studio work will be supplemented by the following (evolving) list of readings, lectures, tours, demonstrations:

- Lectures/demonstrations of the proposed design process (optioning and iteration, modeling)
- Tour of KieranTimberlake office/shop and explanation of the research and design processes
- Demonstrations/assistance with modeling tools/techniques using Drexel facilities
- Lecture/tour of Penn’s campus master plan
- Lecture/tour of Penn’s architectural history/landscape context
- Lecture about residential colleges/residential college life
- Readings in the history of American campus planning
- Readings in the development of American residential colleges
- Original sources/case studies/plan typologies: master plans and residential college plans
- Technical support on topics as needed
Studio Goals:
The design of an entertainment venue requires a detailed understanding of the capacity of the built environment to support the performance. A successful music theater improves the experience for the audience and performers as well as the functionality of the technical and service facilities. Solving for room acoustics and sightline design will give students a robust experience in coordinating engineering and aesthetic concerns in a civic space. Finally, developing the decorative scale of the exterior and interior spaces as symbols and representations of music tradition and current expression will provide an outlet for visual creativity. It is expected that students will work in digital and physical 3d from the project’s inception.

Problem:
Even since the development of high quality sound and video recording and live broadcasting, music is understood and appreciated best in live performances. To this end, architects and their allied specialty consultants have always been active in the design of music performance, recording and broadcast facilities.

Additionally, the wide variety of musical types and styles call for different types of musical ensembles, from unaccompanied solo vocal performance to large scale groups with hundreds of instrumentalists and choral performers. Arguably, the best, most exciting live performances are held in venues the balance intimacy, sound quality and economic feasibility. However, the myriad of performance types requires that the venue provide flexibility for performance type, audience seating configuration, lighting and sound reinforcement.

For this thesis studio, we will research and develop a place for music in an urban, suburban or rural site, and produce a design which solves for these complex issues. We will study architectural, technical and music industry literature, visit and tour venues, learn about the facilities and equipment that make them work and design a 21st Century music showplace.

Aspects of the project:
Program: The venue will have a first class main music auditorium for 500 - 750 patrons, with flexible seating and stage device, lighting, sound, lighting and recording provisions. The building will also include a smaller venue for about 200. Students will solve for support spaces accommodating performers and service and a recording studio and rehearsal space.

Site and building relationship: We will choose a prominent urban site and a suburban or rural site for the venue and study how the building can fit and contrast its context in an appropriate way for this entertainment facility.

Plan and music room precedent: Through research and tours, we will learn how these performance venues have evolved, along with the way the venues and musical styles have influenced each other, and how these lessons can be applied to our project.

Sustainability: Responsible environmental design is the price of admission to the design industry and will be emphasized.

Studio support and research:
Lectures/demonstrations of the proposed design components (acoustical design, sightline design, lighting and sound)
Tours of precedent venues of various types
Readings in the history of music performance, recording, broadcasting and theater design
Technical support on topics as needed
Project: Building the City - The Forces That Shape Development
Faculty Advisor: Stephen Varenhorst

Studio Goals:
Successful private development is the masterful orchestration of Money, Know How and Vision. This course will explore the architect’s complex role to both understand the forces at play and the architect’s role on the development team in shaping a creative vision. The course will also explore the public impact on urban development and the architect’s role in understanding how the public’s vision through codes, rules, regulations, commissions and agency approvals shape Urban Development.

Money: The Developer and the Financial Team
Who are the investors? How is a site selected? How do they decide what to build? How are the finances put together and how do they decide on how much can be spent? How does the financial return inform the design? How does the developer make money? How is building or use type determined? Office, residential, retail

Know How: The Construction Team
Approach to construction, selection of building systems

Vision: The Design Team
How to build a design team. Necessary design and engineering consultants. Working with a client.

Design Guidelines:

Aspects of the three projects:
Fall:
250 unit apartment building in center city.
Ground Floor Retail
Parking below grade.
Winter:
250 Apartment Building in Center City
Ground Floor Retail including a 60000 sf grocery store
Parking below grade.
Spring:
300 Apartment Building in Center City
Ground Floor Retail
300,000 SF of office space
150 Room Hotel
Parking below grade or in separate structure

Studio Support and research:
These are all real projects. Site documentation will be provided, discussions with real developers, real consultants: geotechnical, structural etc. The type and selection of structural and other building systems will be determined based on cost, practicality, and other real-world factors.

Additional information regarding this course will be provided by 1 June 2015.