

# ARCH 302: ARCHITECTURAL DESIGN

ball state university | department of architecture | spring 2020

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MKM Student Design Competition 2020 □ Urban Food Hub and Environment for Aging - Fort Wayne, Indiana

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The 2020 MKM Student Design Competition is a multifaceted program with a range of opportunities for engagement. As discussed during the introductory session held on Friday, February 28, 2020 in Room AB 100, each ARCH 302 Student will have the choice of developing one (1) of two (2) program component options (*categories*) for a single, pre-determined site in the Central Business District (CBD) of Fort Wayne, Indiana. In addition to our internal MKM Student Design Competition, each student will have the opportunity to submit their respective design proposal to the Association of Collegiate Schools of Architecture (ACSA) for the 20<sup>th</sup> Annual Steel Design Competition administered by the ACSA and sponsored by the American Institute of Steel Construction (AISC) either in the Food Hub Category or the Open Category. Furthermore, students competing in the Environment for Aging program component option will have the opportunity (with support from the American Institute of Architects) to be recognized, participate, and present at the National Environments for Aging Expo and Conference in Louisville, Kentucky in late April 2020.

<https://www.environmentsforaging.com/>

## PROGRAM DESCRIPTIONS:

### □ Option 1: Urban Food Hub

The 2020 MKM Student Design Competition and the ACSA Steel Design Competition challenges students to design an Urban Food Hub. Urban agriculture is a social movement for sustainable communities, where organic growers, foodies, and locavores form social networks founded on a shared ethos of nature and community. Many people are looking for food security, nutrition, and income generation which are key motivations for urban agriculture and local markets. People who live in cities need a more direct access to fresh vegetables, fruits, and meat products through urban agriculture.

<https://www.acsa-arch.org/competitions/2020-steel-competition/program/>

### □ Option 2: Environment for Aging

The 2020 MKM Student Design Competition with support from the AIA, challenges students to explore the creation of spaces, places, and living environments for the aging, and advancing senior environments through architecture and design. According to *Environments for Aging* magazine, as more senior living community operators adapt to meet the rising demand for more integrated, multigenerational housing options, architects, and designers are seeking new ideas for incorporating the latest amenity spaces, wellness features, technologies, and living options for seniors. Outdoor activity spaces and dining options are also essential to advancing new ideas and approaches for senior living communities in the present and in the future.

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## THE SITE:

The pre-determined site for both components of the 2020 MKM Student Design Competition will be located in the northern sector of the Central Business District of Fort Wayne, Indiana. The site is located between Main Street to the south, Ewing Street to the west, Pearl Street to the north, and Webster to the east. If desired, Webster Street may be vacated and converted into an urban plaza space or pedestrian thruway if desired. However, the proposed building components will be located within the existing boundaries of the site.



Each student will be responsible for developing a master plan of the entire site, indicating the location and site development for both the Urban Food Hub and the Environment for Aging. Also, competition entries should take the surrounding context into consideration including but not limited nearby development such as the mid-rise housing complex (*Edsall House Apartments*) to the south, the abandoned Perfection Bakery to the north (*recommendations for adaptive, re-use or other creative strategies for this massive facility are encouraged*), and lofts, hotels, and museums to the east. The proximity to Promenade Park on the southern bank of the nearby St. Mary's River is an asset that could and should be taken into consideration. Other nearby amenities including eateries, "The Landing", banks, and theaters – all within a three block radius. The historic University of St. Francis (USF) Performing Arts Center (*formerly Scottish Rite*), the Allen County Public Library and its amazing Genealogy Center are also within said radius.

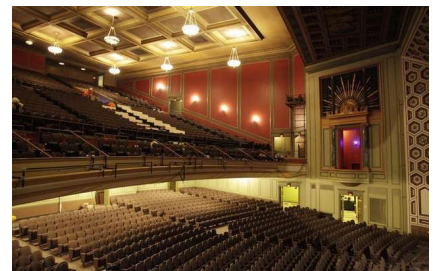
<http://www.genealogycenter.org/>



The Promenade



The Landing



USF Performing Arts Center



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## URBAN FOOD HUB



Much of the programmatic information and deliverable requirements contained herein for your convenience, is taken directly from the 20th Annual Steel Design Competition administered by the ACSA and sponsored by the AISC. As indicated above, the 2020 MKM Student Design Competition and the ACSA Steel Design Competition challenges students to design an Urban Food Hub. Urban agriculture is a social movement for sustainable communities, where organic growers, foodies, and locavores form social networks founded on a shared ethos of nature and community. Many people are looking for food security, nutrition, and income generation which are key motivations for urban agriculture and local markets. People who live in cities need a more direct access to fresh vegetables, fruits, and meat products through urban agriculture.

The USDA defines a food hub as “a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products.”<sup>1</sup> Food Hubs are a part of the agricultural value chain model and often share common principles relating to conservation, sustainability, healthy food access, and supporting local farmers.<sup>2</sup> A defining characteristic of food hubs is source identification, a food safety and marketing benefit that allows consumers to trace the origin of products they buy.<sup>3</sup> One of the primary goals of food hubs is to give small and medium-sized farms access to larger or additional markets. Food hubs also fill gaps in food systems infrastructure, such as transportation, product storage, and product processing.<sup>4</sup>

Steel is an ideal material, for the Urban Food Hub because it facilitates the quick construction of affordable, versatile structures. Steel offers the greatest strength-to-weight ratio. In addition, steel can be constructed quickly and for all project site types with the use of labor-saving prefabrication methods such as kit-of-parts, panelization, and modular construction. Designing the Urban Food Hub with steel will be more flexible and adaptable to allow for changing needs and methods of production over time. Steel can create an aesthetic that respects and enhances the location of the Hub installation.

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<sup>1</sup> “USDA Blog » Getting to Scale with Regional Food Hubs”. [blogs.usda.gov](https://blogs.usda.gov). Retrieved 2016-10-15.

<sup>2</sup> “Food Value Chains and Food Hubs: Supporting Local Producers Through Collaborative Planning, Aggregation, and Distribution | Agricultural Marketing Service”. [www.ams.usda.gov](https://www.ams.usda.gov). Retrieved 2016-10-15.

<sup>3</sup> “Food Hubs: Supply Chain Traceability to Enhance Local Food Systems”. *Food Studies: An Interdisciplinary Journal*. 3.

<sup>4</sup> Berti, Giaime; Mulligan, Catherine (2016-07-01). “Competitiveness of Small Farms and Innovative Food Supply Chains: The Role of Food Hubs in Creating Sustainable Regional and Local Food Systems”. *Sustainability*. 8 (7): 616. doi:10.3390/su8070616.

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## URBAN FOOD HUB - Program

In addition to improving residents' food access options, an urban food hub can serve as a fresh produce pick-up location, make commercial kitchen equipment available to small-scale producers, host nutrition classes and serve as an anchor for the local community. The following program elements and corresponding areas are recommended:

Commercial Kitchen (Shared Space)	1 @ 1500 sq. ft. =	1500 sq. ft.
Teaching Kitchen	1 @ 800 sq. ft. =	800 sq. ft.
Restaurant / Retail	4 Units@ 500 sq. ft. =	2000 sq. ft.
Storage	4 @ 200 sq. ft. =	800 sq. ft.
Retail	1 @ 200 sq. ft. =	200 sq. ft.
Restroom	2 @ 50 sq. ft. =	100 sq. ft.
Service	1 @ 100 sq. ft. =	100 sq. ft.
Reception	1 @ 100 sq. ft. =	100 sq. ft.
Office	2 @ 50 sq. ft. =	100 sq. ft.
<b>Total</b>		<b>+/- 5,300 sq. ft.</b>

## Site

The site for the competition has been pre-determined as part of the MKM Student Design Competition and has been selected in strict accordance with the ACSA requirements to be in an urban context, close to public transportation, and city amenities. Submissions must explain the site selection and strategy geographically or otherwise. With respect the 2020 MKM Student Design Competition and the ACSA Steel Design Competition, each proposal will be required to master plan the entire site (*including the foot print for the Environment for Aging, street and subsurface parking access, and the development of exterior spaces*). Exterior spaces are to be shared by visitors and vendors of the Urban Food Hub, with the multigenerational occupants and visitors from the Environment for Aging facility, the surrounding community, and greater Fort Wayne community. Thus, although the programmatic spaces summarized below represent a relatively small facility, the creative development of exterior space is essential. Students are strongly encouraged develop detailed site plans with imaginative proposals for exterior spaces that and enhance the overall quality of life for the residents in the Environment for Aging, the surrounding community, and the citizens of Fort Wayne, Indiana.





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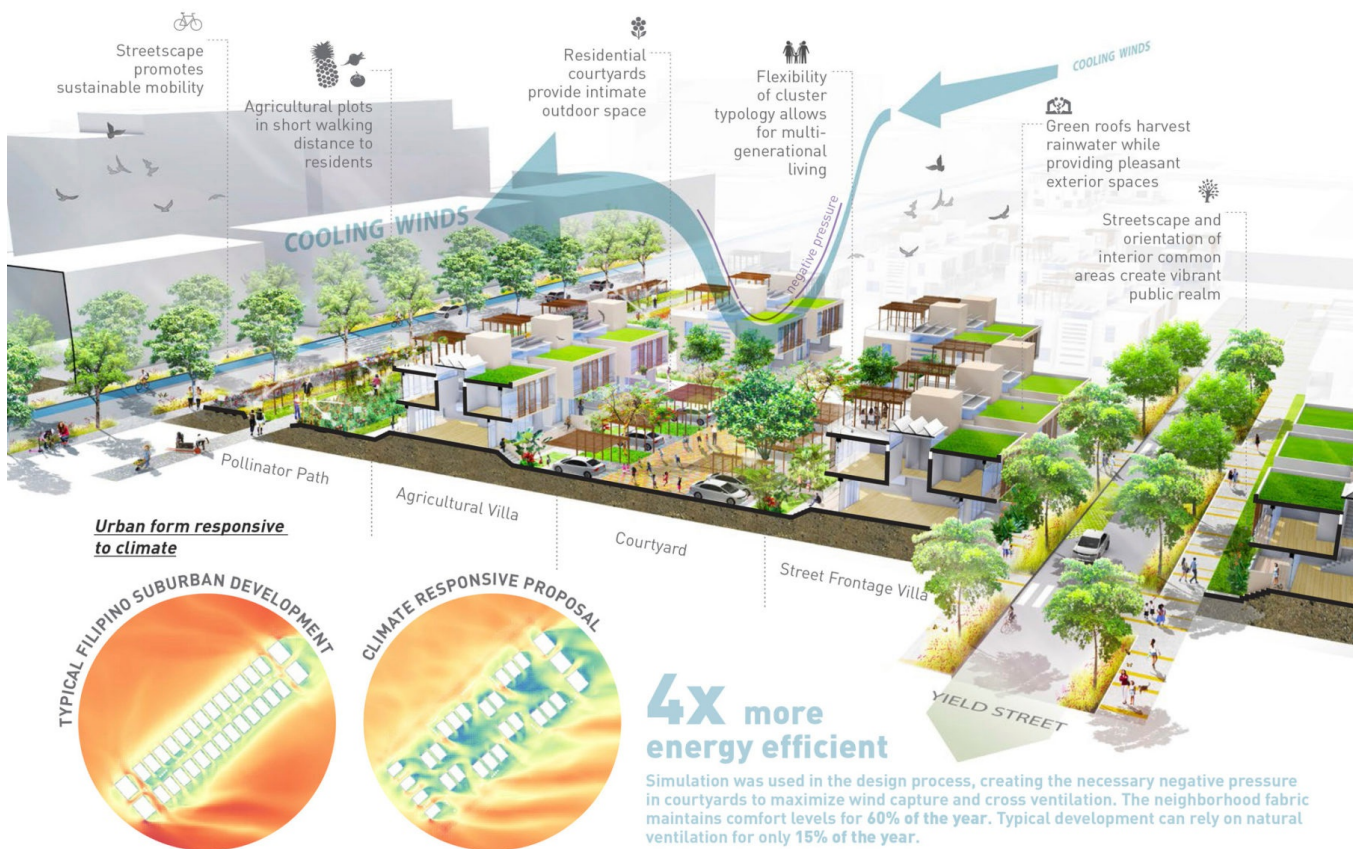
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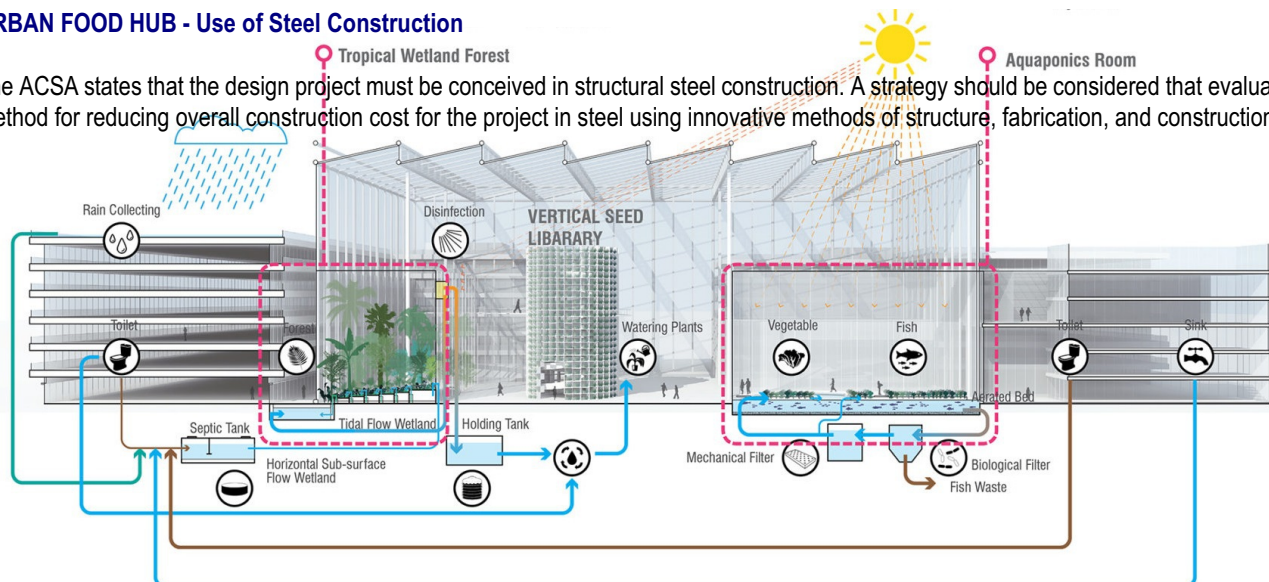
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## NEW FORMS OF LIVING URBAN FORM RESPONSIVE TO CLIMATE



## URBAN FOOD HUB - Use of Steel Construction

The ACSA states that the design project must be conceived in structural steel construction. A strategy should be considered that evaluates a method for reducing overall construction cost for the project in steel using innovative methods of structure, fabrication, and construction.



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## URBAN FOOD HUB - Submission Requirements

The following is a summary of submission requirements for the Urban Food Hub based on the ACSA Steel Design Competition. Upon our return from the site visit and as a result of site master planning and determination of scope, additional requirements will be provided is required to meet the pedagogical goals of ARCH 302 and **NAAB Criteria** outlined in the course syllabus.

Realm B: Building Practices, Technical Skills, and Knowledge. Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

- B.1 Pre-Design: Ability to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.
- B.3 Codes and Regulations: Ability to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of life-safety and accessibility standards.
- B.5 Structural Systems: Ability to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.
- B.8 Building Materials + Assemblies – MKM structural bay model deliverable with skin enclosure and material expression; graphic diagrams of materials/methods/assembly principles. Understanding of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse

Realm C: Integrated Architectural Solutions. Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

- C.2 Integrated Evaluations and Decision-Making Design Process – Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
- C.3 Integrative Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

## Program Summary

A program summary, 150 words maximum, diagram/text of spaces and areas is required as part of the submission. All interior and exterior spaces must be included; total net and gross areas are required. The program summary is included in the final online submission, uploaded by the student(s) in a simple copy/paste text box.

## Digital Essay or Abstract (Conceptual Statement)

A brief essay, 300 words maximum, describing the most important concepts of the design project is required as part of the submission. Keep in mind that the presentation should graphically convey the design solution and context, and not rely on the design essay to convey a basic understanding of the project. This essay or abstract is included in the final online submission, uploaded by the student(s) in a simple copy/paste text box.

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## URBAN FOOD HUB - Submission Requirements: *continued*

### Digital Submission Format (for ACSA Submission)

Submissions must be presented on four 20" x 20" digital boards, and no more than 20MB each. All boards are required to be uploaded through the ACSA website as JPEG. The names of student participants, their schools, or faculty sponsors, must NOT appear on the boards, or in the project title or project title file name(s). Unless determined otherwise, each competition entry will be **printed** on four 20" x 20" boards to be displayed in CAP Corridors and Collaboration Spaces for review by prospective jurors. Any variations to this format will be determined well in advance of the MKM Competition due date.

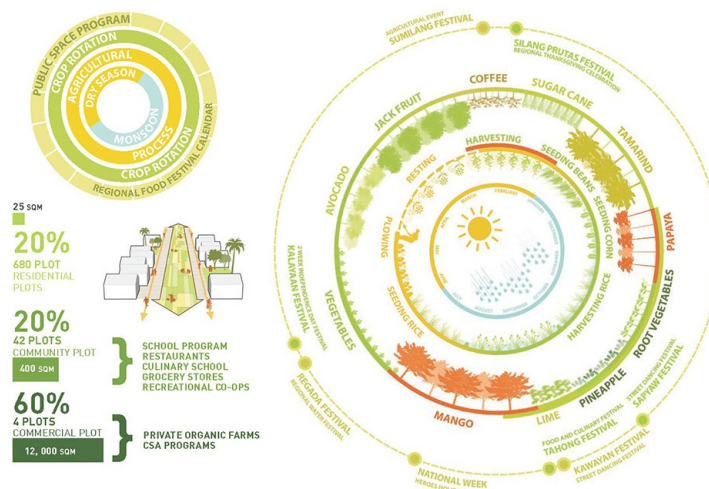
### Minimum Required Submission Documents

Submissions must include (but are not limited to) the following required drawings:

- Site plan showing proposal in the context of surrounding buildings and topography, together with details of access/circulation;
- Floor plans to show program elements, spatial adjacencies and navigation strategies;
- A minimum of two building elevations suggesting overall form, materiality, and relationship to contiguous exterior spaces;
- Building/site sections sufficient to show site context and major spatial and program elements;
- Large scale drawing(s), either orthographic or three-dimensional, illustrating: the use and detailing of steel for building structure and/or envelope integrated design;
- Sustainability Diagrams graphically illustrating design approaches to, and uses of ecologically and responsible systems;
- Three-dimensional representations to illustrate the character of the project in the form of axonometrics, perspectives showing the proposal in its context, montages and/or physical model photographs –;
- A physical model of scale to-be-determined suggesting overall form, materiality, and relationship to contiguous exterior spaces.

### AGRICULTURAL STRATEGY INTEGRATION TO LOCAL CULTURE AND ECONOMY

Current agricultural practices on-site rely on produce that can only be harvested once every one or two years. Proposed bio-intensive organic gardens provide a more active harvesting cycle with greater biodiversity.



Incomplete or undocumented entries will be disqualified. All drawings should be presented at a scale appropriate to the design solution and include a graphic scale. The site plan should include a north arrow.



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## URBAN FOOD HUB - Project Schedule

WEEKS	COURSE DAYS	ASSIGNMENT
WEEK 10	March 9	Field Trip/Site Visit
	March 11	Group Discussion
	March 13	Student Declaration: <b>Urban Food Hub or Environment for Aging</b>
WEEK 11	March 16	Questions in Writing for MKM Studio – Written Concept Statement- Precedent Study- (looking at GA Documents- Pulling details/Form/Structure/Layout)
	March 18	(Pin-Up) -3D Models/Parti/Space Program-Layout/Site Layout Working in Studio
	March 20	Concept- Models/Drawings/images/Statements/Parti
WEEK 12	March 23	
	March 25	Working in Studio/Desk-Crits/Revit Session
	March 27	Floor Plans-hand Drawings/Digital/Sketches/Working in Studio/Desk-Crits
WEEK 13	March 30	Elevations/Working in Studio/Desk-Crits/Talk about Structure
	April 1	Mid-review- Concept/Floor Plans/Elevations/Images (Group 1)
	April 3	Mid-review- Concept/Floor Plans/Elevations/Images (Group 2)
WEEK 14	April 6	Sections/ Working in Studio/Desk-Crits/Job Fair
	April 8	Working in Studio/ Desk-Crits/REVIT Session
	April 10	Working in Studio/Pin-up-Diagrams/Layout
WEEK 15	April 13	Working in Studio/Desk-Crits/Revit Session
	April 15	Working in Studio/Pin-up-Diagrams/Layout
	April 17	Working in Studio/Pin-up-Diagrams/Layout
	April 20	Working in Studio/Desk-Crits/Revit Session
WEEK 16	April 21	Due on the 3 <sup>rd</sup> Floor, Colab #3, Check-in for Pin-up
	April 22	Final Review
	April 24	
WEEK 8	April 27	Last Day of Class (Studio)
	April 29	Final Examination Period
	May 1	Final Examination Period



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## ENVIRONMENT FOR AGING



As indicated above, the 2020 MKM Student Design Competition and the ACSA Steel Design Competition challenges students to offer design proposals under the “Open” Category (Category II). With support from the AIA, students will explore the creation of spaces, places, and living environments for the aging, and advancing senior environments through architecture and design. According to *Environments for Aging* magazine, as more senior living community operators adapt to meet the rising demand for more integrated, multigenerational housing options, architects, and designers are seeking new ideas for incorporating the latest amenity spaces, wellness features, technologies, and living options for seniors. Outdoor activity spaces and dining options are also essential to advancing new ideas and approaches for senior living communities in the present and in the future.

Our competition sponsor, MKM adds that as resident expectations and care models begin to shift within the senior care market, specific consideration needs to be given to the environments in which people are choosing to age-in-place. The neighborhoods and campuses residents choose dramatically impact the quality of life they will experience. More importantly, the way senior care environments are organized and designed can have a direct impact on increased social interaction for older adults. MKM is leading national discussions and developing operational innovations within the long-term care industry - ideas that prioritize resident engagement and dignity as a critical design principal.



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## ENVIRONMENT FOR AGING

"One of the great beauties of architecture is that each time it is like life starting all over again." Renzo Piano

As architects, we must learn to design timelessly. We need to be able to design for many different age groups and many different types of clients. As the American population ages, we must learn to create space for seniors who are transitioning from their homes to a new way of life. Baby Boomers and Active seniors are 22.9 % of the United States, which is about 74.1 million Americans.

**Multigenerational Characteristics:** There are four types of generations:

GEN Y Age 16-35 ,84 Million	GEN X Age 36-45, 43 Million	BABY BOOMERS Age 46-65, 80 Million	ACTIVE SENIORS Age 66+, 47 Million
Renters Job-hopping Peer influence Collective empowerment Record unemployment	Family Overwhelmed/ Underwater Community Entering peak earning years	Power influence (10,000 a day turning 65 for the next 19 years) Do-it-for-me Downsizing Shifting priorities Second middle age	Savings/Nest Egg Loss Worried about retirement and healthcare costs, Working longer Supporting up to 3 generations (self, young adult children and aging parents) Living Longer Mentally and Physically healthier than prior generations
Key Inspirations	Key Inspirations	Key Inspirations	Key Inspirations
Friends, Technology, Local retailers, Experience, Social media	Gen Y, Work/life balance Healthy living, Children	Gen Y, Wellness, Experience Giving back, Family (quality time, tradition creation and preservation)	Boomers do not perceive themselves as getting old and work hard at staying young
	The majority of moms (65%) utilize five or more forms of technology every day to stay connected		47% of parents are putting college expenses for their kids ahead of their retirement savings





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## ENVIRONMENT FOR AGING - Program

For 2020 MKM Student Design Competition, an Environment for Aging Facility will be designed on the above-referenced site in Fort Wayne, Indiana. Each student will develop a design proposal of a building for active seniors (*with some baby boomers, as well*). Half of the facility units (*should be designed for independent living and half for assisted living (seniors living in their own apartments with access to emergency help, nursing, daily activities needs assistance also)*). This overall facility shall be approximately 50,000 sf not including sub-surface parking designed to accommodate fifty vehicles. The following is a general outline of proposed programmed spaces and square footage(s) for the facility:

Space	Occupants	SF/Occupant	Net Area	No. of Rooms	Total Area	Notes
<b>Common Area/General</b>						
Lobby	n/a	n/a	400	1	400	Main Entrance including Air lock Vestibule
Lounge Space	40	25	1,000	1	1,000	The area to accommodate 20 people, soft seating, table and chairs for eating, close to the kitchen. Make adjacent to the receptionist and administrative assistant via glass
Multipurpose Room	40	25	1,000	1	1,000	Room set up with chairs to accommodate 40 people, could be set up with tables and chairs for 50 people
Public Restrooms	n/a	n/a	200	2	400	
Conference Room	10	20	600	2	600	To accommodate 10-15 people
Kitchen	10	60	600	1	600	Stove, range, microwave, refrigerator, dishwasher, sink, counter area, center island
Resource Room/ Computer Lab	20	30	600	1	600	Space to accommodate 15-20 residents at work tables, Some soft furniture
<b>Sub-Total</b>					4,800	Square Footage Rounded
<b>Office/Suite Area</b>						
Office	1	200	400	2	800	Office configuration with 2 visitor seats
Storage	n/a	n/a	200	4	1,600	Multiple spaces or single location
Nursing Office Suite	2	150	300	1	300	Seating area, private room for conversations
<b>Sub-Total</b>					2,700	Storage spaces may be located elsewhere
Special Amenities - <b>Consider Program of All-Inclusive Care for the Elderly (PACE)</b>					2,000	TBD ( <i>Based on Student Research</i> )
Mechanical		n/a	400	n/a	400	May be zoned and placed in multiple locations
General Circulation	n/a	n/a	n/a	n/a	7,100	
<b>Residential Units</b>						
Studios	1	700	700	10	7,000	Additional detail may be provided
One Bedroom	1	800	800	20	16,000	
Two Bedroom	2	1,000	1,000	10	10,000	
<b>Sub-Total</b>					33,000	
<b>Total Environment for Aging Facility Square Footage</b>					50,000	

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## ENVIRONMENT FOR AGING

### Site

The site for the competition has been pre-determined as part of the MKM Student Design Competition in cooperation with MKM Architecture. The "Open" Category submissions must explain the site selection and strategy geographically or otherwise. With respect the 2020 MKM Student Design Competition, each proposal will be required to master plan the entire site (*including the foot print for the Urban Food Hub, street and subsurface parking access, and the development of exterior spaces*). **NOTE: No mention of the Urban Food Hub will be allowed as part of the Open Category submissions. Thus, any reference to the Urban Food Hub will be denoted as "Farmers Market."** Exterior spaces are to be shared by residents of and visitors to the Environment for the Aging Facilities, and of the Urban Food Hub; however, some degree of safety, security, and privacy for the residents, must be taken into consideration. Students are strongly encouraged develop detailed site plans with imaginative proposals for exterior spaces that and enhance the overall quality of life for the residents in the Environment for Aging, the Food Hub, the surrounding community, and the citizens of Fort Wayne, Indiana.

Site Design Considerations should promote walkability and use of public transportation. The facility should meet all applicable regulatory requirements with respect to accessibility (*including the Americans with Disabilities Act*). Thus, corridors (*if applicable*) should be extra-wide for wheelchairs, and public and private restrooms should be ADA accessible. Elevators, monumental stairs, and egress stairs should also be code compliant.

### Program of All-Inclusive Care for the Elderly (PACE)

What is the Program of All-Inclusive Care for the Elderly (PACE)?

PACE provides comprehensive medical and social services to certain frail, elderly people (participants) still living in the community. Most of the participants who are in PACE are dually eligible for both Medicare and Medicaid. The PACE Model of Care is recognized among consumers, health care providers and government leaders as the most innovative, accessible, valuable and effective model of care promoting the highest level of independence for individuals with significant health care needs. For more information, please review the following weblink:

<https://www.npaonline.org/pace-you>





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## ENVIRONMENT FOR AGING - Use of Steel Construction

The Annual Steel Design Competition administered by the ACSA and sponsored by the American Institute of Steel Construction (AISC) offers architecture students the opportunity to select a site and building program using steel as the primary material. This competition category permits the greatest amount of flexibility for any building type. Structural steel offers a number of benefits in building design including the capacity to bear great loads in tension and compression, high resiliency and performance under harsh and difficult conditions, such as earthquakes and hurricanes, and the ability to span great distances with minimal material. Steel can be shaped by many processes, ranging from standard rolled sections to custom castings and digitally generated components. It can be prefabricated and delivered for site assembly, and it can be erected quickly under almost any weather condition to meet tight construction schedules. Steel can be easily modified during the life cycle of a building to accommodate changing occupant requirements. As the most recycled material in the world, steel is an environmentally sound building material choice. Architects praise the natural beauty of steel and are excited about exposing it in the design of their structures to emphasize grace, slenderness and strength, and in their building envelopes to enhance environmental performance and aesthetic character.

### Submission Requirements

The following is a summary of submission requirements for the Environment for Aging based on the ACSA Steel Design Competition. Upon our return from the site visit and as a result of site master planning and determination of scope, additional requirements will be provided is required to meet the pedagogical goals of ARCH 302 and **NAAB Criteria** outlined in the course syllabus.

Realm B: Building Practices, Technical Skills, and Knowledge. Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

- B.1 Pre-Design: Ability to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.
- B.3 Codes and Regulations: Ability to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of life-safety and accessibility standards.
- B.5 Structural Systems: Ability to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.
- B.8 Building Materials + Assemblies – MKM structural bay model deliverable with skin enclosure and material expression; graphic diagrams of materials/methods/assembly principles. Understanding of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse

Realm C: Integrated Architectural Solutions. Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

- C.2 Integrated Evaluations and Decision-Making Design Process – Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
- C.3 Integrative Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

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## ENVIRONMENT FOR AGING - Submission Requirements: *continued*

### Program Summary

A program summary, 150 words maximum, diagram/text of spaces and areas is required as part of the submission. All interior and exterior spaces must be included; total net and gross areas are required. The program summary is included in the final online submission, uploaded by the student(s) in a simple copy/paste text box.

### Digital Essay or Abstract (Conceptual Statement)

A brief essay, 300 words maximum, describing the most important concepts of the design project is required as part of the submission. Keep in mind that the presentation should graphically convey the design solution and context, and not rely on the design essay to convey a basic understanding of the project. This essay or abstract is included in the final online submission, uploaded by the student(s) in a simple copy/paste text box.

### Digital Submission Format (for ACSA Submission)

Submissions must be presented on four 20" x 20" digital boards, and no more than 20MB each. All boards are required to be uploaded through the ACSA website as JPEG. The names of student participants, their schools, or faculty sponsors, must NOT appear on the boards, or in the project title or project title file name(s). Unless determined otherwise, each competition entry will be **printed** on four 20" x 20" boards to be displayed in CAP Corridors and Collaboration Spaces for review by prospective jurors. Any variations to this format will be determined well in advance of the MKM Competition due date.

### Minimum Required Submission Documents

Submissions must include (but are not limited to) the following required drawings:

- Site Plan showing proposal in the context of surrounding buildings and topography, together with details of access/circulation;
- Floor Plans (and Typical Floor Plans) to show program elements, spatial adjacencies and navigation strategies;
- One enlarged Floor Plan of each dwelling unit type (Studio, One Bedroom, Two Bedroom);
- A minimum of two building elevations suggesting overall form, materiality, and relationship to contiguous exterior spaces;
- Building/site sections sufficient to show site context and major spatial and program elements;
- Large scale drawing(s), either orthographic or three-dimensional, illustrating: the use and detailing of steel for building structure and/or envelope integrated design;
- Sustainability Diagrams graphically illustrating design approaches to, and uses of ecologically and responsible systems;
- Three-dimensional representations to illustrate the character of the project in the form of axonometrics, perspectives showing the proposal in its context, montages and/or physical model photographs –;
- A physical model of scale to-be-determined suggesting overall form, materiality, and relationship to contiguous exterior spaces.

Incomplete or undocumented entries will be disqualified. All drawings should be presented at a scale appropriate to the design solution and include a graphic scale. The site plan should include a north arrow.



# ARCH 302: ARCHITECTURAL DESIGN

ball state university | department of architecture | spring 2020

battaglia dixon dotson gray phillippe

MKM Student Design Competition 2020 □ Urban Food Hub and Environment for Aging - Fort Wayne, Indiana

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## ENVIRONMENT FOR AGING - Project Schedule

WEEKS	COURSE DAYS	ASSIGNMENT
WEEK 10	March 9	Field Trip/Site Visit
	March 11	Group Discussion
	March 13	Student Declaration: <b>Urban Food Hub or Environment for Aging</b>
WEEK 11	March 16	Questions in Writing for MKM Studio – Written Concept Statement- Precedent Study- (looking at GA Documents- Pulling details/Form/Structure/Layout)
	March 18	(Pin-Up) -3D Models/Parti/Space Program-Layout/Site Layout Working in Studio
	March 20	Concept- Models/Drawings/images/Statements/Parti
WEEK 12	March 23	
	March 25	Working in Studio/Desk-Crits/Revit Session
	March 27	Floor Plans-hand Drawings/Digital/Sketches/Working in Studio/Desk-Crits
WEEK 13	March 30	Elevations/Working in Studio/Desk-Crits/Talk about Structure
	April 1	Mid-review- Concept/Floor Plans/Elevations/Images (Group 1)
	April 3	Mid-review- Concept/Floor Plans/Elevations/Images (Group 2)
WEEK 14	April 6	Sections/ Working in Studio/Desk-Crits/Job Fair
	April 8	Working in Studio/ Desk-Crits/REVIT Session
	April 10	Working in Studio/Pin-up-Diagrams/Layout
WEEK 15	April 13	Working in Studio/Desk-Crits/Revit Session
	April 15	Working in Studio/Pin-up-Diagrams/Layout
	April 17	Working in Studio/Pin-up-Diagrams/Layout
	April 20	Working in Studio/Desk-Crits/Revit Session
WEEK 16	April 21	Due on the 3 <sup>rd</sup> Floor, Colab #3, Check-in for Pin-up
	April 22	Final Review
	April 24	Selected Finalist(s) Prepare to Travel to Louisville for EFA Conference
WEEK 8	April 27	Last Day of Class (Studio)
	April 29	Final Examination Period
	May 1	Final Examination Period