

Ubuntu Architecture Summer Abroad

Spatial Justice - Listening to build

Ubuntu Architecture Summer Abroad is an intercollegiate, cross-cultural program; that focuses on immersing students into a historical, socio-economic, and community-driven design experience. We work in partnership with (and under the tutelage of) the Umbumbulu community to tackle spatial justice.



Andrews University students in an apartheid-shaped township in Durban, South Africa (2016). Photo Credit: Troy Homenchuk, Andrew Von Maur, Andrews University School of Architecture & Interior Design

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Urban Studies Instructor

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General Course Information:

Course Type: Design Class (Open to all students within the Built Environment)

Course Start Date: May 31st, 2021

Course Description:

South African cities have undergone periods of dramatic social and spatial change in the two and a half decades since formal apartheid ended. South Africa, is often thought of as a country in transition, even some 27 years after the election of a democratic government. Over the years, urban scholars and thinkers have been decoding the impacts and legacies of colonialism in South Africa and broadly in Africa. Even urban studies or human geography research that self-identified as “postcolonial” concentrates on excavating the histories and legacies of colonialism, in part because these were and are so extensive. In the present day, there are still relics of colonial powers and white minority enclaves. The lingering spectre of colonial history and architecture’s largely hidden yet pervasive racist presence, dominate the notions how we keep re-imagining the urban. The built environment as tangible heritage is evidence of the past and what it represents, therefore it can be named, categorized and controlled, much like objects archived in a museum.

In a post-colonial context and in how post-colonial South African communities are making, claiming, contesting and reorganizing urban space in these contexts. Especially regarding the social and cultural tensions found at the intersections of heritage, architecture and space. Popke and Ballard (2016) contend, “the subjective experiences of urban space provide one of the principle mediums through which ideas of identity, difference, democracy and citizenship are

being reworked in post-apartheid South Africa.” To understand and trace the experiences of post-apartheid cities in South Africa, these courses will focus mainly on the contemporary era, our explorations will consider the South African cities in historical perspective. We will begin with a brief history of urbanism of the country to lay the groundwork for an examination of colonial legacies and the strategic role that South African cities have played in globalization and empire, past and present.

This course will be broken down into two segments; *Collaborative Design* and *Urban Studies*. In the collaborative design segment of the program you’ll collaborate with students from around the world to design a home for a family from Umbumbulu, Durban. The Urban Studies component of the course participants will be challenged to understand colonial histories of South African cities and reflect how these histories continue to shape present-day dynamics.

This will help us to locate urban South Africa in today’s most recent era of globalization. During our ***Urban Studies*** discussions we will:

- a. Analyze and challenge conventional representations of South African cities.
- b. Gain a broad understanding of the central debates in the study of South African cities, grappling with the important stakes and implications held by different perspectives.
- c. Gain an understanding of the different colonial histories of South African cities and reflect on how these histories have shaped present-day dynamics.
- d. Survey the various trajectories of urbanization, and the different patterns of social, economic, and political transformation specific cities are undergoing in the era of globalization.

In addition to enabling students to get a grasp of the history, local context, challenges and ongoing contestation, students will get to put all this knowledge to practical use by being a part of a collaborative community-led design process, that will yield a home design for a family in South Africa. (Read Attached Design Brief for more information)

The ***Collaborative Design*** component will:

1. Create a diverse cross-cultural architectural experience for students and communities by working in an environment removed from eurocentric and american-centric architectural philosophies.

2. Educate students in a community-centered design-build approach (listening to build) aimed at impacting larger communities through means of working with key family units.
3. Provide opportunities for students to gain real-world experience through designing and helping build dignified and culturally-influenced homes for resilient families.

Intended Student Learning Objectives:

As a result of this course, students will be able to develop/implement culture-informed, sustainable, community-focused architectural knowledge and perspectives, translating them into their own lives and careers. They will be able to:

Understand the power of architecture and how it either hurts or heals

- (1) Students will be able to learn the effects of apartheid era architecture on modern-day South African neighborhoods.
- (2) Students will gain a working knowledge of community-informed design.

Learn how to engage communities, to develop contextual, sustainable solutions

- (1) At the end of this course, students will be able to hold successful community engagement/participation charrettes.
- (2) Students will learn the values and tools of how to conduct community-driven design.
- (3) Students will be taught how to acclimatize to a new culture in a respectful and effective way that gains trust from the client community.

Introduction to Zulu Architecture

- (1) Students will gain knowledge about climate responses and passive sustainable design in the context of Zulu architecture.
- (2) Students will be made aware of how culture (political and social) affects how spaces are shaped in South African communities.
- (3) Students will be made aware of traditional Zulu urban design considerations by various ethnic groups.
- (4) Students will learn about the evolution of Zulu architecture (pre-colonial, colonial and post-colonial).

Continuous Learning and Continuing Education Pathways for Professional Development:

Intercultural Relationship and a Global Network of Designers

- (1) This program will teach students the ability to work collaboratively with other students from different programs from around the world. This is aimed at fostering diversity of thought and building meaningful relationships that will last beyond the experience.
- (2) Community engagement will enable the students to build a relationship with our beneficiary community.

Introduction to Practical Construction:

Students will:

- (1) Learn a working knowledge of bricklaying, being taught by expert local builders.
- (2) Gain the working knowledge to put together a construction program outlining each day's activity based on how a building is built.
- (3) Gain the working knowledge of how the substructure and roof trusses come together through, constructing the building envelope.

Leadership in Architecture:

Students will engage with lectures and participate in dialogues that tackle topics such as, how to establish mission and vision with a social impact initiative and how to tell stories through architecture that will enable them to be effective leaders in their communities.

Studio Program Summary:

Teaching Strategies

The methods of instruction include assigned readings, lectures, videos, class discussions, panel discussions, virtual site visits, design reviews, and finally designing a home. Daily attendance is

essential to good performance, as assigned readings complement rather than duplicate, topics covered in-class lectures.

Required Materials:

1. Ubuntu in Umbumbulu Book:
[\[See Dropbox Folder\]](#)
2. Freear, A and Barthel, E (date) *Rural Studio at Twenty: Designing and Building in Hale County, Alabama*. Place of publication: publisher.
3. Alternative Design Practice: https://padlet.com/mef_arc521_aap2021/lxjjqwobf94ym
4. #Transmissions - Jean-Charles Tall in conversation with Mpho Matsipa:
https://open.spotify.com/episode/6lv9zIrCtzKdCB8MHY5j7?si=vZkpZePIQGKb4zbdJY_ftQ&nd=1
5. African Mobilities: <https://archive.africanmobilities.org/discourse/>
6. Space, Race & Architecture:
<http://racespacearchitecture.org/openaccesscurriculum.html>
7. Kumkuni 's 'On design[ing] pedagogy with Dr Lesley Lokko
8. A sketchbook, sketching pens & pencils
9. The rest of the readings and assignments will be emailed to students in the form of a pdf.

Content Guide:

1. Orientation

At the beginning of the course students will participate in an orientation session outlining the calendar of events, the selected family for the project, the expectations of each participant, and an introduction to the program leaders and designated speakers.

2. Creating an interview guide

The participating students will work together to curate a list of questions they wish to ask the client family to aid them in the development of their architectural design. This list will be reviewed by the facilitators and the students will be given the opportunity to simulate the interview process with local architecture students, to refine this list into a concise and culturally sensitive set of questions. The participants will also develop visual aids to go along with the questions to help in the communication process. Once this list is completed, the team will nominate one member to communicate directly with the family and facilitate this questioning process. A translator will be provided to aid with any language barriers; the rest of the team will take notes on question responses.

3. After the family engagement portion is completed, the design team will identify the overarching themes that were communicated by the family, visually sorting them into different categories. From these categories, the facilitators will lead a discussion on these topics and what they mean to the design process, allowing for brainstorming and discussion as to how to implement them in design.
4. Upon completion of this discussion session, the facilitator will separate students into groups to tackle these themes, and participants will begin work on their specific design tasks based on their assigned theme (eg. one group theme could be a climate-based design approach, due to the family talking about rainwater entering their living space, another group may focus on a utility perspective and how they use space, another from a form perspective, etc.)

5. The student groups will consist of 2-3 individuals. In this initial phase of design, group membership will be subject to rotation in order to provide each student with a diverse breadth of architectural knowledge, foster collaborative learning, and take part in solving different problems.
6. From these schemes, students will have a crit, and select the most promising iteration, but can also draw on different aspects of the other schemes, and consolidate it into one scheme. The facilitator will then break the designers into groups based on different aspects of the consolidated design; some will focus on kitchen design whilst others focus on landscape, bathrooms, etc. Each group is expected to have a preliminary cost schedule.
7. The students will then have one more review with the family before the final crit. The balance of the time will be spent developing the scheme, building the house, and engaging in dialogue that helps them better define the “why?” of every decision they make.
8. Students are expected to produce a schematic presentation that should include a money-shot rendering visualization, floor plans, elevations (these could be replaced by a 3D or digital communication of the form), sections cutting through the house east to west, and north to south. They will also be expected to provide a preliminary material cost schedule for certain parts of the building which will be supported by an Ubuntu Design Group Quantity surveyor consultant).
9. To aid in the cross-cultural exchange, students will participate in team-building activities. One of the pivotal challenges of building a successful design team is creating an environment in which all members feel safe to voice their ideas and feel a connection to the larger team, both in goals and social interactions.



Ubuntu home designed and built by Wandile and his team for a family that lost their mudbrick home in a light rainstorm in Durban. (2018)

Program Schedule:

Week 1 - The Monte Effect; from Iqhugwane to Mzansi's Tuscan mansions

- The objectives for the first week is to give students context on the state of design in South Africa by helping them understand the role apartheid era legislation played in shaping modern-day South Africa. In addition, we will be equipping them with skills on how to design for the community and letting the family take the lead in designing their surroundings through the Ubuntu process: **Listening to Build**.
- **On Wednesday, we will take them through the journey of understanding the history and evolution of Zulu architecture from Iqhugwane to the modern day Tuscan mansions that occupy all of the affluent suburbs and rural areas**

This will give a brief history of the Monte Casino old tuscan style adaptation, and why it is the preferred style for aspirational south africans.

Next, we will go through the brief and explain

Deliverable

After receiving information about the history and context, students will be asked to present their revised understanding of the brief , and produce a basic inception report about the family, the community and the house they are proposing (Based on their presentation , The student with projects that are most aligned will be separated into group of 6 , that will work together going forward.)

The Post-Colonial Metropolis of South African Cities Lecture Series: Week 1 — Representing the African Metropolis

(31 May - 6 June)

Monday (12-2 pm EST) Orientation Day May 31, 2021

Talk:

Listening to build; designing for the South African context Wandile Mthiyane
Family Interview Video, Translated (Groups of twos write up follow up questions to be submitted on Sunday)

Q&A:

Going over the brief and answering questions

Design: Program Participants are put into groups of two' based on similar design schemes

Brief Definition by Moderator

Wednesday (12-2 pm EST) Class Officially Begins June 2, 2021

Talk:

Pre-colonial landscapes & Colonial, Republic and post-Republic landscapes

Dr. Debbie Whelan | Senior Lecturer, Deputy Head of School / Director of Teaching and Learning
BArch (Natal). PG Dip Arch (Natal). BA.(UNISA) MArch (Natal) PhD (London). FHEA

Session 1: Pre-colonial landscapes

This session consists of three sections. The first explores the depths of Nguni history in order to appreciate the constantly moving boundaries of territory and power. The second considers Nguni built form, as this is both a cognitive and practical aspect of connection to the ancestors and identity. It also critically, considers the spatial aspects of form as these are the important ‘take aways’ required in understanding the nuance of potential requirements. The third considers settler interference in the middle and later years of the 19th century in order to lay the foundations for appreciating the different and complex types of land tenure, in addition to the position of the ‘locations’.

- 1.1 Nguni history
- 1.2 Nguni built form
- 1.3 Settler interference

Session 2: Colonial, Republic and post-Republic landscapes

This session consists of three sections. The first covers the era of paternalism, that is the late Victorian, Edwardian and Union Periods up until the 1948 elections which brought the Nationalists into power. It considers the relationship with pejorative legislation, but also the significant paternalism characteristic of that time, reflected in Model Native Villages, and the township era of Calderwood. The second session considers the Apartheid era, the take over of the Nationalists in 1948 and the impact that this had on creating Group Areas allowing for forced removals, but also the massive building projects that were undertaken to support these. The third section describes the money-driven society of post 1994, and the promises, both delivered and empty, that have shaped the architecture of contemporary residents of KwaZulu-Natal.

- 2.1 Paternalism
- 2.2 Apartheid
- 2.3 Neo-liberalism

Q&A

Design: Group Participants in Groups of Two's based on similar design scheme

Friday: (12-2 pm EST)

June 4, 2021

The Post-Colonial Metropolis of South African Cities (Facilitated by Sibonelo)

Talk:

- 1. Representing the African Metropolis (TBD)

- Reading Assigned
- Talk
- Moderated Discussion with the Host

Crits/instructions (Scheduled Crits)

Sunday (10.am - 2pm EST)

June 6, 2021

Yoga (Optional) 10-11:00

Groups Submit Questions to be answered by the family.

Collaborative Crit (All 15 Groups present and get Crit)

Final Design Team Arrangement (5 Groups of 6 people teams are formed based on similar themes from the crits)

Teams are assigned a moderator to help guide the design process when needed

Team Orientation and Brief Discussion & Role Definitions

Week 2 - What does vernacular architecture look like in a global context

(7 June - 13 June)

- In a workshop led by a vernacular architecture specialist the, the students will start to understand how to design Zulu architecture in the 21st century. Students will also learn to translate the knowledge and principles of Zulu architecture into buildings that will work for today's context and society.

Deliverables

- The new groups will have to come up with a developed Concept design that starts to show an understanding of contemporary Zulu family and how old architecture design principles can and should be adapted.
- Students may also give feedback or bring forth any additional questions they may have for the family or the adjudicators of the program.

The Post-Colonial Metropolis of South African Cities **Lecture Series: Week 2**

Colonial Legacies: Space, Labour and the household (TBD)

Monday (12-2pm EST)

June 7, 2021

Talk:

The Art of Designing Vernacular Zulu Architecture - HH Neil Hayes-Hill Architect

Q&A:

Discussion

Scheduled Crits / Design Collaboration Zoom Rooms for teams to work on their designs.

Wednesday (12-2pm EST)

June 9, 2021

Talk:

Colonial Legacies: Space, Labour and the household

- Reading Assigned
- Talk
- Moderated Discussion with the Host
- Scheduled Crits / Design Collaboration Zoom Rooms for teams to work on their designs.

Friday (12-2pm EST)

June 11, 2021

Understanding the African Philosophy with Dr Prof Langalibalele Mathenjwa

Workshop:

Family Response Video to streamlined Group questions:

Talk: Designing for the South African Context and helping students understand the brief and the families need to be based on their response video - Sibusiso Sithole

Since this will be a two-hour session, questions will be texted in.

Sunday (10.am - 2pm EST)

June 13, 2021

1. Yoga (Optional) 10-11:00
2. Individual Group Crits with selected times for each group

3. Participants collaborative design process (Open)

Week 3 - Building in place

(14 June - 20 June)

- Design Development - In this phase, students will start to understand the materiality, construction culture, and possibilities in the South African context.
- Students must start engaging with local contractors and quantity surveyors so they can understand cost limitations that will affect the decisions they make.
- Understand Value Engineering and Project Planning - Local quantity surveyor/project manager and a structural engineer
- **Deliverables**
Produce sections and construction details, to scale , illustrate an understand how this building will come together as they continue to develop and finalize the design

The Post-Colonial Metropolis of South African Cities **Lecture Series: Week 3**

Claiming Urban Space: Planning, Land Rights and Housing (Sibonelo Gumede)

Monday (12-2 pm EST)

June 14, 2021

Talk:

Understanding Affordable Housing Design & Construction in South Africa - Sibusiso Sithole

Q&A

Wednesday (12-2pm EST)

June 16, 2021

Talk:

The Post-Colonial Metropolis of South African Cities

Claiming Urban Space: Planning, Land Rights and Housing (Sibonelo Gumede)

- Reading Assigned
- Talk
- Moderated Discussion with the Host
- Scheduled Crits / Design Collaboration Zoom Rooms for teams to work on their designs.

Friday (12-2pm EST)

June 18, 2021

Talk:

Understanding Value Engineering and Project Planning - Local Quantity Surveyor/Project Manager

Q&A

Sunday (10am - 2pm EST)

June 20, 2021

1. Yoga (Optional)
2. Individual Group Crits with selected times for each group
3. Participants collaborative design process (Open)

Week 4: The New African vision

(21 June - 27 June)

- Pivotal Point - Each group is finalizing their design and starts putting together presentation strategies, general renders, and tying loose ends. Lots of final crits.
- Students start working on their visual communication of the project
- **Deliverables**
Final design presentation., Construction details , schedules of materials and renders

The Post-Colonial Metropolis of South African Cities **Lecture Series: week 4**

Gender and the city (TBD)

Monday(12-2 pm EST)

June 21, 2021

The Politics of Race: Phila Msimang

CRIT:

Wednesday (12-2pm EST)

June 23, 2021

Talk:

The Post-Colonial Metropolis of South African Cities

Gender and the city (Simamkele Dlakavu)

- Reading Assigned
- Talk
- Moderated Discussion with the Host

Friday (TBD): Final Crit

June 25, 2021

Students will participate in a final critique alongside course leaders and guest critics.

Sunday (12-2pm EST)

June 27, 2021

Office Hours for Questions and Last Minute Help

Final Submission of Project due by midnight. 23:59pm EST

Appointment Based Group Crits

June 28, 2021

Family Thank You Video from Family
Participants present Their designs
Live Crits:

The chosen project is published a week later

Edit Monday submission and wednesday presentation

Facilitators

Group 1 - Nontokozo Mhlungu (Lead Facilitator)
Group 2 - Thandolwenkosi Mthembu
Group 3 - Mbuso Msipho
Group 4 - Ngoako
Group 5 - Khayakazi Matangana

Sunday Schedule:

10.am Yoga: Lisa Huter Yoga Coordinator
11.am Design: Group Sessions with Moderators
12.am Design: Group Sessions with Moderators
12.am Pulse Check: Group check-ins, collaborative crit discussions,, and Announcements for the next week.

Monthly Design Q&A Check-ins Ahead of the program starts

- Wandile Mthiyane

February 28th (11.am est)

March 28th (11.am est)

April 25th (11.am est)

Instructor Profile: Wandile Mthiyane

[Wandile Mthiyane](#) is an Obama Leader, lecturer, Tedx Fellow, Resolution Fellow, dynamic speaker, social entrepreneur, and the founder of Ubuntu Design Group (UDG), an architectural and micro-finance organization that focuses on social-impact design projects in housing and

urban design. Influenced by his childhood experiences in post-apartheid South Africa, Wandile founded UDG on the idea that if apartheid could segregate and oppress, then community-led design can liberate and provide opportunities for all. UDG is currently engaged in building homes and bringing micro-mortgages to low-income families. Wandile studied his BSA and M.Arch at Andrews University in Michigan. He currently lectures in architecture at both the University of KwaZulu-Natal and the Durban University of Technology.

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

Design Facilitator Profile: Nontokozo Mhlungu

As a dynamic and ambitious young architect, [Nontokozo Mhlungu](#) possesses the design flair needed to conceptualize, coordinate and develop future landmark architecture. With a holistic yet practical outlook on design and art, Nontokozo graduated at the top of her Master's class in architecture from the University of Witwatersrand, and in 2013 she was awarded South Africa's prestigious Corobrik Architecture Student of the Year Award for her 2012 Dissertation '*Hillside Sanctuary, a reception center for Refugees*' which went on to be published in the book 10+ years 100 projects architecture in a democratic SA, and in various national industry journals. With nine years of industry experience working for internationally-renowned architects such as Peter Rich, Silvio Rech + Lesley Carstens and Stauch Vorster Architects International, Mhlungu has gained extensive expertise in the design, project management and construction of numerous luxury retail, commercial and residential developments across South Africa. Nontokozo's professional involvement extends to more creative endeavors such as fine art and product design. She is a Registered SACAP professional, an executive board member of AAC 'African Architects Collaborative' a specialized Non-Profit Organization for African architects and is a member of the South African Institute of Black Property Practitioners (SAIBPP) and the Women's Property Network (WPN) which offers her the opportunity to expand her role into real estate investments and property development ventures.

Accreditation Affiliation:

Our work is aligned to the NAAB architecture school Accreditation philosophy, 2020 Edition.

Attached below are NAAB principles and objectives that align with our program:

The **National Architectural Accrediting Board** (NAAB) is an agency that evaluates architecture programs in the United States to ensure that graduates have the technical and critical thinking skills required to have a rewarding career in the profession.

In preparing for this edition of the Conditions and Procedures, the NAAB initiated a two-year dialogue with the collateral organizations to advance an accreditation process that ensures minimum competency of graduates based on the following goals:

- Promote excellence and innovation in architecture education
- Allow program flexibility that adapts to a dynamic context
- Encourage distinctiveness among programs
- Support equity, diversity, and inclusion in architecture education and the profession
- Increase access to the profession of architecture
- Stimulate the generation of new knowledge
- Protect the public interest

Shared Values of the Discipline and Profession The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

2—Shared Values of the Discipline and Profession The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

Design: Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

Environmental Stewardship and Professional Responsibility: Architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.

Equity, Diversity, and Inclusion: Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful

learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.

Knowledge and Innovation: Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

Leadership, Collaboration, and Community Engagement: Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

Lifelong Learning: Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.

4.2.3 Optional Studies. All professional degree programs must provide sufficient flexibility in the curriculum to allow students to develop additional expertise, either by taking additional courses offered in other academic units or departments, or by taking courses offered within the department offering the accredited program but outside the required professional studies curriculum. These courses may be configured in a variety of curricular structures, including elective offerings, concentrations, certificate programs, and minors.