EXECUTIVE SUMMARY OF 2016 NAAB VISIT

CONDITIONS NOT MET

2017 VTR
All Conditions were met

STUDENT PERFORMANCE CRITERIA NOT MET

2017 VTR
B.1 Pre-Design B.8 Building Materials and Assemblies

Interim Progress Report

Tuskegee University
Robert R. Taylor School of Architecture and Construction Science
Bachelor of Architecture [170 Credit Hours]
Year of the previous visit: 2017

Chief Administrator for the Academic Unit in which the program is located:
Dr. Carla Jackson Bell
Dean and Professor
Tuskegee University
The Robert R. Taylor School of Architecture and Construction Science
1200 W. Montgomery Road
Willcox A Bldg. Rm 101
Tuskegee, AL 36088
Office: (334) 727-8014
cjbell@tuskegee.edu

Interim Provost:
Dr. Roberta Troy

President of the institution:
Dr. Lily D. McNair

Individual submitting the Interim Progress Report:
Dr. Carla Jackson Bell

Name of individual(s) to whom questions should be directed:
Mr. Kwesi Daniels, Department Head
kdaniels@tuskegee.edu

Mr. Roderick Fluker, Associate Professor
rfluker@tuskegee.edu

Current term of accreditation: Eight-Year Term of Accreditation
Effective January 1, 2018

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

B.1 Pre-Design
2017 Visiting Team Assessment*: *While there is evidence of a high level of engagement with (and benefit to) clients in many upper-level studio projects, there was not sufficient evidence found of the ability to identify, assess, and develop client needs and site conditions (including existing physical and environmental conditions as well as sustainability requirements) in order to assess their implications for the project within a comprehensive program document. The sequence of ARCH 503 - Thesis Seminar and ARCH 502 - Architecture Design Studio 10, which was taught for the first time in the 2016-17 academic year, shows great promise to fulfill this requirement in future iterations.

Tuskegee University, 2019 Response:
Summary: B.1 Pre-Design is introduced in the invited guest lectures series and workshops are developed as supplements to the studio and lecture classes. Guest speakers are invited yearly on a range of topics as an additive to the faculty lectures. More specifically, to identify, assess, and present examples of client needs and site conditions, and to inform coursework in the ARCH 503 Thesis Seminar and the ARCH 502 Design Studio. The two-course sequence of ARCH 503 - Thesis Seminar/ARCH 502 - Architecture Studio.

ARCH 503 Thesis Seminar (Fall semester)
ARCH 503: Thesis Seminar was redesigned in 2016 to implement a collaborative seminar format that introduces research tools, techniques, and strategies required to develop, refine, and to write a capstone thesis paper and to fulfill the B.1 Pre-Design requirement. In this course, the student selects a capstone project that is pre-approved by the thesis professor. The capstone is an academic project that applies a research agenda and a design experiment to a conceptual framework/idea. The primary goals are to formulate an architecturally significant thesis/argument, and to assemble, organize, and format research related to the design studio course, ARCH 502.

As a supplement to strengthen the students understanding of traditional architectural theories, lectures on non-traditional theories were developed by the professor including design methodologies on *Afrocentric Architecture* (Dr. David Hughes and Diébédo Francis Kéré) and *Blackness in Architecture* (Dr. Darell Wayne Fields) to engage in the development of a more culturally based Thesis Capstone.

Guest Lectures Series (Fall and Spring semesters)
To enhance the ARCH 502 and ARCH 503, a guest lecture series is incorporated to introduce data gathering, programming and case study analysis, and summary of the analysis. Most recently, Carla Swickerath, guest speaker and a partner at Studio Daniel Libeskind, gave a lecture on October 2nd, 2019 that focused on diverse perspectives in cultural, civic, retail, commercial, residential and planning projects around the world. Carla Swickerath's presentation focused on the programming phases of the Jewish Museum in Berlin, the World Trade Center master plan, the Summer Houses in Brooklyn, NY and 18.36.54 in Connecticut. Case study analyses were presented for the Crystals retail

complex at CityCenter, Las Vegas, the Hyundai Haeundae Udong me-Park residential development in Busan, Korea, and the Contemporary Jewish Museum in San Francisco.

Tim Scarbrough, Vice President and director of the Advance Planning Group for Jacobs Global Buildings was invited in October 2018 to present a lecture on programming. Scarbrough included an activity at the end of the lecture, which focused in solidifying the content of the lecture. Scarbrough has over 30 years of experience both in design and pre-design services and has focused primarily in pre-design services. The Advance Planning Practice is a technical center of expertise that provides consulting services to support client decision making and problem definition early in the project delivery process. Scarbrough is a recognized speaker on the process of programming and planning and has published several articles on the subject.

Nick Seierup, TSACS Visiting Professor of Practice, gave lectures during the spring semester focusing in Pre-Design and Integrative Design through a brief introduction of the development of client needs and site conditions. Nick Seierup is the Principal and Design Director of Perkins+Will's Los Angeles office and oversees a wide range of project types and scales throughout the world, including education, civic, mixed-use, science + technology and healthcare. Seierup has taught at SCI-Arc, USC, UCLA and Woodbury University and his design work has been recognized with over 75 awards, including 50 from the American Institute of Architects.

B.8 Building Materials and Assemblies:
2017 Visiting Team Assessment: *Although evidence of students' understanding of basic principles of materials, products, components, and assemblies is present in the work, achievement of the understanding of how to utilize this knowledge in the appropriate selection of interior and exterior materials based on their inherent performance, including environmental impact and reuse, is not shown.*

Tuskegee University, 2019 Response:
Summary: As a result of the 2017 NAAB Report, the Department of Architecture is being more intentional in an effort to expose students to the process of selecting and evaluating specific building materials and assemblies through studio courses, lecture classes, and a guest lectures series. The students focused on building materials and assemblies in the 501 Design Studio to ensure that the deficiency was addressed in the graduating class. The class developed a mixed-use housing development focused on exposing students to innovative strategies for choosing building materials, and the interrelationship of interior and exterior environments. During the 2019 National Organization of Minority Architects (NOMA) design competition, the students engaged in new sustainable structural systems using mass timber and laminated timber construction.

ARCH 401 and ARCH 501 Design Studios (Fall semester)
This year, the ARCH 401 Design Studio explored prefabricated and modular assembly through the NOMA Student Design Competition. The project called for a mixed-use, multifamily residential housing development in Brooklyn, New York. In the ARCH 501 Design Studio, the students initially focus on developing mixed-use exhibition spaces. The

second phase of the project specifically focus on form, structure, and technologies. During this phase, students select materials, prepared structural and environmental control systems, selections/analyses, and develop plans, elevations, building sections, wall sections and details to represent their solutions for building systems integration. The studio ultimately utilized a generative design process to develop their final designs. The development of construction means, methods and assemblies are also parts of the ARCH 501 and ARCH 401 Design Studios.

ARCH 331 and ARCH 332: Materials and Construction and ARCH 343, 344, & 443: Structures (Fall and Spring semesters)
These sequences are used to teach students the use of building materials and assemblies. The students in the Structures I course, most recently, collaborated with the ARMY ROTC program to design an obstacle course. The students specified the materials and constructed each of the obstacles and selected wood pallets and structural wood members to construct all of the obstacles on the campus of Tuskegee University. The structures professor instructed the students on how to test the design and reinforced the structural elements.

2. **Changes or Planned Changes in the Program**
Tuskegee University, 2019 Response:
The Department of Architecture has developed new course offerings and a proposed undergraduate degree to further the mission of developing citizen architects who are capable of developing practical solutions for a better built environment. To adjust to the diverse and growing needs of the students, the department has added five new professional electives courses, two minors, and a proposed Bachelor of Arts in Design degree.

The new courses include:

- ARCH 100 Careers in Architecture (Fall 2019)
- ARCH 363 Digital Manufacturing (Spring 2019)
- ARCH 363 Historic Preservation (Fall 2019)
- ARCH/HUMN 100 The Legacy of Booker T. Washington (Fall 2019)
- ARCH 368 Humanities in Architecture (Spring 2019)

ARCH 363 Historic Preservation, ARCH/HUMN 100 The Legacy of Booker T. Washington and ARCH 368 Humanities in Architecture (Fall and Spring semesters)
These courses have provided students with hands on experiences that reinforce their skill set and knowledge related to pre-design and building materials and assemblies, in the design studios and lecture courses. The new courses, particularly The Legacy of Booker T. Washington and Humanities in Architecture were developed to leverage the University's historical and cultural significance as the only historically black college or university (HBCU) to earn national historic landmark status. The Legacy of Booker T. Washington professional elective course allows the professors to simultaneously train the students to address the needs of the historic buildings on the Tuskegee University campus and research the works of the campus Architects, in the community, and in African American communities throughout the black belt region of Alabama.

Students conduct intentional discussions in the Humanities in Architecture seminar of African American architect experiences at Tuskegee and inequalities in the architecture profession, and draw conclusions between architecture and human culture. The students interview architects who integrate interdisciplinary practices in firms headed by African Americans and other underrepresented minority groups. The interviews will develop questions – the "what", "so what" and ultimately "what differences have your practices made?"

ARCH 368 Digital Manufacturing (Spring semester)

The digital manufacturing course, in particular, introduced students to design methodologies using parametric modeling, 3D printing, and laser cutting. The Office of the Dean hosted the first-ever Undergraduate Student Leadership in Architecture (ULead) Forum on April 11th and 12th, 2019. The 2-day forum brought together an intellectual community of highly motivated students (Morgan State, the University of the District of Columbia, and Tuskegee University) with a shared sense of purpose. The students lead discussions on a wide range of architectural and design related topics; examined practical design methodologies; addressed themes related to the significance of cultural perspectives like race, gender and space in architectural practice and design; and developed critical thinking skills required across architectural disciplines, while creating culturally responsive spaces and communities. Students in the ARCH 368 Digital Manufacturing course shared the design methodologies from the course with the ULead participants. The course culminated with the students developing two client-based projects, a Modular Playground System for Mr. Charles Ball, Executive Director of the Regional Planning Commission of Greater Birmingham and the design of a donor wall for Tuskegee University President Lily D. McNair and the Tuskegee University Office of Development. The donor wall will be constructed by the students using the original bricks from the Old Huntington Building (built in 1902) which burned in 1994.

The project for the modular system employed students with the design concepts of (stacking, additive & subtractive manufacturing) to develop a proposal for a modular building kit. The building kit was to be used by 10 to 16 year olds and can be assembled in multiple ways to simulate different environments with an emphasis on providing options for creative building experience, rapid installation, disassembling, and repackaging. The project deliverables were 2D and 3D documentations that explained the system and the installation process, and instructional videos for the installation process.

New Minors Programs

- African American Studies with a Concentration on the Tuskegee Architects (Fall 2018) and
- Historic Preservation (Fall 2019)

Summary: The minors are available to students at the university who want to complete a minor, and are interested in architecture, closely related fields, and in African American Studies. The minors will offer an overview of architecture as a discipline and as a profession. Through a survey of African American history in the South, historic

preservation and conservation, and sustainability concepts, students acquire an understanding of the architecture discipline and its possibilities.

A National Endowment for the Humanities (NEH) grant totaling nearly $100,000 helped to establish the first-of-its-kind, multidisciplinary African American Studies minor at Tuskegee University. The grant, entitled "Lifting the Veil: Seeing the Built Environment through the Lens of the Humanities," is a collaborative project between the Department of Architecture and the Department of History in the College of Arts and Sciences. The funding supported the creation of the new 18-credit-hour interdisciplinary minor.

New Degree Program

- Bachelor of Arts in Design (proposed fall 2020)

Summary: The Bachelor of Arts in Design will be a 4-year, 129 credit hour undergraduate degree program. The degree will explore design as a problem-solving tool and will provide a broad range of interdisciplinary and professional opportunities. Students who graduate from this program will be equipped with skills that qualify them to work as practicing applied artists, interior designers, and industrial designers. By keeping the discipline current and offering a B.A. in Design, the students will have the skills that most employers are now seeking within the design industry.

The degree will develop creativity, provide the tools for verbal and nonverbal communication, and develop the capacity to make wise and informed choices. The opportunity for unique self-expression, group participation, and self-directed learning in a design studio environment will be explored. Students will develop the ability to analyze, interpret, and evaluate their own decisions regarding their artwork and collaborate with architecture students in a design studio environment. This program will require fewer credit hours than the 169 required by the BArch degree. Because of this, students interested in focusing on design studies rather than a post-professional degree in architecture, in particular, completing a Thesis Capstone Paper during their 5th year will have an opportunity to complete a 4-year design instead of transferring to a completely different field of study. In the first and second years, the B.A. in Design degree shares many architecture courses. Those students who decide to pursue this degree will take specialized courses (focusing on interior and industrial designs) in their third and fourth years. The Thesis Capstone, Structures I, II, and III, and Math 207/227 courses were deleted from the curriculum for students who struggle with the writing and the math content.

The new courses, minors, and B.A. in Design degree were approved by the Faculty Senate and the Provost in fall 2019. The Board of Trustees will review and approve the adoption of the minors and the new B.A. in Design Degree at the January 2020 board meeting in Atlanta, GA.

a. **Other Projects related to New Curriculum Content**

In addition to the course work, the department hosted two hands on historic preservation workshops to instruct students in the process of restoring historic wood windows and

repointing historic brick. The work has received support from the J.M. Kaplan Fund, the National Trust for Historic Preservation, the National Park Service, the Advisory Council for Historic Preservation, the Alabama Historical Commission, and the Birmingham Civil Rights Institute.

These organizations have committed time energy and resources to help the students and program develop into the premiere center for addressing the historic preservation needs of African American communities. The National Trust for Historic Preservation awarded the department a $150,000 grant to renovate the Willcox E Trades Building to expand the existing woodshop and add a new building construction workshop, and a digital manufacturing lab. This expansion allows the department to expand and explore the development of large-scale construction projects. Outside contractors and student labor, under the guidance of faculty, are completing the renovation of the building. This work is contributing to an effort to reconnect students to Tuskegee's architecture legacy and preparing them to address the contemporary needs of the building industry.

Beginning with the Drakeford House, the Historic Preservation Program seeks to preserve, conserve and protect buildings, objects, landscapes or other artifacts of historical significance in the Tuskegee community. The Drakeford House is located at 616 North Main Street in Tuskegee, AL and was built in 1890. The house was listed on the National Register of Historic Places Inventory on March 7th, 1985. The house will support the development of an innovative educational system, which will be a leader among other HBCUs in developing craft training skills and services, through its undergraduate, research and outreach programs. The faculty and students will use the house as a learning laboratory for preservation training and instructional plans for students to acquire knowledge of preserving the historic character of the house. There are no other architecture and construction schools in the state that features an interdisciplinary approach to teaching and learning, especially in under-served communities.

b. **Faculty Changes**

Faculty no longer in the Department of Architecture since the 2017 team visit

Jack Ames (Full-Time)
William Lewis (Full-Time)
Emile Dixon (Full-Time)
Kathleen Kirkpatrick (Adjunct)
Shavon Charlot (Adjunct)
Nick Seierup (Visiting Professor of Practice)

New Faculty since the 2017 team visit

Dr. Wesley Henderson (Full-Time), a licensed architect and has research interests in African American Architecture; Art Deco period buildings; World's Fairs/Negro Buildings at Fairs; Architecture of the mid-Twentieth Century is also known as "Googie" style; Cotton gins/industrial buildings of the agrarian South.

Swarnali Ghosh-Dastider (Full-Time)

Research Areas: Digital Technology; Virtual Design and Construction; Technology and Sustainability; Virtual Reality and Teaching methodology

Dr. Mostafa Alani (Full-Time Visiting Scholar), a licensed Iranian architect and has research interests in computational design with a focus on problems related to the built environment including design thinking and embedded computations; Reconfigurable and modular structures; Morphological design thinking; Islamic Geometric patterns.

Carl Trimble (Adjunct), a licensed architect since 1981. Trimble's firm has a portfolio that includes residential, institutional, civic, and healthcare facilities. He has more than a decade of higher education teaching experience and focuses his research around how cultural theme manifest into form.

Harold Tate (Adjunct), a licensed architect and the vice president for facilities and construction at Tuskegee University. His career has spanned more than three decades of experience in higher education, governmental and private practice.

Amma Asamoah (Adjunct)

Research Areas**:** Sustainable design with a focus on third world development; Green stormwater infrastructure and management in urban areas; Antique African textile research.

Jack Travis (Part-Time Visiting Scholar), a licensed architect and has research interests in Afro culture in architectural expression; investigating "blackness" of culture, and sensibilities; architecture and interiors fused with African iconography.

3. Summary of Activities in Response to Changes in the 2014 NAAB Conditions

Tuskegee University, 2019 Response:

This section is not applicable to the Tuskegee University Department of Architecture. All program and curriculum adjustments to the 2014 NAAB Conditions were made prior to the 2017 NAAB visit.

4. Appendix

Appendix A: Course Syllabi that satisfy the Unmet SPC's
Appendix B: New Courses Developed by the Department of Architecture
Appendix C: New Minors and Bachelor of Arts in Design degree
Appendix D: 1 Page Faculty CVs
Appendix E: Willcox E Trades Building Utilization Plans (Expansion Plans)

TUSKEGEE UNIVERSITY
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COURSE OUTLINE

ARCH 401 ARCHITECTURE DESIGN STUDIO FALL 2019 CREDIT HRS: 6

Instructor:	Roderick Fluker, Associate Professor
Office:	Willcox 'C' Building Rm 122 Hrs: M W 9-11am; Tu 9-2 pm (via Skype)
Contact:	rfluker@tuskegee.edu (email) 724-4694 (phone)
Class Period:	M W F 1.00 – 5.00 PM
Location:	Willcox A – Rm 203
Pre-requisite(s):	Arch 302

COURSE DESCRIPTION:
This course focuses on the comprehensive design of a building from the programming phase through construction details. An emphasis is placed on the integration of building systems as an approach to sustainable design. Students learn to develop a theoretical stance and select an associated design methodology as part of their design process. A focus is placed on the role of the detail in design and how to document construction details.

In addition to the technical requirements, additional emphasis will focus on critical thinking, originality, and perceptual sensitivity – through readings, discussion, analysis and design.

COURSE OBJECTIVES:
The course is designed to meet the following NAAB performance criteria:

A.2 Design Thinking Skills
The ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards

B.3 Codes and Regulations
The 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.8 Building Materials and Assemblies
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.

C.2 Integrated Evaluations and Decision-Making Design Process
The 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.

D.3 Integrative Design
The 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.

D.4 Legal Responsibilities
Understanding of the architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.

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COURSE OUTLINE

ARCH 501 DESIGN STUDIO FALL – 2018 CREDIT HRS: 6

Instructor:	Roderick Fluker, Associate Professor
Office:	Willcox 'C' Building Rm 122 Hrs: M W F 9-11am Tues 9-4pm
Contact:	rfluker@tuskegee.edu (email) 334.724.4694 (phone)
Class Period:	M W F 1.00 – 5.00 PM Willcox A - 103
Pre-requisite(s):	Arch 402; Co-requisite: ARCH 521

COURSE DESCRIPTION:

This course focuses on architectural design within an urban context, with an emphasis on socioeconomic issues and community redevelopment. Projects are at an urban scale and incorporate planning issues. *The 501 Studio explores "conceptual and technical aspects of architectural form and the integration of the various building assemblies and systems. Each student shall bring the knowledge, skills, and understanding gained from all previous coursework and experiences to the development of a conceptually coherent, comprehensive, and integrative architectural design proposals. Studio work will include (1) Schematics: integrating major building systems and sustainable strategies with design at a conceptual level as shown in conceptual drawings of structural, mechanical, passive environmental and lighting systems; and (2) Design Development: using large scale models and drawings to test initial ideas and the integration of these ideas; studying materials and details of assembly including vertical surfaces relative to framing systems, wall sections and details of assembly; and presentation: with final models and drawings of site plan, plans, sections, and elevations".*

At the conclusion of the semester, each student should be able to demonstrate an:

- *Ability to produce an architecture project informed by a comprehensive program as developed by each student as part of the 503 seminar course - from schematic design through the detailed development of programmatic spaces, structural and environmental systems, life-safety provisions, wall sections and building assemblies, as may be appropriate; and to assess the completed project with respect to the program's design criteria.*
- *Ability to assess, select, configure and detail as an integral part of the design appropriate combinations of building materials, components and assemblies to satisfy the requirements of the building program.*
- *Understanding of the principals, conventions, standards, applications and restrictions pertaining to the manufacture and use of construction materials, components and assemblies.*
- *Ability to assess, select and integrate structural systems, environmental systems, life safety systems, building envelope systems and building service systems into building design as described by the National Architectural Accrediting Board (NAAB) Performance Criteria.*

COURSE OBJECTIVES:

The course is designed to meet the following NAAB performance criteria:

- ***A.6 Use of Precedents:*** *Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.*
- ***B.2 Site Design:*** *Ability to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.*
- ***B.8 Building Materials and Assemblies:*** *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.*

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COURSE OUTLINE

ARCH 503 THESIS SEMINAR FALL – 2019 CREDIT HRS: 2

Instructor:	Dr. Carla Jackson Bell, Professor and Dean
Office:	Willcox 'A' Building Rm Wilcox A Rm. 101
Contact:	cjbell@tuskegee.edu (email) 724-4258 (phone)
Class Period:	TTH 9:30am-11am
Location:	Willcox A – Rm 201
Pre-requisite(s):	Arch 402

COURSE DESCRIPTION:
This course is a collaborative seminar format presenting the research tools, techniques, and strategies required to develop, refine, and write a capstone thesis paper. During this course, the student will select a capstone project is predetermined by the professor and other designees or an approved project of their choosing. The capstone is an academic project that applies a research agenda and a design experiment to a conceptual framework/idea.

COURSE OBJECTIVES:
The course is designed to meet the following NAAB performance criteria:

A.1 Professional Communication Skills
Ability to write and speak effectively and use representational media appropriate for both within the profession and with the general public.

A.3 Investigative Skills
Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

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.

C.1 Research
Understanding of the theoretical and applied research methodologies and practices used during the design process.

COURSE GOALS:
- To improve skills in writing, oral presentation and research
- To formulate an architecturally significant thesis/argument
- To recognize, explain, and contrast contemporary arguments within the context of your research
- To clearly articulate a conceptual idea and thesis argument in a well-written and orally presented manner
- To assemble, organize, and format research related to the thesis design course, ARCH 0502

TOPICAL OUTLINE:
- Identify information needs and gathering data (15%)
- Programming and case study (10%)
- Analysis summaries (25%)
- Development of architectural theory (50%)

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COURSE OUTLINE
ARCH 100 INTRO TO CAREERS IN ARCH & CSMT FALL – 2019 CREDIT HRS: 1

Instructor:	Dr. Carla Jackson Bell, Professor and Dean & TSACS Faculty
Office:	Willcox 'A' Building Rm. 101
Contact:	cjbell@tuskegee.edu (email) 724-4258 (phone)
Class Period:	M 4:00 pm-5pm
Location:	Willcox A – Rm 110
Pre-requisite(s):	NONE

COURSE DESCRIPTION:
The purpose of this seminar is to assist students in making informed decisions regarding their future academic and professional goals and to provide information regarding careers in the Architecture & Construction. The content includes but is not limited to careers in architecture, design, urban planning, construction management, building and maintaining the built environment. Reinforcement of academic skills occurs through seminar room instruction and applied laboratory procedures.

COURSE OBJECTIVES:
The course is designed to meet the following NAAB performance criteria:

D.1 Stakeholder Roles in Architecture:
Understanding of the relationships among key stakeholders in the design process—client, contractor, architect, user groups, local community—and the architect's role to reconcile stakeholder needs.

D.3 Business Practices:
Understanding of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.

The course is designed to meet the following ACCE Student Learning Outcomes (SLO):

SLO 1 Create written communications appropriate to the construction discipline.

SLO 1- Create written communications appropriate to the construction discipline.

SLO 2- Create oral presentations appropriate to the construction discipline.

SLO 9- Apply construction management skills as an effective member of a multi-disciplinary team.

COURSE STRUCTURE:
The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters. The one-hour a week fall semester seminar will be divided between the architecture and construction science faculties over the fall semester.

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COURSE OUTLINE

ARCH 363 DIGITAL MANUFACTURING PROCESS FALL 2018 CREDIT HRS: 3

Instructor:	Dr. Mostafa Alani, Visiting Professor
Office:	Willcox 'C' Building Rm 118
Contact:	malani@tuskegee.edu (email) 727-8091 (phone)
Class Period:	T TH 3:30-5.00 PM
Location:	Willcox A – Rm 100
Pre-requisite(s):	None

COURSE DESCRIPTION:
Digital Manufacturing will be examining how digital processes are transforming traditional building methods. The course will provide an overview of contemporary digital manufacturing processes and at the same time being a "hands-on" lab that has students develop advanced forms digitally and physically using a variety of "additive" and subtractive digital tools.

COURSE OBJECTIVES:
The course is designed to meet the following NAAB performance criteria:

A.2 Design Thinking Skills
The ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards

C.2 Integrated Evaluations and Decision-Making Design Process
The 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.

LEARNING OUTCOMES
- Gain an understanding how digital tools are transforming the digital design and physical fabrication of architecture.
- Apply and practice technical issues related to the use of digital design and fabrication.

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COURSE OUTLINE
ARCH 367 HISTORIC PRESERVATION I FALL 2019 CREDIT HRS: 1-3

Instructor:	Mr. Kwesi Daniels, Assistant Professor and Department Head
Office:	Willcox 'C' Building Rm 115
Contact:	kdaniels@tuskegee.edu(email) 727-8352 (phone)
Class Period:	MWF 10am-11pm
Location:	Willcox C – Rm 125
Pre-requisite(s):	None

COURSE DESCRIPTION:
This course presents a summary of the principles of historic preservation. An overview of the historic Tuskegee campus will be provided and used as a framework for first-hand study and discussion of preservation issues including researching a building's history, determining its significance, assessing its condition and creating a rehabilitation plan. The model for the course will be the Secretary of the Interior's Standards for Rehabilitation.

COURSE OBJECTIVES:
The course is designed to meet the following NAAB performance criteria:

A.1 Professional Communication Skills:
Ability to write and speak effectively and use representational media appropriate for both within the profession and with the general public.

A.3 Investigative Skills:
Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

COURSE MISSION STATEMENT:
This course is designed to address the historic preservation needs of the buildings on Tuskegee University's campus and within the city of Tuskegee. We explore the topic of historic preservation using the "Learning by Doing" educational philosophy developed by Booker T. Washington. Students learn how to use contemporary preservation tools, including photogrammetry and laser scanning in order to develop resources that can be used to preserve, rehabilitate, reconstruct, and/or stabilize buildings within our local community.

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COURSE OUTLINE

HUM 100 LEGACY OF BOOKER T WASHINGTON FALL 2019 CREDIT HRS: 3

Instructor:	Mr. Kwesi Daniels, Assistant Professor and Department Head
Office:	Willcox 'C' Building Rm 115
Contact:	kdaniels@tuskegee.edu(email) 727-8352 (phone)
Class Period:	MWF 11am-12pm
Location:	Willcox C – Rm 125
Pre-requisite(s):	None

COURSE DESCRIPTION:
The course seeks to advance humanities education and scholarship at Tuskegee University by undertaking a critical re-examination of Booker T. Washington, one of the university's founders and its first president—and arguably one of the most complex and controversial figures of the twentieth century. Employing the techniques and practices of historical and literary analysis and utilizing a range of primary and secondary sources, the class will seek to shed new light on Washington's regional, national, and global influence in education, politics and civil rights, business, and literature and the arts. Through research, curriculum and program enhancement, digital resource development, and presentations, Tuskegee students will seek to analyze and reinterpret Washington's life and work and to better comprehend his place in American history and impact on today's Tuskegee students.

Despite his name recognition and his iconic status as one of black America's most prominent twentieth-century educators and leaders, he remains an enigma, and his multi-layered agenda, his diverse interests, and his wide-ranging influence are still not clearly understood. Beyond the publication of Up from Slavery, his autobiography, his engagement with the humanities is little known and seldom acknowledged.

COURSE OBJECTIVES:
The course is designed to meet the following NAAB performance criteria:

A.8 Cultural Diversity and Social Equity:
Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites, buildings, and structures.

COURSE MISSION STATEMENT:
This course is designed to explore in some depth the complex dimensions of Booker T. Washington and the cumulative experience of his work at Tuskegee University, to provide an understanding of how his work continues to influence today and the outlook for tomorrow.

We offer this course as part of your education because it is important for educated citizens at and from Tuskegee University to be familiar with the importance of Booker T. Washington's impact on the university and the South, and to recognize the historically interacting forces that produced important forms of political, social, and economic organization. You should understand that you, the Tuskegee University student, are an ambassador and advocate; not just a student that went to Tuskegee, but a Tuskegee student.

Tuskegee University

Robert Taylor School of Architecture and Construction Science and Management (TSACS)

HISTORIC PRESERVATION MINOR
CURRICULUM SHEET

Student Name: _____ Student ID: _____

Advisor Name: _____ Advisor Department: _____

Student Major: _____

Students who wish to earn a Historic Preservation minor with a concentration in the Built Environment must complete 18 credit hours with a "C" grade or higher. Students must complete the following introductory level courses: HIST 0105, HIST 0201, ARCH 252. In addition, students must meet the "Depth Requirement" of 9 semester credit hours in the Upper Division Courses (300 level courses) ARCH 352, ARCH 364, ARCH 365.

Mandatory Courses **Interdisiciplinary Courses (9 semester credit hours)**	**Semester**	**Grade**	**Credits**
HIST 0105: The Black Experience in America	_____	_____	3
HIST 0201: Intro to Historical Reserach	_____	_____	3
ARCH 252: Architecture History I	_____	_____	3
Depth Course			
ARCH 352: Architecture History II	_____	_____	3
ARCH 364: Historic Preservation I	_____	_____	3
ARCH 365: Historic Preservation II	_____	_____	3
		Total Number of Credits:	18

APPROVAL OF COMPLETION OF HISTORIC PRESERVATION MINOR PROGRAM:

Student Signature: _____ Date:_____

Advisor Signature: _____ Date:_____

Dean Signature: _____ Date: _____

Tuskegee University

Robert Taylor School of Architecture and Construction Science and Management (TSACS)
and College of Arts and Sciences (CAS)

AFRICAN AMERICAN STUDIES MINOR
CURRICULUM SHEET

Student Name: _____ Student ID: _____

Advisor Name: _____ Advisor Department: _____

Student Major: _____

Students who wish to earn an African American Studies minor with a concentration on the Built Environment must complete 18 credit hours (architecture, history, humanities, English) with a "C" grade or higher. Students must complete three introductory level courses: HIST 105, HUM 200 and ARCH 221. Students will also complete one of two 200/300 level courses: HIST 201 and ARCH 368. In addition, students must meet the "Depth Requirement" of 6 semester credit hours in the Upper Division Courses (300 level courses) HIST 317 or ENGL 390 and ARCH 368.

Mandatory Courses	**Semester**	**Grade**	**Credits**
Introductory Level Courses (9 semester credit hours)			
HIST 105 Black Experience in the Americas *(*HIST 103/104/ can be substituted)*	_____	_____	3
HUM 200 The Legacy of Booker T. Washington	_____	_____	3
ARCH 221 Ethnic Americans and the Built Environment	_____	_____	3
Choose one of the following 200/300 level History/Architecture courses (3 semester credit hours):			
HIST 201 Introduction to Historical Research	_____	_____	3
ARCH 368 Humanities in Architecture (required)	_____	_____	3
MUSC 304 Afro-American Music	_____	_____	3
FPAR 110 The Black Aesthetic	_____	_____	3
Choose two Upper Division Courses – Level 300 (6 semester credit hours):			
HIST 317 African American History 1877 to Present	_____	_____	3
HIST 318 African American Scientists and Inventors	_____	_____	3
ARCH 369 Culturally-Responsive Practices *(*Special Focus on the Built Environment of TU)*	_____	_____	3
ENGL 330 Black American Literature I	_____	_____	3
ENGL 331 Black American Literature II	_____	_____	3
Total Number of Credits:			18

APPROVAL OF COMPLETION OF AFRICAN AMERICAN STUDIES MINOR PROGRAM:

Student Signature: _____ Date:_____

Advisor Signature: _____ Date:_____

Dean Signature: _____ Date: _____

TSACS | BA in Design (DESI)

INTRODUCTION

The Bachelor of Arts in Design at Robert R. Taylor School of Architecture and Construction Science and Management (TSACS) explores a creative and scientific approach to design by which students conduct processes to change already existing conditions into "preferred ones."

Students will be experimenting with the design, fabrication, and testing of artifacts that aim to enhance the quality of human lives. The scope of projects that students will be engaged in ranges from a small piece of furniture to entire indoor spaces.

Design is interdisciplinary by nature and encompasses many disciplines under its umbrella from social sciences to natural sciences. The proposed program emphasizes this nature and aims to prepare students to be effective team leaders and be able to have a productive conversation with various disciplines across the university.

This document covers the following aspects:

- Why *BA in Design*?
- Admissions, Selection and Application
- Curriculum and Requirements to Complete the BA in Design Program
- BA in Design Program Faculty & Leadership
- BA in Design Courses

The proposed Design program is to be taught and managed at the department of architecture at Tuskegee University.

Contact the BA in Design Program
Tuskegee University
Dr. Carla Jackson Bell, Dean of TSACS and Professor of Architecture
1200 W. Montgomery Rd. Tuskegee, AL 36088
Phone: 334-727-8011 Email: cjbell@tuskegee.edu

MOSTAFA ALANI, Ph.D

Curriculum Vita

The Robert R. Taylor School of Architecture and Construction Science
Tuskegee University | Tuskegee, AL
Office 118 Wilcox C
malani@tuskegee.edu
www.geno-morph.com
(864) 346-8408

E D U C A T I O N

Ph.D. Planning, Design, and the Built Environment | College of Architecture, Arts, & Humanities, Clemson University | Clemson, South Carolina, 2018 (Fully Funded Scholarship)
Dissertation title: "Computational Investigation of the Morphological Design Dimensions of Historic Hexagonal-Based Islamic Geometric Patterns"
Chair: Michael Kleiss, Ph.D.; Associate Professor of Architecture, Department of Architecture

M.Sc. Building Technology | School of Housing, Building, and Planning, University of Science | Penang, Malaysia, 2009

B.Sc. Architecture Engineering | Department of Architecture, University of Technology | Baghdad, Iraq, 2006

Certificate Programs:
2015 Digital Ecology Certificate | College of Architecture, Arts, & Humanities, Clemson University | Clemson, South Carolina

T E A C H I N G _ E X P E R I E N C E

Tuskegee University, Visiting Assistant Professor
Architecture Design Studio (ARCH.0302) | Spring 2019
Computer Applications (ARCH.0345) | Spring 2019
Special Problems (ARCH.0363) | Spring 2019
Architecture Studio (ARCH.0401) | Fall 2018
Digital Manufacturing Processes (ARCH.0363) | Fall 2018

Kennesaw State University, Part-Time Assistant Professor
Architecture Studio IV (ARCH.2004) | Spring 2018
Design Communication (ARCH.1241-6, 14) | Spring 2018
Focus Design Studio, Dynamic Environments (ARCH.5015) | Fall 2017

Clemson University, Graduate Teaching Assistant
Design Science (ARCH.8790) | Spring 2016
Creative Inquiry | Spring 2016

AMMA O. ASAMOAH, LEED GA

4310 Perriton Trail, Loganville GA | (215) 480-7091 | aosamoah@gmail.com

EDUCATION

Master of Science: Sustainable Design| Philadelphia University | Philadelphia, PA 2009-2011

Bachelors of Architecture: Architecture| Tuskegee University | Tuskegee, AL 2004-2008

Visiting Scholar: African Studies| University of Ghana | Legon, Ghana,2003 Gilman International Scholarship Recipient

Community College of Philadelphia | Philadelphia PA| 2001-2003

RELEVANT COURSEWORK

SDN601 Sustainable Design Methodologies Topics Covered: History/Theory of Sustainability, LEED Rating System, Integrated Design Process SDN 603 Sustainable Building Systems Topics Covered: Ecological Site Systems, High Performance Building Systems, Integrated Systems Design, Energy Modeling, Energy and water budgeting SDN 611 Sustainable Design Studio Topics Covered: Collaborative Design, Interdisciplinary Design, Integrated Design, Ecological Design, Aesthetics of Green SDN 615 Sustainable Organizations Primer Topics Covered: Developing social responsibility reports, marketing and branding a sustainable business, measurements for sustainable practice in the corporate environment
Online Certification Course |Project Management |University Of California Irvine|2019

SKILLS

Proficient in:	Knowledge of:	Experienced in:
Revit	International Building Code	Public Speaking
AutoCAD	American Disabilities Act	Workshop and Training
Sketch-Up	OSHA Standards	Development
Adobe Creative Suite	LEED Scoring	Design Development
Microsoft Office	Sustainable System Integration	Project Management

HISTORY

Adjunct Instructor | Tuskegee University| Tuskegee Institute| 9/2019 -12/2019

Architectural Designer | Urban Aesthetics, LLC | Philadelphia, PA | 9/2018 - 2019

- Coordinated with Head architect to develop design drawings and construction documents for a high-end residential renovation addition
- Engaged with clients to determine their needs and requirements for residential and commercial renovations and new-builds.
- Created graphic renderings and models using Sketch-Up and Photoshop
- Coordinated with segment leaders to promote architectural goals and design concepts.
- Consulted with clients to determine functional and spatial requirements of the new structure.
- Communicated with vendors and contractors and incorporated their input into project designs. Recommended and implemented adaptations and modifications to complete working drawing sets. Created, printed and modified drawings in AutoCAD.

Swarnali Ghosh Dastider, M.S., M.Arch, LEED AP
Assistant Professor | Construction Science Department
Robert R. Taylor School of Architecture and Construction Science
Tuskegee University
Willcox C - Office 120
Tuskegee, AL 36088
Office: 334.724.4921
Email:sghoshdastider@tuskegee.edu

Professional Preparation

Master of Science in Civil Engineering | **University of Missouri-Rolla** | USA | May 2007
Master of Architecture | **Miami University** | Oxford, Ohio | USA | May 2004
Bachelor of Architecture | **University of Madras** | India | April 2001

Professional Publication

- Swarnali Ghosh Dastider | "Effectiveness of Virtual Reality Technology to teach Gen Z students about Construction Safety A Pilot Study" | Submitted to the International Journal of Scientific Research and Management and is under review
- Matt Jefferies and Swarnali Ghosh Dastider | "*BIM in Multifamily Design & Construction"* , Journal of Building Construction and Planning Research | December 2018
- Matt Jefferies and Swarnali Ghosh Dastider | Poster Presentation | "*Building Information Modeling In Multifamily Design & Construction"* | Design & Construction Technology Conference | Associated General Contractors of America | October 2018
- Ghosh, S.D. and Baur S.W. | *"2005, UMR/RTI Solar House: Coexistence of Environmental and Technology*," 2005 | Engineers for a Sustainable World (ESW)
- Ghosh, S.D. and Baur S.W., | "*Evaluation of Building Performance University of Missouri–Rolla (UMR) 2002 Solar House*," 2006 | Architectural Engineering Conference: Building Integration Solutions, Omaha, NE, April 2006.

Professional Activities

- Advisor "Women in Construction" Tuskegee University
- LEED Accredited Professional (BD+C)
- Member; United States Green Building Council
- Associate Member: American Institute of Architects
- Member, UMR Solar House Team 2005

Courses Taught

- CSMT.0402: Advance Const. II, Constcrution [Tuskegee University]
- ARCH.0332: Mat & Construction II [Tuskegee University]
- CSMT.0332: Mat. & Struc. in Industrial /Commercial Constcrtion [Tuskegee University]
- CSMT.0347: Virtual Design in Construction [Tuskegee University]

Wesley H. Henderson, AIA, NOMA, NCARB

Educational Credentials:

Doctor of Philosophy in History of Architecture, UCLA	1992
Masters of Architecture, MIT	1976
Bachelors of Science in Art and Design, MIT	1974

Teaching Experience:

Tuskegee University	2018-Present
Hampton University	2009-2015
Florida A&M University	2004-2009
Texas A&M University	1997-98, 1999-2002
University of Texas at Austin	1993-97, 1998-99
Prairie View A&M University	1976-78, 1983-86

Professional Experience

Wesley H. Henderson, AIA, Architectural Services		1990-Present
RAW Architecture	Los Angeles, CA	1993
Jeffrey Sulkin and Associates Architects	Santa Monica, CA	1992-1993
Tumohr Construction Company	Inglewood, CA	1991
Robert S. Moore, Architect	Inglewood, CA	1988-90
Archi-technics 3	Houston, TX	1976-1986

Licenses / Registrations

Texas, 1982
NCARB, 2013

Professional Memberships:

American Institute of Architects (AIA)	Joined 1983.
National Organization of Minority Architects (NOMA)	Joined 1984
Society of Architectural Historians	1992 to present
National Trust for Historic Preservation	1993 to present

Select Publications:

African American Architects: A Biographical Dictionary 1865-1945 (New York: Routledge Press, published January 2005).

"Contradictions: An African-American View of Aggieland" in CITE: The Architecture and Design Review of Houston (#41 Spring 1998), published by Rice Design Alliance, Rice University, Houston, Texas.

CARL TRIMBLE, ARCHITECT

Education Experience:

Tuskegee University	1964-1968	B.A. Architectural Science
Tuskegee University	1972-1973	B.Arch. 6yr (Master Equivalent)
Georgia State University	1974-1976	Master Urban Community Development
Atlanta Metropolitan State University	2013-present	Pursuing Associate of Fine Arts

Teaching Experience:

Tuskegee University: Adjunct Professor

Fall 2007-Spring 2008; Fall 2018-Spring 2019 (Instructor); Fall 2019

Taught: Architectural Design Theory, Urban Design Studio, Soils and Foundation & Building Construction; Portfolio Design & Second Design Studio

University of Louisiana at Lafayette: Fall 2008-Spring 2013

Taught: First year Foundation Design Studio, Second year Design Studio, Third year Design Studio, Third year Urban Design Studio, Second Year Free hand drawing, Digital media, Fifth year-working drawings

Private Practice:

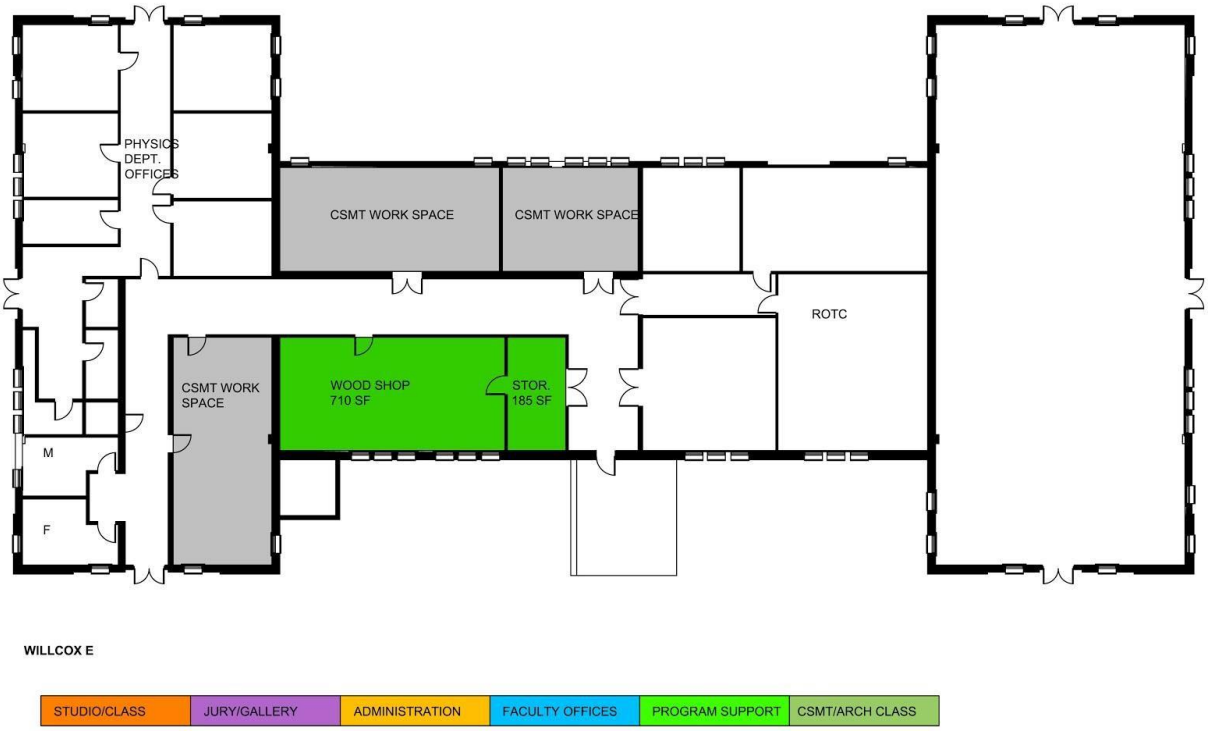
1981-Present (President)	Carl Trimble Architects	Atlanta, GA (1981)

GA. Registration # 3954

Selected Practice Project Highlights:

Grady Hospital $230 million addition renovation	URS-KMD-Trimble Architects	Atlanta, GA
400 room Stouffers Hotel Hartsfield-Jackson Airport Atlanta	TVS/Trimble Architects	Atlanta, GA
Delta Tech Operations center / Aircraft Maintenance 3 bay expansion FABRAP/Trimble Architects		Atlanta, GA
UPS vehicle maintenance facility		Norcross, GA
Dormitory renovation for Olympic Athletes Atlanta Olympics 1996		Atlanta, GA
Federal Express Air to Ground Terminal 230,000 sq. ft. Renovation		Atlanta, GA
Public Housing Renovation Atlanta Housing Authority & Birmingham Housing Authority		Atlanta, GA / Birmingham, AL
South Fulton Library		College Park, GA
Multiyear contract with HUD Renovated over 15,000 apartment units		Southeastern U.S

Existing Utilization Floor Plan



Proposed Utilization Floor Plan