1. INSTRUCTIONS AND TEMPLATE GUIDELINES

Purpose

Continuing accreditation is subject to the submission of interim progress reports at defined intervals after an eight-year or four-year term of continuing accreditation is approved.

This narrative report, supported by documentation, covers three areas:
1. The program's progress in addressing not-met Conditions, Student Performance Criteria, or Causes of Concern from the most recent Visiting Team Report.
2. Significant changes to the program or the institution since the last visit.
3. Responses to changes in the NAAB Conditions since your last visit (Note: Only required if Conditions have changed since your last visit)

Supporting Documentation

1. The narrative should describe in detail all changes in the program made in response to not-met Conditions, Student Performance Criteria, and Causes of Concern.
2. Provide information regarding changes in leadership or faculty membership. Identify the anticipated contribution to the program for new hires and include either a narrative biography or one-page CV.
3. Provide detailed descriptions of changes to the curriculum that have been made in response to not-met Student Performance Criteria. Identify any specific outcomes expected to student performance. Attach new or revised syllabi of required courses that address unmet SPC.
4. Provide additional information that may be of interest to the NAAB team at the next accreditation visit.

Outcomes

IPRs are reviewed by a panel of three: one current NAAB director, one former NAAB director, and one experienced team chair.[1] The panel may make one of three recommendations to the Board regarding the interim report:
1. Accept the interim report as having demonstrated satisfactory progress toward addressing deficiencies identified in the most recent VTR.
2. Accept the interim report as having demonstrated progress toward addressing deficiencies but require the program to provide additional information (e.g., examples of actions taken to address deficiencies).
3. Reject the interim report as having not demonstrated sufficient progress toward addressing deficiencies and advance the next accreditation sequence by at least one calendar year but not more than three years, thereby shortening the term of accreditation. In such cases, the chief academic officer of the institution will be notified and a copy sent to the program administrator. A schedule will be determined so that the program has at least six months to prepare an Architecture Program Report. The annual statistical report (see Section 9 of the 2014 Conditions) is still required.

Deadline and Contacts

IPRs are due on November 30. They are submitted through the NAAB's Annual Report System (ARS). Contact Kesha Abdul Mateen (kabdul@naab.org) with questions.

Instructions

1. Type all responses in the designated text areas.
2. Reports must be submitted as a single PDF following the template format. Pages should be numbered.
3. Reports are limited to 25 pages/10 MBs.
4. Supporting documentation should be included in the body of the report.
5. Student work is not to be submitted as documentation for a two-year IPR.

2. EXECUTIVE SUMMARY OF 2014 NAAB VISIT

[1] The team chair will not have participated in a team during the year in which the original decision on a term of accreditation was made.

CONDITIONS NOT MET

2014 VTR
None

STUDENT PERFORMANCE CRITERIA NOT MET

2014 VTR
B.6 Comprehensive Design

CAUSES OF CONCERN

2014 VTR
Leadership & Faculty Stability
Opportunity for additional Digital Instruction
Shop Safety
Accessibility
Sustainability

- The School of Architecture has initiated efforts to work with five other institutions of higher education to build pathways to an architecture education from a more diverse population.

d. Summary of Activities in Response to Changes in the NAAB Conditions: The School made two important changes as a result of the VTR and the changes in the Conditions. First, we decided to increase the number of courses that address A.1 Professional Communication Skills in order to make sure that a wide range of communication skills were addressed. This occurs in the Introductory course, three Architectural Graphics courses in first and second year, the Options Studio and the Thesis, allowing for written, verbal and graphic communication to be addressed across the design spectrum. Second, we decided to focus ARCH 558 and 535 on Realm C, Integrated Architectural Solutions. See the description of these two courses, below. Their integration is discussed in the section above on SPC not met B.6.
2014 NAAB Conditions

Montana State University, 2016 update: Click here to enter text.

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

Montana State University, 2016 update: The following documents are submitted with this Template:

- Syllabus for ARCH 431 addressing the Concern for Sustainability (not SPC related-available upon request)
- Syllabus for ARCH 535 addressing SPC B.6 Comprehensive Design p. 11-16
- Syllabus for ARCH 558 addressing SPC B.6 Comprehensive Design p. 17-21
- Position Description for Sean Clearwater Concern for Shop Safety p. 22
- Susan Cowan CV p. 23
- Jaya Mukhopadhyay CV p. 24
- Andrew Vernooy CV p. 25
- Robert Mokwa CV p. 26
- Royce Smith CV p. 27

Arch 535 – Advanced Systems Integration:

getting from design to construction

Instructors: Thomas McNab
tmcnab@montana.edu
406-994-3793
114 Cheever Hall
Office Hours: Monday 9:00 – 11:00 AM, Tuesday 10:00 AM to 12:00 PM or by appointment

Jaya Mukhopadhyay,
jaya.mukhopadhyay@montana.edu
406-994-4717
116 Cheever Hall,
Office Hours: 8:00-9:30 AM Monday & Wednesday or by appointment

Class Times: Monday, Wednesday, and Friday 12:00 – 12:50 PM, 113 Linfield Hall

abstract

The practice of architecture is unique in the culture of business and society. An Architect's training is broadly based in the design of space and focused on knowledge and skill in a variety of cultural, social, aesthetic, and technical areas. The realization of an Architectural project's success ultimately is dependent on the balance of physical, visual, and performance the integration and communication that takes place between the architect's consultants and the construction team. By virtue of this an Architect must be part artist, scientist, engineer, and craftsman to be able to recognize and assess every part of a project and assemble or guide the assemblage of parts, materials, processes, and systems required to realize the constructed manifestation of the design.

This course is a companion course to Arch 558 Comprehensive Design Studio. As such, the course is designed to support the technical considerations necessary to achieve the goals of Arch 558. The intent of this course is to introduce the thinking and processes that will allow you to apply the skills and knowledge you have accumulated in undergraduate studies of construction material and process; structural design; environmental design; and environmental control systems to a building design.

learning outcomes and student performance criteria

The Master of Architecture degree at Montana State University is a professionally accredited degree and as such, this course fulfils the National Architectural Accreditation Board (NAAB) criteria (2014):

"The accredited degree program must demonstrate that each graduate possesses the knowledge and skills defined by the criteria below. The knowledge and skills defined here represent those required to prepare graduates for the path to internship, examination, and licensure and to engage in related fields." The program must provide student work as evidence that its graduates have satisfied each criterion.

The criteria encompass two levels of accomplishment:

- ***Understanding***—The capacity to classify, compare, summarize, explain, and/or interpret information.
- ***Ability—***Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

II.1.1 Student Performance Criteria (SPC): The NAAB establishes SPC to help accredited degree programs prepare students for the profession while encouraging education practices suited to the individual degree program. The SPC are organized into realms to more easily understand the relationships between each criterion."

- National Architectural Accreditation Board, "Conditions of Accreditation", 2014 edition, page 15.

Realm C: Integrated Architectural Solutions.

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

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

		DATE	TOPIC	ASSIGNMENT	NOTES
Setting Goals	WEEK 1 INTRODUCTION	MONDAY August 29	Syllabus Technical Writing Introduction Project Goals: Programming	Technical Writing Assignment: Instruction Assignment 1: Programming - Introduction	Systems Integration Quiz distributed
		WEDNESDAY August 31	Setting Program Goals Program Elements		Systems Integration Quiz Due
		FRIDAY September 2	Arch 558 Fieldtrips		
Programming and Planning	WEEK 2 PROGRAM	MONDAY September 5	LABOR DAY HOLIDAY		
		WEDNESDAY September 7	Tools to set goals Introduction to rating systems, & assessment tools		
		FRIDAY September 9	Tools for programming Programming Issues Preliminary code analysis Zoning Pre-design + concept design		
	WEEK 3 SITE ANALYSIS	MONDAY September 12	Climate context: Macro & micro Water conservation	Assignment 2: Site Analysis - Introduction	
		WEDNESDAY September 14	Soils and Design Site Grading	Assignment 2: Site Analysis - In-class work	
		FRIDAY September 16	Comprehensive issues Applying zoning criteria Regional and community issues	Assignment 2: Site Analysis - In-class work	

		DATE	TOPIC	ASSIGNMENT	NOTES
Concept Design	WEEK 4 CONSTRUCTION / INTEGRATION	MONDAY September 19	Assignment 2: Site analysis – Class presentation	Assignment 2: Site analysis - Due	Presenters will be selected randomly
		WEDNESDAY September 21	Foundation systems Materials: energy, moisture, migration, infiltration	Assignment 1: Programming - Due	Work of this week is preparing for Assignment 7 Walls Sections, Detailing, and Specifications
		FRIDAY September 23	Case-Study: Norm Asbjornson Innovation Center Agnes Pohl		
	WEEK 5 ENVELOPE / INTEGRATION	MONDAY September 26	Envelope considerations Envelope detailing and construction		Work of this week is preparing for Assignment 7 Walls Sections, Detailing, and Specifications
		WEDNESDAY September 28	Campus LEED building tour		
		FRIDAY September 30	Integrating Systems Selecting appropriate systems Diagraming systems	Technical Writing Assignment: Part 1 - Due	Work of this week is preparing for Assignment 7 Walls Sections, Detailing, and Specifications
Schematics and Iteration	WEEK 6 DAYLIGHTING + ENERGY	MONDAY October 3	Basic concepts in daylighting Daylighting calculations Introduction to DIVA	Assignment 3a: Daylighting - Introduction	
		WEDNESDAY October 5	ARCHITECTURE SCHOOL SERVICE DAY		Required attendance at service day activities
		FRIDAY October 7	Basic concepts in energy consumption of buildings Energy calculations Energy efficiency strategies Introduction to Sefaira	Assignment 3b: Energy Analysis - Introduction	
	WEEK 7 DAYLIGHTING + ENERGY	MONDAY October 10	Daylighting – DIVA workshop	Assignment 3a: Daylighting analysis - In-class work	
		WEDNESDAY October 12	Energy analysis – Sefaira workshop	Assignment 3b: Energy analysis - In-class work	
		FRIDAY October 14	CLASS PRESENTATION Assignment 3a + 3b	Assignment 3a + 3b: Energy & daylighting analysis - Due	Presenters will be selected randomly from those that have not presented in prior classes

		DATE	TOPIC	ASSIGNMENT	NOTES
	WEEK 8 PASSIVE SYSTEMS	MONDAY October 17	Bioclimatic chart Passive design strategies	Assignment 4: Passive design strategies - Introduction	
		WEDNESDAY October 19	Iterating to incorporate passive design strategies	Assignment 4: Passive design strategies - In-class work	
		FRIDAY October 21	Assignment 4: Passive systems – Class presentation	Assignment 4: Passive design strategies - Due	Presenters will be selected randomly from those that have not presented in prior classes
	WEEK 9 ACTIVE SYSTEMS	MONDAY October 24	Review of HVAC systems	Assignment 5: HVAC systems - Introduction	
		WEDNESDAY October 26	Integrating HVAC systems in buildings – Case studies	Assignment 5: HVAC systems - In-class work	
		FRIDAY October 28	Assignment 5: Active systems – Class presentation	Assignment 5: HVAC systems - Due	Presenters will be selected randomly from those that have not presented in prior classes
	WEEK 10 LIGHTING / ACOUSTICS	MONDAY October 31	Fundamentals of acoustics Fundamentals of lighting		
		WEDNESDAY November 2	Acoustical Q&A with Sean Connolly		
		FRIDAY November 4	Lighting Q&A with Andrew Moore	Technical Writing Assignment: Part 2 - Due	
	WEEK 11 RATING SYSTEMS	MONDAY November 7	The LEED process	Assignment 6: Rating Systems - Introduction	
		WEDNESDAY November 9	Meeting compliance goals - A discussion with Kath Williams	Assignment 6: Rating systems - In-class work	
		FRIDAY November 11	VETERAN'S DAY HOLIDAY		

		DATE	TOPIC	ASSIGNMENT	NOTES
Design Documentation	WEEK 12 SPECIFICATIONS / WALL SECTIONS	MONDAY November 14	Assignment 6: Rating systems – Class presentation	Assignment 6: Rating systems - Due Assignment 7: Envelope design - Introduction	Presenters will be selected randomly from those that have not presented in prior Classes
		WEDNESDAY November 16	Introduction to WUFI & THERM	Assignment 7: Envelope design - In-class work	
		FRIDAY November 18	Wall sections Details	Assignment 7: Envelope design - In-class work	
	WEEK 13 WALL SECTION DETAILING	MONDAY November 21	Campus LEED building tour		
		WEDNESDAY November 23	THANKSGIVING DAY HOLIDAY		
		FRIDAY November 25	THANKSGIVING DAY HOLIDAY		
	WEEK 14 WALL SECTION DETAILING	MONDAY November 28	Wall Sections Details	Assignment 7: Envelope design - In-class work	
		WEDNESDAY November 30	Specifications	Assignment 7: Envelope design - In-class work	
		FRIDAY December 2	Assignment 7: Envelope design – Coordination detailing questions & desk critique		Presenters will be selected randomly from those that have not presented in prior Classes
	WEEK 15 WALL SECTION DETAILING	MONDAY December 5	Assignment 7: Envelope design – Coordination detailing questions & desk critique		
		WEDNESDAY December 7	Assignment 7: Envelope design – Coordination detailing questions & desk critique		
		FRIDAY December 9	Assignment 7: Envelope design – Coordination detailing questions & desk critique	Assignment 7: Envelope design - Due Technical Writing Assignment: Part 3 - Due	
	WEEK 16 REVIEW	REVIEW WEEK			Appropriate elements of your work in Arch 535 are expected to be included in your final Arch 558 presentation

4. Environmental Stewardship
   Demonstration: Identify the conservation and reuse of natural and built resources utilized in your project as well as the strategies you have utilized to seek carbon-neutral design, bioclimatic design and energy efficiency.
5. Technical Documentation
   Demonstration: Create large scale wall sections, plans and elevation drawings that articulate the building systems (enclosure, structure, HVAC, and finishes) found in your design proposal. Create models (digital or physical) illustrating and identifying the assembly of materials and develop outline specifications.
6. Accessibility
   Demonstration: Site and building plans as well as vertical circulation systems addressing physical, sensory and cognitive disabilities.

7. Site Conditions
   Demonstration: Site plan with contours indicating new and preserved landscapes, vegetation, on-site water management and knowledge of soil types.
8. Life Safety
   Demonstration: Develop egress diagrams.
9. Environmental Systems
   Demonstration: Identify active and passive environmental systems that respond to needs of the site, building program and specific geographic region. Identify strategies in response to active and passive heating and cooling solar orientation/geometry, daylighting, natural ventilation, indoor air quality, lighting systems and acoustics. Demonstrate evaluations through appropriate assessment tools.
10. Structural Systems
    Demonstration: Evaluating and selecting appropriate structural systems, including foundations, to be documented through drawings or models illustrating primary, secondary and tertiary systems.
11. Building Envelope Systems and Assemblies
    Demonstration: Evaluating and selecting building envelope systems appropriate to specific programmatic requirements, climatic conditions, energy use, fundamental performance, and aesthetic/socio/cultural conditions. Create large scale wall sections and other drawings/diagrams or models illustrating building systems, assemblies, materials, as well as performance characteristics.

Robert L. Mokwa

Interim Provost and Executive Vice President for Academic Affairs

EDUCATION

Ph.D. Civil Engineering (Geotechnical focus) M.S. Civil Engineering (Geotechnical focus) B.S. Civil Engineering (Structural focus)

MSU APPOINTMENTS

Virginia Tech Purdue University Virginia Tech 2016 – present 2015 – 2016 2014 – 2015 2013 – present 2006 – 2013 2001 – 2006

Interim Provost and Executive Vice President of Academic Affairs Department Head, Mathematical Sciences Presidential Leadership Fellow Professor of Engineering

HONORS, AWARDS AND RECOGNITIONS

MSU President's 2014 Excellence in Teaching Award, January 2014 Nominated for the *MSU Center for Faculty Excellence 2014 Teaching Innovation Award, October*

2013. MSU President's Excellence in Teaching Award – Finalist and Honorable Mention. Montana State University, January 2013.

Nominated for the National *Teaching Award from the American Society of Engineering Education*, nominated by the MSU College of Engineering.

Faculty Award for Excellence. Montana State University and the Bozeman Area Chamber of Commerce, February 2009.

Outstanding Teacher Award. Montana State University, College of Engineering, May 8, 2002. *Presidents Research Excellence Award.* Paul E. Torgerson's Presidential Research Award, Virginia Tech, 1999.

Top Ten Paper Award. ASCE Journal of Geotechnical and Geoenvironmental Engineering, October 2002.

Charles E. Via Doctoral Fellowship. Virginia Tech. *Department of Energy Graduate Fellowship.* Purdue University.

Dr. Royce W. Smith Dean

Montana State University, College of Arts and Architecture,

Education

2000 – 2005, University of Queensland; Brisbane, QLD, Australia, Ph.D. by Dissertation and Exhibition, Contemporary Art History and Theory

1999, University of Queensland; Brisbane, QLD, Australia, M.A., Contemporary Art History and Theory

1997 – 1998; 2000, Purdue University; West Lafayette, IN, USA, M.A., English

1992 – 1994; 1995-1996 Wabash College; Crawfordsville, IN, USA, A.B. (Summa Cum Laude) with majors in English, Spanish, and Humanities/Fine Arts and a minor in Secondary Education

Professional Experience

2016- Dean, College of Arts & Architecture, Montana State University

2005 – 2016 Director (2013-2016) and Associate Professor, Modern & Contemporary Art History School of Art, Design & Creative Industries Wichita State University Wichita, KS, USA (tenured 2011)

Fulbright Scholar Creative Director, 2015 Bienal Internacional de Artes Visuales de Paraguay– Asunción, Paraguay

2013 Visiting Professor, Contemporary Art History and Criticism, Instituto Superior de Artes (ISA) Havana, Cuba (invitation extended from the Cuban

2008 Visiting Professor, Contemporary Art History and Theory, University of Auckland Auckland, New Zealand

2003 – 2005 Associate Lecturer, Art History and Theory, College of Fine Arts, University of New South Wales Sydney, NSW, Australia