MEMORANDUM

TO: Curriculum Committee

FROM: Jack Kirby

DATE: February 15, 2013

SUBJECT: Curriculum Proposal #12-13-40, REVISION #2
          Final Faculty Senate Approval 3/5/2013

    I recommend approval of the attached REVISION #2 of Curriculum Proposal #12-13-40 from the College of Science and Technology, Department of Technology. The proposal is now ready for Faculty Senate.

MEMORANDUM

TO: Curriculum Committee

FROM: Jack Kirby

DATE: February 6, 2013

SUBJECT: Curriculum Proposal #12-13-40, REVISION #1

I recommend approval of the attached REVISION #1 of Curriculum Proposal #12-13-40 from the College of Science and Technology, Department of Technology. This proposal incorporates the revisions requested by the Curriculum Committee.

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c: Dr. Christina Lavorata
      Dr. Anthony Gilberti
      Mr. Philip Freeman
      Mr. Kirk Morphew
      Ms. Evie Brantmayer
      Ms. Leslie Lovett

FAIRMONT STATE

UNIVERSITY

MEMORANDUM

TO: Curriculum Committee

FROM: Jack Kirby

DATE: January 17, 2013

SUBJECT: Curriculum Proposal #12-13-40

I recommend approval of the attached Curriculum Proposal #12-13-40 from the College of Science and Technology.

This proposal revises the B.S. Architecture four-year degree in support of a proposed professional degree that would be accredited by the National Architecture Accrediting Board. The proposal revises course content, credit hours, titles and pre-requisites.

c: Dr. Christina Lavorata
        Dr. Anthony Gilberti
        Mr. Philip Freeman
        Mr. Kirk Morphew
        Ms. Evie Brantmayer
        Ms. Leslie Lovett

CURRICULUM PROPOSAL (Submit one hard copy and an electronic copy to the Associate Provost by the second Tuesday of the month.)

Proposal Number:	*12-13-40*
School/Department/Program:	Science and Technology/Technology/Architecture
Preparer/Contact Person:	Philip Freeman, Kirk Morphew
Telephone Extension:	x4237, x4628
Date Originally Submitted:	01/17/2013
Revision (Indicate date and label it Revision #1, #2, etc.):	REVISION #2 02/15/2013
Implementation Date Requested:	Fall 2013

I. **PROPOSAL.** Write a brief abstract, not exceeding 100 words, which describes the overall content of the proposal.

The B.S. Architecture degree is the existing pre-professional component laying the foundation for study in a professional graduate program. This four-year degree has been revised in support of a proposed professional degree at Fairmont State that would be accredited by the National Architecture Accrediting Board. In this proposal course content is revised, credit hours, titles and pre-requisites are changed. New courses are added and some courses are removed from the curriculum to reflect program foci; and program electives are redefined. The curriculum has been revised to better align with the National Architectural Accrediting Board (NAAB) student performance criteria.

II. **DESCRIPTION OF THE PROPOSAL.** Provide a response for each letter, A-H, and for each Roman Numeral II– V. If any section does not apply to your proposal, reply N/A.

   A. Deletion of course(s) or credit(s) from program(s)

      1. B.S. Architecture deletions:

      *ARCH 2200 Graphics (3 Credits)
      *ARCH 2225 Architectural CADD (3 Credits)
      *ARCH 3320 Site Planning (3 Credits)
      *ARCH 4420 Urban Design and Preservation (3 Credits)
      *ART 1111 Art Fundamentals (3 Credits)
      CIVL 2210 Light Construction (4 Credits)
      CIVL 2220 Construction Materials and Methods (4 Credits)
      COMP 1101 Applied Technical Programming (3 Credits)
      COMM 2200 Communication (3 Credits)
      MATH 1101 Applied Technical Math I (3 Credits)
      MATH 1102 Applied Technical Math II (3 Credits)
      PHYS 1102 Introduction to Physics II (4 Credits)

                                        Total hours deleted. _____39_____

      *To Be Removed From Catalog

B. Addition of course(s) or credit(s) to program(s)

    1. B.S. Architecture additions:

ARCH 1000 Design Fundamentals I (4 Credits)
ARCH 1050 Design Fundamentals II (4 Credits)
ARCH 2060 Building Technology I (4 Credits)
ARCH 3000 Design III: Site [6 Credits (2 Additional Credits)]
ARCH 3050 Design IV: Urban [6 Credits (2 Additional Credits)]
ARCH 4000 Design V: Technology [6 Credits (2 Additional Credits)]
ARCH 4050 Design VI: Build [6 Credits (2 Additional Credits)]
MATH 1112 College Algebra (3 Credits)
MATH 1115 Trigonometry and Elementary Functions (3 Credits)
PHED 1100 Fitness and Wellness (2 Credits)
General Studies Electives (1 Credit)
Program Electives (7 Credits)

                                      Total hours added. _____36_____

C. Provision for interchangeable use of course(s) with program(s)

ARCH 2000 Design I	**Substitutes for**	ARCH 2210 Design I
ARCH 2010 Architectural History I	**Substitutes for**	ARCH 1130 Architectural History I
ARCH 2020 Architectural History II	**Substitutes for**	ARCH 1160 Architectural History II
ARCH 2050 Design II	**Substitutes for**	ARCH 2250 Design II
ARCH 2060 Building Technology I	**Substitutes for**	CIVL 2210 Light Construction
ARCH 3000 Design III: Site	**Substitutes for**	ARCH 3300 Design III + ARCH 3320 Site Planning
ARCH 3050 Design IV: Urban	**Substitutes for**	ARCH 3350 Design IV + ARCH 4420 Urban Design
ARCH 4060 Building Technology II	**Substitutes for**	ARCH 3310 Construction Details and Materials

D. Revision of course content. Include, as an appendix, a revised course description, written in complete sentences, suitable for use in the university catalog.

Revised catalog course descriptions for all the required courses shown in Section E are included in Appendix B.

ARCH 3320 Site Planning and ARCH 3300 Design II have been combined into ARCH 3000 Design III: Site; and ARCH 4420 Urban Design and ARCH 3350 Design IV have been combined into ARCH 3050 Design IV: Urban. This has been proposed to better align with the NAAB expectations for addressing contextual issues as a more integrated part of the design process. As both ARCH 3320 and ARCH 4420 address focus issues critical to and supporting intermediate design decisions, integrating them into the studio courses provides a more holistic approach to the design process.

E. Other changes to existing courses such as changes to title, course number, and elective or required status.

Course number		Course title		Prerequisites		Credits	
Old	New	Old	New	Old	New	Old	New
ARCH 1130	ARCH 2010	Architectural History I	No change	None	No change	3	No change
ARCH 1160	ARCH 2020	Architectural History II	No change	ARCH 1130	ARCH 2010	3	No change
ARCH 2200	ARCH 1000	Graphics	Design Fundamentals I	None	No change	3	4
ARCH	ARCH	Architectural CADD	Design	None	ARCH 1000,	3	4

2225	1050			Fundamentals II			
ARCH 2210	ARCH 2000	Design I	Design I: Foundation	ARCH 1160, 2225, ART 1111	ARCH 1050	4	No change
ARCH 2250	ARCH 2050	Design II	Design II: Foundation	ARCH 2210	ARCH 2000	4	No change
ARCH 3300	ARCH 3000	Design III	Design III: Site	ARCH 2250, Co-Req ARCH 3320	ARCH 2050 ARCH 2020	4	6
ARCH 3310	ARCH 4060	Construction Details and Materials	Building Technology II	CIVL 2220, Co-Req ARCH 4450	ARCH 2060; CR: ARCH 4000	4	No change
ARCH 3350	ARCH 3050	Design IV	Design IV: Urban	ARCH 3300, Co-Req ARCH 4420	ARCH 3000	4	6
ARCH 4430	ARCH 4030	Mechanical and Electrical Systems	No change	ARCH 2250	CR: ARCH 4050	3	4
ARCH 4450	ARCH 4000	Design V	Design V: Technology	ARCH 3350, Co-Req ARCH 3310	ARCH 3050	4	6
ARCH 4460	ARCH 4050	Design VI	Design VI: Design/Build	ARCH 4450, ENGL 1108	ARCH 4000	4	6

F. Creation of new course(s). For each new course

1. Designate the course number, title, units of credit, prerequisites (if any), ownership (FSU, PC&TC, or shared) and specify its status as an elective or required course. If you are creating a shared course, attach a memo from the Deans of the affected Schools explaining the rationale for the course being shared.

Number	Course Title	Credits	Prerequisites	Ownership	Status
ARCH 2060	Building Technology I	4	Co-Req ARCH 2000	FSU	Required
ARCH 3060	Architecture Portfolio	3	ARCH 3300	FSU	Elective
ARCH 3399	Special Topics in Architecture	1-6	None	FSU	Elective

2. Include, as an appendix, a course description, written in complete sentences, suitable for use in the college catalog.

Appendix B contains the catalog course descriptions for the proposed new course.

3. Include, as an appendix, a detailed course outline consisting of at least two levels.

Appendix C contains the two-level course outlines for the proposed new course.

4. In order to meet the requirements as outlined in Goal One of the Strategic Plan, please include Outcome Competencies and Methods of Assessment as an appendix. Examples are available upon request from the Chair of the Curriculum Committee.

Appendix C also contains the Outcome Competencies and Methods of Assessment for the proposed new courses.

G. Attach an itemized summary of the present program(s) affected, if any, and of the proposed change(s).

1. Describe how this proposal affects the hours needed to complete this program. Specifically, what is the net gain or loss in hours? Use the format for Current and Proposed Programs in Appendix A.

Total hours for completion of this program degree are decreased by 3 credit to 126 credits

    2. Include proof that this proposal satisfies your program requirements and general studies requirements in 120 hours or less.

N/A

The Master of Architecture degree being proposed for Fairmont State consists of 42 semester hours of graduate architecture courses, meeting the NAAB requirements for graduate courses in the major and electives. The NAAB requires a minimum of 168 total semester credit hours for awarding a Master of Architecture degree. To meet these requirements for a preparatory curriculum, the Bachelor of Science in Architecture must be at least 126 credit hours. This proposal exceeding 120 Cr. Hrs. is supported by Dean, Anthony Gilberti – School of Science and Technology; and Provost, Christina Lavorata.

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III. **RATIONALE FOR THE PROPOSAL.**
    A. **Quantitative Assessment**: Indicate the types of assessment data, i.e., surveys, interviews, capstone courses, projects, licensure exams, nationally-normed tests, locally developed measurements, accreditation reports, etc., that were collected and analyzed to determine that curricular changes were warranted. Quantitative data is preferred.

The Bachelor of Science in Architecture is considered to be a preparatory/pre-professional degree by the National Architectural Accrediting Board (NAAB) leading to an accredited first-professional degree, such as the Master of Architecture. West Virginia Title 2, Legislative Rule, Series 1 Registration of Architect, Section 2-1-5 Registration Standards, Subsection 5.1.1.b. States that a candidate for registration must: Hold a professional degree in architecture from a degree program that has been accredited by the NAAB, (or an equivalent foreign organization). As a preparatory/pre-professional degree, the curriculum needs to align with preparatory Student Performance Criteria (SPC) established by the NAAB. Our current curriculum does not align with these requirements. The proposed degree is designed to comply with the SPC requirements listed in the NAAB 2009 Conditions for Accreditation document Part II: Section 1.1, pages 21-25 (www.naab.org), thus meeting the pre-requisite requirements for students continuing their education in a NAAB accredited graduate degree program. The proposed curriculum is an integral part of the Master of Architecture program currently under study for Fairmont State. Additionally, as some of the graduates from the 4-year program do not continue with graduate education, the program must provide a curriculum that meets the education recommendations of the National Council of Architectural Registration Boards (NCARB) as listed in the 2012 NCARB Education Guidelines (www.ncarb.org), preparing students for employment in the architecture profession.

    B. **Qualitative Assessment**: Based upon the assessment data above, indicate why a curricular change is justified. Indicate the expected results of the change. Be sure to include an estimate of the increased cost, or reduction in cost of implementation. FOR EXAMPLE: Will new faculty, facilities, equipment, or library materials be required?

This curriculum revision is necessary to better align the four-year degree program in architecture with current expectations of the NAAB, trends of the profession, and with similar programs at peer institutions. As a pre-professional degree program, graduates must continue their education in a professional degree program to be eligible for licensure as an architect. This curriculum meets the preparatory requirements of the NAAB, thus being the integral first step toward completing a professional education. This curriculum provides the initial preparatory education for students entering the proposed Master of Architecture program at Fairmont State.

IV. Should this proposal affect any course or program in another school, a memo must be sent to the Dean of each school impacted and a copy of the memo(s) must be included with this proposal. In addition, the Deans of the affected schools must sign below to indicate their notification of this proposal.

By signing here, you are indicating your college's/school's notification of this proposal.

College/School	Dean	Signature

| School of Fine Arts | Peter Lach | *[signature]* |

See Attached Memorandum

V. Should this proposal affect any course to be added or deleted from the general studies requirements, a memo from the chair of the General Studies Committee indicating approval of the change must be included with this proposal.

We anticipate that this curriculum revision will not affect any course to be added or deleted from the general studies requirements.

VI. ADDITIONAL COMMENTS.

No Additional Comments

APPENDIX A

B.S. Degree in Architecture
Current Program

Required Major Courses		HRS
ARCH 1130	Architectural History I	3
ARCH 1160	Architectural History II	3
ARCH 2210	Design I	4
ARCH 2225	Architectural CADD	3
ARCH 2250	Design II	4
ARCH 3300	Design III	4
ARCH 3310	Construction Details and Materials	4
ARCH 3320	Site Planning	3
ARCH 3350	Design IV	4
ARCH 4420	Urban Design and Preservation	3
ARCH 4430	Mechanical and Electrical Systems	3
ARCH 4450	Design V	4
ARCH 4460	Design VI	4
ART 1111	Art Fundamentals	3
CIVL 2210	Light Construction	4
CIVL 2220	Construction Materials and Methods	4
CIVL 2290	Introduction to Structures	3
COMP 1101	Applied Technical Programming	3
MATH 1102	Applied Technical Mathematics II	3
MECH 1100	Statics	3
MECH 2200	Strength of Materials	4

	HRS
TOTAL Required Major Courses	73
Major Electives	12
Minor Electives	0

	HRS
TOTAL HOURS FOR MAJOR	85

Required General Studies Courses				
First Year Experience				15
ENGL	1104	Written English I	3	
ENGL	1108	Written English II	3	
INFO	1100	Computer Concepts and Applications	3	
MATH			3	
COMM	2200,2201 OR 2202	Communication	3	
Scientific Discovery				8
Cultural / Civilization Exploration				9

7

Society / Human Interactions			6
Artistic / Creative Expression			6

TOTAL GENERAL STUDIES HOURS	**44**

TOTAL HOURS	**129**

B.S. Degree in Architecture
Proposed Program

Required Major Courses		Hours	
			II Proficiency in the Major
ARCH 1000	Design Fundamentals I	4	
ARCH 1050	Design Fundamentals II	4	
ARCH 2000	Design I: Foundation	4	
ARCH 2010	Architectural History I	3	
ARCH 2020	Architectural History II	3	
ARCH 2050	Design II: Foundation	4	
ARCH 2060	Building Technology I	4	
ARCH 3000	*Design III: Site*	*6*	
ARCH 3050	Design IV: Urban	6	
ARCH 4000	*Design V: Technology*	*6*	
ARCH 4030	Mechanical and Electrical Systems	4	
ARCH 4050	Design VI: Design/Build	6	
ARCH 4060	Building Technology II	4	
CIVL 2290	Introduction to Structures	3	
MATH 1115	Trigonometry	*3*	
MECH 1100	*Statics*	*3*	
MECH 2200	Strength of Materials	4	
	Total Hours for Major	**71**	

	Total Program Electives	**19**	
	Total Hours	***126**	
MATH 1112	College Algebra	3	**IB Quantitative Literacy**
ENGL 1104	Written English I	3	**IC Written Communication**
ENGL 1108	Written English II	3	**IE Information Literacy**
	Citizenship Elective	3	**III Citizenship**
	Ethics Elective	3	**IV Ethics**
PHED 1100	Fitness and Wellness	2	**V Health and Well-being**
	Health Interdisciplinary and Lifelong Learning Elective	3	**VI Interdisciplinary and Lifelong Learning**
ART 1120	Art Appreciation	3	**VIIA Fine Arts**
	Humanities Elective	3	**VIIB Humanities**
	Social Science Elective	3	**VIIC Social Science**
PHYS 1101	Physics I	4	**VIID Natural Sciences**
	Cultural Awareness and Human Dignity Elective	3	**VIII Cultural Awareness and Human Dignity**
	Total Hours Courses Outside the Major	**36**	

Notes:

*The Master of Architecture degree being proposed for Fairmont State consists of 42 semester hours of graduate architecture courses, meeting the NAAB requirements for graduate courses in the major and electives. The NAAB requires a minimum of 168 total semester credit hours for awarding a Master of Architecture degree. To meet these requirements for a preparatory curriculum, the Bachelor of Science in Architecture must be at least 126 credit hours. This proposal exceeding 120 Credit Hours is supported by Dean, Anthony Gilberti – School of Science and Technology; and Provost, Christina Lavorata. The university will seek a waiver from the West Virginia Higher Education Policy Commission.

G.S. Attributes		G.S. Outside Major
IA Critical Analysis		
MECH 1100	*Statics*	X
IB Quantitative Literacy		
MATH 1112	*College Algebra*	3
IC Written Communication		
ENGL 1104	*Written English I*	3
ID Teamwork		
ARCH 3000	*Design III: Site*	X
IE Information Literacy		
ENGL 1108	*Written English II*	3
IF Technology Literacy		
	*Technology Literacy Elective	X
IG Oral Communication		
ARCH 4000	*Design V: Technology*	X
II Proficiency in the Major		
	See Required Major Course	
III Citizenship		
	Citizenship Elective	3
IV Ethics		
	Ethics Elective	3
V Health and Well-being		
PHED 1100	*Fitness and Wellness*	2
VI Interdisciplinary and Lifelong Learning		
	Interdisciplinary and Lifelong Learning Elective	3
VIIA Fine Arts		
ART 1120	*Art Appreciation*	3
VIIB Humanities		
	Humanities Elective	3

G.S Attributes		G.S. Outside Major
VIIC Social Science		
	Social Science Elective	3
VIID Natural Sciences		
PHYS 1101	*Physics I: Intro to Physics*	4
VIII Cultural Awareness and Human Dignity		
	Cultural Awareness and Human Dignity Elective	3

	Total	**36**

Written English Required For General Studies	**Hours**
	6
Required in Program:	
ENGL 1104 Written English I	3
ENGL 1108 Written English II	3
G.S. Attribute VIIA Fine Arts Required	3
Required in Program:	
ART1120 Art Appreciation	3

Notes:
* *ARCH 2060 – Building Technology I* is a newly created course. The architecture program is concurrently seeking inclusion of this course as an IF. Technology Literacy Elective in the General Studies course list.

Old Catalog Course Description	New Catalog Course Description
ARCH 1130 Architectural History I, 3 hrs. This course covers architectural history from prehistoric times to the Gothic period. The emphasis will be on the historical, social and technological factors behind the structures discussed.	**ARCH 2010 Architectural History I, 3 hrs.** This course covers architectural history from prehistoric times to the Gothic period. The emphasis will be on the historical, social and technological factors behind the structures discussed. Offered: Fall Semester
ARCH 1160 Architectural History II, 3 hrs. This course is a continuation of architectural history covering the Renaissance period to the present. The emphasis will be on the historical, social and technological factors behind the structures discussed. PR: ARCH 1130	**ARCH 2020 Architectural History II, 3 hrs.** This course is a continuation of architectural history covering the Renaissance period to the present. The emphasis will be on the historical, social and technological factors behind the structures discussed. PR: ARCH 2010
ARCH 2200 Graphics, 3 hrs. This course is an introduction to architectural presentation drawings. The course emphasizes rendering techniques and perspective drawing.	**ARCH 1000 Design Fundamentals I, 3 hrs.** This course addresses the basic graphic communications skills necessary to express architectural form using traditional hand methods. Topics include freehand, multi-view, paraline, perspective and shade/shadow drawing. Offered: Fall Semester
ARCH 2225 Architectural CADD 3 hrs. Introduction to computer-aided drafting and design. Will include an introduction to the basic drawing processes of the computer and subsequent application to design solutions in architecture. Introduction to computer-aided drafting and design. Will include an introduction to the basic drawing processes of the computer and subsequent application to design solutions in architecture.	**ARCH 1050 Design Fundamentals II, 3 hrs.** This course is an introduction to digital media used in architectural graphics. Principles of digital image manipulation and Building Information Modeling (BIM) will be introduced. PR: ARCH 1000 Offered: Spring Semester
ARCH 2210 Design I 4 hrs. Introduction to developing design methodology and its integration into the process of design. Topics include form studies and theory, and incorporation of these into the design of architectural elements. Introduction of sketching, graphic and modeling skills to communicate design concepts. Emphasis on developing the student's presentation skills. PR: ARCH 1160, 2225, ART 1111	**ARCH 2000 Design I: Foundation, 4 hrs** Introduction to basic principles of architectural design. Areas to be explored include: design theory, methods and processes; presentation drawing techniques; fundamentals of model making; and the application of the above to actual design projects. PR: ARCH 1050 CR: ARCH 2060 Offered: Fall Semester
ARCH 2250 Design II 4 hrs. A continuing study of design methodology as applicable to the design of simple structures. Emphasis on tectonics, as well as the nature of materials and the site. Further development of sketching, graphic and modeling skills as students learn to understand, interpret, and represent spaces and receive further training in presentation skills. Students will develop a first-year design portfolio. PR: ARCH 2210.	**ARCH 2050 Design II: Foundation, 4 hrs.** A continuing study of design methodology as applicable to the design of simple structures. Emphasis on tectonics, as well as the nature of materials and the site. Further development of sketching, graphic and modeling skills as students learn to understand, interpret, and represent spaces and receive further training in presentation skills. Students will develop a first-year design portfolio. PR: ARCH 2000 Offered: Spring Semester
ARCH 3300 Design III 4 hrs. This class encompasses the investigation, synthesis and communication of characteristics of the built environment. Material covered includes programming of a building with respect to function, user, and site, and exploration of energy conservation and solar application. Students will develop a more advanced level of design, graphic skills, and 3-dimensional modeling. PR: ARCH 2250, CR: ARCH 3320.	**ARCH 3000 Design III: Site, 6 credits** This course is a continuation of the design sequence, emphasizing synthesizing pragmatic issues of the site, context, and building envelope with basic design theory. PR: ARCH 2050, ARCH 2020 Offered: Fall Semester

ARCH 3310 Construction Details & Materials 4 hrs. This course is a comprehensive exploration of materials, structural systems and details in the context of commercial building design. Students will produce a set of working drawings for an architectural office setting. Baccalaureate majors only. PR: CIVL 2220, CR: ARCH 4450.	**ARCH 4060 Building Technology II** 4 hrs. This course investigates the building envelope and select building systems explored through the creation of a set of design drawings for a commercial building. PR: ARCH 2060; CR: ARCH 4000 Offered: Fall Semester
ARCH 3350 Design IV 4 hrs. This course explores architectural design in the context of the urban setting. Topics include urban design, historic preservation and the social impact of the built environment. Cultural and behavioral patterns will be explored. Students will develop further their modeling skills, graphic communication, and oral communication. A second year portfolio will be developed. PR: ARCH 3300; CR: ARCH 4420.	**ARCH 3050 Design IV: Urban,** 6 hrs. This course explores architectural design within the urban setting. Topics include urban design, historic preservation and the social impact of the built environment. PR: ARCH 3000 Offered: Spring Semester
ARCH 4430 Mechanical & Electrical Systems 3 hrs. Introduction to the design of mechanical and electrical systems. PR: ARCH 2250.	**ARCH 4030 Mechanical & Electrical Systems,** 4 hrs. This course is an introduction to the variety of principles and systems at work in a building. Topics emphasized: environmental resources, environmental control, and life safety. CR: ARCH 4050 Offered: Spring Semester
ARCH 4450 Design V 4 hrs. This course encompasses architectural design as an integration of design concept and building technology. Concepts synthesized in the design process include structural systems, mechanical systems and building materials, as well as more sophisticated building design. Advanced graphic communications will be combined with computer applications. Baccalaureate majors only. PR: ARCH 3350, CR: ARCH 3310.	**ARCH 4000 Design V: Technology,** 6 hrs. This course encompasses integrated design, synthesizing building systems, sustainable principles and a more complete approach to planning and design of commercial buildings. PR: ARCH 3050 Offered: Fall Semester
ARCH 4460 Design VI, 4 hrs. *Writing Intensive* Students in this class will execute comprehensive architectural designs of their own choice with the approval of the instructor. Concentration in the project may be in building technology, urban design, historical design, theory, environmental design or another approved topic. The student will develop the design concept, conduct research, develop the form and express the design of the structure at a sophisticated level of graphic and 3-dimensional skills. A third-year portfolio will be completed. PR: ARCH 4450.	**ARCH 4050 Design VI: Build,** 6 hrs. Writing Intensive This course examines the relationship between the design process and the act of building. Concept and reality are studied, resulting in a built architectural object. PR: 4000 Offered: Spring Semester
Old Catalog Course Description	New Catalog Course Description
	ARCH 2060 Building Technology I, 4 hrs. Students will study practices utilized in the erection of residential buildings including architectural materials, methods and use, and structural, mechanical, and electrical systems. CR: ARCH 1000 Offered: Fall Semester

	ARCH 3060 Architecture Portfolio, 3 hrs. This course explores the methodology of creating professional and academic portfolios for Architecture students. Offered: Fall Semester
	ARCH 3399 Special Topics In Architecture, 1-6hrs This course provides students with further opportunities to study principles and concepts in selected areas of specialization, to be determined by the instructor and to be approved by the department chair. Credits earned will be applicable as free electives in degree and certificate programs.

Outcome Competencies and Methods of Assessment

Number & Title of Course:
ARCH 2060 Building Technology I, 4 credits

Course Description:
Students will study practices utilized in the erection of residential buildings including architectural materials, methods and use, and structural, mechanical, and electrical systems
Course Goals:
This course will develop a fundamental understanding of the various components of a building project's systems and will familiarize the student with the creation of construction documents.

Course Outcomes:
After completing this course, the student will be able to:
- Describe the basic practices utilized in the erection of residential and small industrial buildings.
- Describe the process by which buildings are built, including, but not limited to the following: the design professional's role, the role of the building contractors and trades, the legal constraints, economic constraints, and the process through which a building is brought from an abstract idea to a concrete reality. In addition, the student should be able to explain how these people relate to one another.
- Describe the process in which materials are combined to form a building system (or component) and the relationship of these systems that form the overall structure. Specifically, an understanding of basic site work, footings and foundation systems, framing systems, interior and exterior wall systems, roofs, doors and windows, and interior and exterior finishes.
- Describe the properties of the following materials and how they are typically used in construction: concrete, wood, steel, light gauge metal, brick, glass, stone and masonry.
- Describe and implement the basic construction documents used for residential construction.
- Use the equipment involved in producing construction documents.
- Use the standard "language" (e.g., lines, symbols, abbreviations, etc.) for representing architectural graphics.

NAAB Student Performance Criterion/a addressed:

B2 Accessibility	B3 Sustainability	B4 Site Design
B5 Life Safety	B7 Financial Considerations	B8 Environmental Systems
B9 Structural Systems	B10 Building Envelope Systems	
B11 Building Service Systems	B12 Building Materials and Assemblies	
C7 Legal Responsibilities		

Topical Outline (include percentage of time in course spent in each subject area):
Architectural Materials and Methods (40%) Civil/Site Work (5%) Structural Systems (10%)
HVAC Systems (10%) Plumbing Systems (10%) Electrical Systems (10%)
Sustainability (5%) Construction Cost Controls (5%) Building and Zoning Codes (5%)

Assessment:
Quizzes, Tests, Graphic and Oral Presentations

Prerequisites:
Co-Requisite: ARCH 2000 Design I: Foundation

Textbooks/Learning Resources:
Edward Allen et. al. *Fundamentals of Residential Construction*

Offered (semester and year):
Fall, Annually

Faculty assigned
Kirk L Morphew, Associate Professor of Architecture

Detailed Outline for ARCH 2060 Building Technology I:

I.Context

    A. The Context for Construction

    B. The Construction Community: Builders, Contractors, and Developers

    C. The Design Community.

II. Materials

    A. The Material Wood.

    B. Masonry

    C. Concrete

III. Wood light Frame Construction

    A. Rough Site Work

    B. Foundations

    C. Floor and Wall Framing

    D. Roof Framing

    E. Finishing the Roof

    F. Windows and Exterior Doors

    G. Finishing the Exterior Walls

    H. Plumbing

    I. Heating and Cooling

    J. Electrical Wiring

    K. Thermal Insulation

    L. Fireplaces and Stoves

    M. Interior Surfaces

    N. Finishing the Interior.

    O. Finish Sitework

IV. Alternative Construction Systems

    A. Multifamily Construction

    B. Low-Tech Energy Construction

    C. Loadbearing Masonry and Concrete Construction

D. Timber Frame Construction.

E. Light-Gauge Steel Construction

F. Panelized Construction

Number & Title of Course:
ARCH 3000 Design III: Site, 6 credits

Course Description:
This course is a continuation of the design sequence, emphasizing synthesizing pragmatic issues of the site, context, and building envelope with basic design theory.

Course Goals:

- Emphasize the application of fundamental design principles of building conceptualization, planning and design as considered through a small to intermediate structure.
- Begin exploration of the relationship of the site and relevant context issues through the investigation of architectural form-making.
- Develop a fundamental understanding of the nature of materials and the appropriate application to built form.
- Introduce the principles of planning as they relate to model building codes and the ADA.

Course Outcomes:

At the conclusion of this course students should be able to:
- Create 3-dimensional constructs that incorporate appropriate spatial relationships and design principles.
- Analyze the physical site and evaluate criteria for optimizing the relationship of the building to the site.
- Produce through graphic media and modeling, interior and exterior spaces; material expressions and the relationship of the building to the physical site.
- Describe precedential ordering and proportioning systems verbally and graphically.
- Demonstrate an intermediate level of graphic and modeling skills necessary to convey their eidetic vision via appropriate software and/or physical media

Student Performance Criterion/a addressed (list number and title):
A.1. Communication Skills   A.2. Design Thinking Skills
A.3. Visual Communication Skills   A.6. Fundamental Design Skills
A.7. Use of Precedents   A.8. Ordering Systems Skills
B.2. Accessibility   B.4. Site Design
B.5. Life Safety

Topical Outline (include percentage of time in course spent in each subject area):
Spatial Organization (20%) Ordering Principles (35%) Codes and Guidelines (5%)
Material Investigation (15%) Precedential Investigation (10%) Modeling, Graphic Representation (15%)

Assessment:
Quizzes, Reading Reflections, Graphic and Oral Presentations, Design Portfolio

Prerequisites:
ARCH 2050 Design II: Foundation

Textbooks/Learning Resources:
Classic Readings in Architecture; Stein, Sprecklemeyer; 508pp. , McGraw Hill, Fairmont State University; 1999
Building Construction Illustrated; Ching, John Wiley and Sons, 2008
2-D/3/D computer software, Sketch Book, Modeling Supplies

Offered (semester and year):
Fall, Annually

Faculty assigned
Philip M Freeman, Associate Professor of Architecture

Detailed Outline for: ARCH 3000 Design III: Site

I. The Context of Building

    A. Climate as Context

    B. Analyzing the Physical Environment

    C. The Waste of Place

    D. The American Public Space

    D. The Building and Context

II. The Design Process

    A. Context of the Aesthetic Process

    B. Site Planning

    C. Form, Space, and Order

    D. Program and Use

III. Design Implementation

    A. Combining Site, Program and Form

    B. Model Code

C. Accessibility

D. Sustainability

E. Process and Design Representation

Number & Title of Course:
ARCH 3050 Design IV: Urban, 6 credits

Course Description:
This course explores architectural design within the urban setting. Topics Include urban design, historic preservation and the social impact of the built environment.

Course Goals:
- The primary goal of this course is to engage students with built environment of the "urban community" in the Fairmont area.
- Develop an understanding of the design considerations necessary to respond to the context of the urban fabric.
- Understand the integration of new construction within the context of a historic environment with respect to zoning ordinances.

Course Outcomes:
At the conclusion of this course students should be able to:

- Organize and develop the programmed spaces of an intermediate commercial structure
- Describe the urban fabric, historic context, and social and cultural impact of the built environment.
- Demonstrate refined presentation skills via graphic, written and oral communication.

Student Performance Criterion/a addressed (list number and title):

A.1. Communication Skills	A.2. Design Thinking Skills
A.3. Visual Communication Skills	A.5. Investigative Skills
A.7. Use of Precedents	A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture	A.10 Cultural Diversity
B.2. Accessibility	B.4. Site Design
B.5. Life Safety	C.2. Human Behavior
C.9. Community and Social Responsibility	

Topical Outline (include percentage of time in course spent in each subject area):
Historic and Cultural Research (30%) Codes and Guidelines (10%)
Urban Design (50%) Modeling, Graphic Representation (10%)

Assessment:
Quizzes, Reading Reflections, Graphic and Oral Presentations, Design Portfolio

Prerequisites:
ARCH 3000 Design III: Site

Textbooks/Learning Resources:
Various texts: topics include urban design principles, historic preservation and cultural influences
2-D/3/D computer software, Sketch Book, Modeling Supplies

Offered (semester and year):
Spring, Annually

Faculty assigned
Kirk L. Morphew, Associate Professor of Architecture

Detailed Outline for ARCH 3050 Design IV: Urban:

I. **Position and Theory**

    A.   Phenomenal Position

    B.   Humanist Position

    C.   Tectonic Position

    D.   Contextual Position

    E.   Building Type Theory

II. **Process: Schematic/Design Development**

    A.   Site planning/parking/landscaping

    B.   Codes/ADA

    C.   Energy/Environmental challenges

    D.   Structure/Materials

    E.   Mechanical/Electrical/ Acoustic/Lighting

    F.   Interiors issues/Way-finding

    G.   Preservation/modernization

    H.   Operation and maintenance

    I.   Finances, fees, feasibility

III. **Implementation**

    A.   Combining Function, Position and Concept

    B.   Process and Design Representation

Number & Title of Course:
ARCH 3060 Architecture Portfolio, 3 credits

Course Description:
This course explores the methodology of creating professional and academic portfolios for Architecture students.

Course Goals:
To acquire the skills and understanding necessary to present design work through a series of different academic and professional portfolios.

Course Outcomes:
At the conclusion of this course students should be able to:
- Create and produce a portfolio layout that supports what the student wishes the portfolio to say or demonstrate.
- Explain the difference between a professional and academic portfolio.
- Explain what kinds of material should be included in a particular kind of portfolio.
- Produce a professional and/or academic portfolio.

NAAB Student Performance Criteria addressed:
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills

Topical Outline:
Academic Portfolio (80%)
Professional Portfolio (20%)

Assessment:
Individual Project Representation Presentation, Design Portfolio

Prerequisites:
ARCH 3000 Design III: Site

Textbooks/Learning Resources:
Eisenman, Sara, *Building Design Portfolios: Innovative Concepts for Presenting Your Work*
Linton, Harold, *Portfolio Design 3rd ed*

Offered:
Spring, Annually

Faculty assigned:
Kirk L Morphew, Associate Professor of Architecture

Detailed Outline for: ARCH 3060 Architecture Portfolio

I. Portfolio Format Selection
    A. Types
    B. Portfolio materials
    C. Electronic portfolio formats
    D. Portfolio sizes
    E. Printing/Binding/Packaging

II. Content selection
    A. Academic Portfolio
    B. Professional Portfolio
    C. Graphical systems
    D. Sketches
    E. Presentation

II. Photography
    A. Camera techniques
    B. Film media
    C. Lighting

IV. Resume/Vita/Letters
    A. Career objectives
    B. Education
    C. Work experience
    D. Honors and activities
    E. Special skills
    F. Letter of Intent
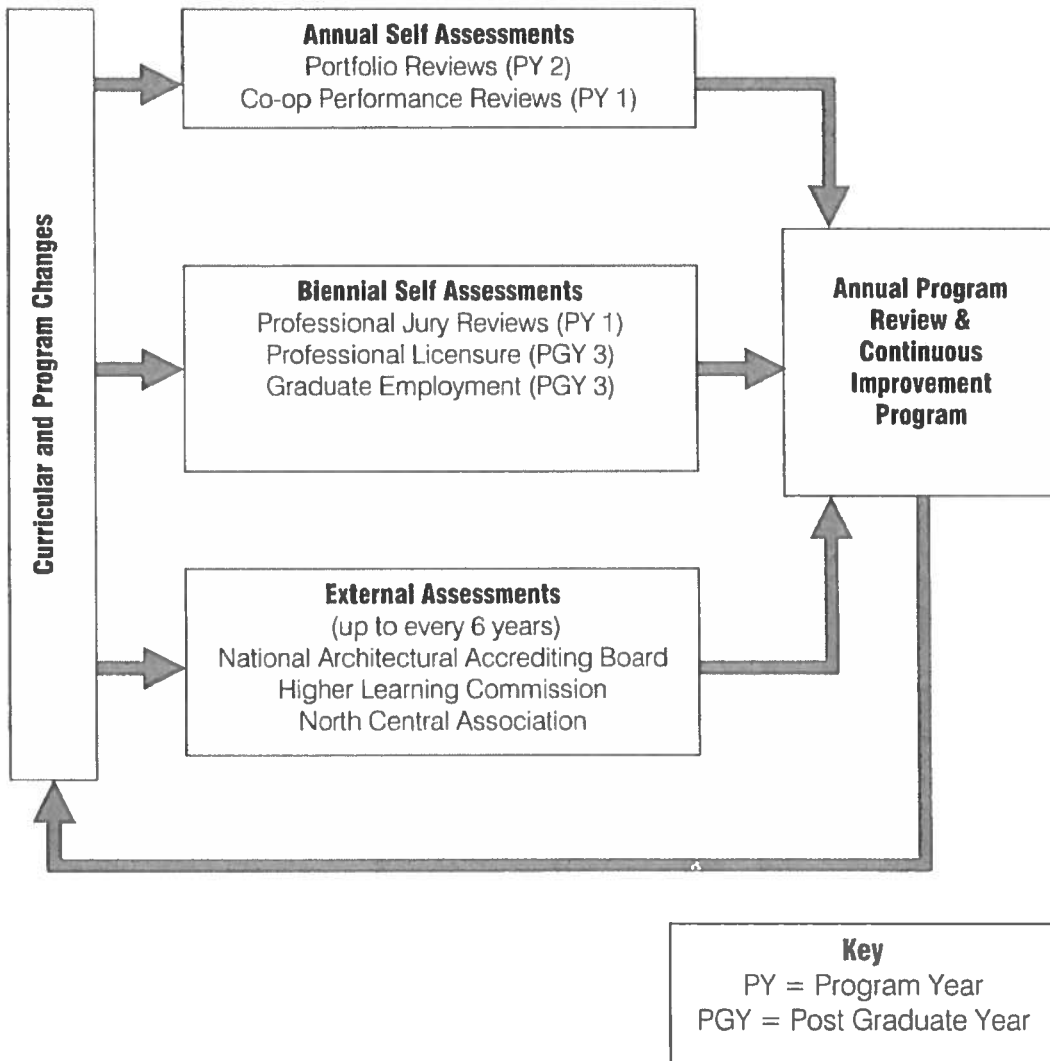   G. Letters of Reference
    H. References

Appendix C

Outcome	Learning Outcomes	Assessment Tool	Benchmark	Collection Timeline & Responsibility

Competencies and Methods of Assessment

The following flowchart and table represent the assessment plan and schedule for proposed courses.

1. apply critical thinking skills to creatively solve a variety of design problems with respect to culture, context, systems, materials, sustainable principles, and contribute to the development of new knowledge. *NAAB Realm A,B & C, Perspective A	PY 1: Co-op performance review by employers PY1: Professional Jury Review PY 2: Portfolio review	≥ 90% satisfactory ≥ 90% competency in 80% of topic areas ≥ 90% competency in 80% of topic areas	annually by faculty alternate years by faculty annually by faculty
2. demonstrate how architectural history, theory, and practice may inform design decisions in a diverse, global society. *NAAB Realm A, Perspective B	PY 1: Co-op performance review by employers	≥ 90% satisfactory	annually by faculty
3. transition to Internship and licensure and gain employment in professional design offices and design and construction-related fields. *NAAB Realm C, Perspective C	PGY 3: Graduate employment PGY 3: Architecture Registration Examination	≥ 80% Graduates employed in architecture related field ≥ 80% licensed	every 5 years by staff
4. assume the role of an architect as a collaborator, communicator, and leader while observing the diverse needs of clients, populations, and communities in a global society. *NAAB Realm C, Perspective D	PY 1: Co-op performance review by employers	≥ 90% satisfactory	annually by faculty
5. make Informed, ethical, and responsible contributions in a diverse and global society to serve the public good. *NAAB Realm B & C, Perspective E	PY 1: Co-op performance review by employers	≥ 90% satisfactory	annually by faculty

Assessment Events and Tools

Curricular and Program Changes

Annual Self Assessments
Portfolio Reviews (PY 2)
Co-op Performance Reviews (PY 1)

Biennial Self Assessments
Professional Jury Reviews (PY 1)
Professional Licensure (PGY 3)
Graduate Employment (PGY 3)

External Assessments
(up to every 6 years)
National Architectural Accrediting Board
Higher Learning Commission
North Central Association

Annual Program Review & Continuous Improvement Program

Key
PY = Program Year
PGY = Post Graduate Year

Realm A: Critical Thinking and Representation
Realm B: Integrated Building Practices, Technical Skills & Knowledge
Realm C: Leadership and Practice
NAAB Perspectives A-E: see I.1.3

PY = Program Year
PGY = Post Graduate Year

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MEMORANDUM

Date: December 11, 2012

Subject: ART 1111, Art Fundamentals

To: Peter Lach, Dean, School of Fine Arts

From: Philip M Freeman, Architecture Program Coordinator

Dear Peter:

As you are aware, the architecture program is working toward the development of a Master of Architecture degree. This program will be a first-professional degree program requiring prospective student to have completed a four-year pre-professional degree in architecture. The Bachelor of Science in Architecture will provide students at Fairmont State with the required pre-requisite degree.

As required by the National Architectural Accrediting Board (NAAB), pre-professional programs must align their curriculum with the NAAB's student performance criteria as specified in the 2009 National Architectural Accrediting Board Conditions for Accreditation. As a result the architecture program is proposing a revision of its curriculum that would include the removal of ART 1111 – Art Fundamentals. Additionally, because of alignment with the NAAB, and architecture programs at peer institutions, it is anticipated that students in the architecture program will depend significantly on courses in the School of Fine Arts for their electives.

Please feel free to contact me with any questions or concerns

Sincerely,

Philip M Freeman, Architecture Program Coordinator

From:	Kirby, Jack
Sent:	Friday, February 15, 2013 1:07 PM
To:	Cox, Kathleen
Subject:	FW: Biology 120 hour Curriculum proposal
Attachments:	Biology 120 hour curriculum proposal REV 1 12 Feb 13.docx
Follow Up Flag:	Follow up
Flag Status:	Flagged

Kathy,

Attached is revision #1 for proposal #12-13-43. This is another one that hasn't even been reviewed by the Curriculum Committee. Therefore, electronic and hard copy need to go to all Curriculum Committee members. Thanks.

jack

Jack R. Kirby, Ed.D.
Associate Provost for Academic Affairs
Director of Graduate Studies
223 Hardway Hall
Fairmont State University
1201 Locust Avenue
Fairmont, WV 26554
(304) 367-4101
Email: Jack.Kirby@fairmontstate.edu

FAIRMONT STATE
UNIVERSITY

From: Roof, Steven
Sent: Tuesday, February 12, 2013 5:34 PM
To: Kirby, Jack
Subject: Biology 120 hour Curriculum proposal

Jack,

Bud Sapp caught me after the Senate meeting today and pointed out a couple of typos in the Biology 120 hour curriculum proposal, but he said that they did not get to it today. When I looked at his mark up I realized that changes we made during the college comment period were not on his copy. Apparently not the most recent copy was sent to you.

I fixed the typos (course number typos) and added the attribute numbers where we use one course to meet two general studies attributes, and added revision 1 to the cover page. Perhaps this will ease transition through curriculum committee.

--Steve

Steven Roof, Ph.D.
Professor of Biology
Fairmont State University
Fairmont, WV 26554

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