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.

c:
Dr. Christina Lavorata
Dr. Anthony Gilberti
Mr. Philip Freeman
Mr. Kirk Morphew
Ms. Evie Brantmayer
Ms. Leslie Lovett
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
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 Fairmont. 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
   ARCH 3050 Design IV: Urban  Substitutes for ARCH 3350 Design IV + ARCH 4420
   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.

<table>
<thead>
<tr>
<th>Course number</th>
<th>Course title</th>
<th>Prerequisites</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old</td>
<td>New</td>
<td>Old</td>
<td>New</td>
</tr>
<tr>
<td>ARCH 1130</td>
<td>ARCH 2010</td>
<td>Architectural History I</td>
<td>No change</td>
</tr>
<tr>
<td>ARCH 1160</td>
<td>ARCH 2020</td>
<td>Architectural History II</td>
<td>No change</td>
</tr>
<tr>
<td>ARCH 2200</td>
<td>ARCH 1000</td>
<td>Graphics Design Fundamentals I</td>
<td>None</td>
</tr>
<tr>
<td>ARCH</td>
<td>ARCH</td>
<td>Architectural CADD Design</td>
<td>None</td>
</tr>
<tr>
<td>Number</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------</td>
<td>---------</td>
<td>------------------------</td>
</tr>
<tr>
<td>ARCH 2060</td>
<td>Building Technology I</td>
<td>4</td>
<td>Co-Req ARCH 2000</td>
</tr>
<tr>
<td>ARCH 3060</td>
<td>Architecture Portfolio</td>
<td>3</td>
<td>ARCH 3300</td>
</tr>
<tr>
<td>ARCH 3399</td>
<td>Special Topics in Architecture</td>
<td>1-6</td>
<td>None</td>
</tr>
</tbody>
</table>

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 Gilberi – School of Science and Technology; and Provost, Christina Lavorata.

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.

<table>
<thead>
<tr>
<th>College/School</th>
<th>Dean</th>
<th>Signature</th>
</tr>
</thead>
</table>

5
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:**

<table>
<thead>
<tr>
<th>Required Major Courses</th>
<th>HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 1130 Architectural History I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1160 Architectural History II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2210 Design I</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2225 Architectural CADD</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2250 Design II</td>
<td>4</td>
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<tr>
<td>ARCH 3300 Design III</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 3310 Construction Details and Materials</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 3320 Site Planning</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3350 Design IV</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 4420 Urban Design and Preservation</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4430 Mechanical and Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4450 Design V</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 4460 Design VI</td>
<td>4</td>
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<tr>
<td>ART 1111 Art Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIVL 2210 Light Construction</td>
<td>4</td>
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<tr>
<td>CIVL 2220 Construction Materials and Methods</td>
<td>4</td>
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<tr>
<td>CIVL 2290 Introduction to Structures</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1101 Applied Technical Programming</td>
<td>3</td>
</tr>
<tr>
<td>MAT-1 1102 Applied Technical Mathematics II</td>
<td>3</td>
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<tr>
<td>MECH 1100 Statics</td>
<td>3</td>
</tr>
<tr>
<td>MECH 2200 Strength of Materials</td>
<td>4</td>
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</table>

**TOTAL Required Major Courses**  
Major Electives  
Minor Electives  
**TOTAL HOURS FOR MAJOR**  
85

### Required General Studies Courses

<table>
<thead>
<tr>
<th>First Year Experience</th>
<th>15</th>
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<tr>
<td>ENGL 1104 Written English I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1108 Written English II</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1100 Computer Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>3</td>
</tr>
<tr>
<td>COMM 2200,2201 OR 2202 Communication</td>
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Scientific Discovery  
Cultural / Civilization Exploration
### Required Major Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARCH 1000</td>
<td>Design Fundamentals I</td>
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<tr>
<td>ARCH 1050</td>
<td>Design Fundamentals II</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2000</td>
<td>Design I: Foundation</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2010</td>
<td>Architectural History I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2020</td>
<td>Architectural History II</td>
<td>3</td>
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<tr>
<td>ARCH 2050</td>
<td>Design II: Foundation</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2060</td>
<td>Building Technology I</td>
<td>4</td>
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<td>ARCH 3000</td>
<td>Design III: Site</td>
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<tr>
<td>ARCH 3050</td>
<td>Design IV: Urban</td>
<td>6</td>
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<tr>
<td>ARCH 4000</td>
<td>Design V: Technology</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 4030</td>
<td>Mechanical and Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 4050</td>
<td>Design VI: Design/Build</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 4060</td>
<td>Building Technology II</td>
<td>4</td>
</tr>
<tr>
<td>CIVL 2290</td>
<td>Introduction to Structures</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1115</td>
<td>Trigonometry</td>
<td>3</td>
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<tr>
<td>MECH 1100</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>MECH 2200</td>
<td>Strength of Materials</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Hours for Major**: 71

---

**Society / Human Interactions**: 6

**Artistic / Creative Expression**: 6

**TOTAL GENERAL STUDIES HOURS**: 44

**TOTAL HOURS**: 129

B.S. Degree in Architecture  
Proposed Program
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Notes</th>
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<tbody>
<tr>
<td>MATH 1112</td>
<td>College Algebra</td>
<td>3</td>
<td>IB Quantitative Literacy</td>
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<tr>
<td>ENGL 1104</td>
<td>Written English I</td>
<td>3</td>
<td>IC Written Communication</td>
</tr>
<tr>
<td>ENGL 1108</td>
<td>Written English II</td>
<td>3</td>
<td>IE Information Literacy</td>
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<td></td>
<td>Citizenship Elective</td>
<td>3</td>
<td>III Citizenship</td>
</tr>
<tr>
<td></td>
<td>Ethics Elective</td>
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<td>IV Ethics</td>
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<tr>
<td>PHED 1100</td>
<td>Fitness and Wellness</td>
<td>2</td>
<td>V Health and Well-being</td>
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<td></td>
<td>Health Interdisciplinary and Lifelong</td>
<td>3</td>
<td>VI Interdisciplinary and</td>
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<td></td>
<td>Learning Elective</td>
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<td>Lifelong Learning</td>
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<tr>
<td>ART 1120</td>
<td>Art Appreciation</td>
<td>3</td>
<td>VIIA Fine Arts</td>
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<td>Humanities Elective</td>
<td>3</td>
<td>VIIB Humanities</td>
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<tr>
<td></td>
<td>Social Science Elective</td>
<td>3</td>
<td>VIIC Social Science</td>
</tr>
<tr>
<td>PHYS 1101</td>
<td>Physics I</td>
<td>4</td>
<td>VIIID Natural Sciences</td>
</tr>
<tr>
<td></td>
<td>Cultural Awareness and Human Dignity</td>
<td>3</td>
<td>VIII Cultural Awareness and</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>Human Dignity</td>
</tr>
</tbody>
</table>

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."
<table>
<thead>
<tr>
<th>G.S. Attributes</th>
<th>G.S. Outside Major</th>
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</thead>
<tbody>
<tr>
<td>IA Critical Analysis</td>
<td>Statics</td>
</tr>
<tr>
<td>MECH 1100</td>
<td></td>
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<tr>
<td>IB Quantitative Literacy</td>
<td>College Algebra</td>
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<td>MATH 1112</td>
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<tr>
<td>IC Written Communication</td>
<td>Written English I</td>
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<td>ENGL 1104</td>
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<td>ID Teamwork</td>
<td>Design III: Site</td>
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<tr>
<td>ARCH 3000</td>
<td></td>
</tr>
<tr>
<td>IE Information Literacy</td>
<td>Written English II</td>
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<tr>
<td>ENGL 1108</td>
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</tr>
<tr>
<td>IF Technology Literacy</td>
<td>*Technology Literacy Elective</td>
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<tr>
<td>IG Oral Communication</td>
<td>Design V: Technology</td>
</tr>
<tr>
<td>ARCH 4000</td>
<td></td>
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<tr>
<td>II Proficiency in the Major</td>
<td>See Required Major Course</td>
</tr>
<tr>
<td>III Citizenship</td>
<td>Citizenship Elective</td>
</tr>
<tr>
<td>IV Ethics</td>
<td>Ethics Elective</td>
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<tr>
<td>V Health and Well-being</td>
<td>Fitness and Wellness</td>
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<tr>
<td>PHED 1100</td>
<td></td>
</tr>
<tr>
<td>VI Interdisciplinary and Lifelong</td>
<td>Interdisciplinary and Lifelong Learning</td>
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<td>Learning</td>
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</tr>
<tr>
<td>VIIA Fine Arts</td>
<td>Art Appreciation</td>
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<td>ART 1120</td>
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<td>VIIIB Humanities</td>
<td>Humanities Elective</td>
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<td></td>
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<tr>
<td>G.S Attributes</td>
<td>G.S. Outside Major</td>
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<tr>
<td>-----------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>VIIC Social Science</td>
<td>Social Science Elective</td>
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<td>VIID Natural Sciences</td>
<td>Physics I: Intro to Physics</td>
</tr>
<tr>
<td>VIII Cultural Awareness and Human Dignity</td>
<td>Cultural Awareness and Human Dignity Elective</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

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.
**Appendix B**

<table>
<thead>
<tr>
<th>Old Catalog Course Description</th>
<th>New Catalog Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARCH 1130 Architectural History I, 3 hrs.</strong>&lt;br&gt;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.&lt;br&gt;PR: ARCH 1130</td>
<td><strong>ARCH 2010 Architectural History I, 3 hrs.</strong>&lt;br&gt;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.&lt;br&gt;Offered: Fall Semester</td>
</tr>
<tr>
<td><strong>ARCH 1160 Architectural History II, 3 hrs.</strong>&lt;br&gt;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.&lt;br&gt;PR: ARCH 1130</td>
<td><strong>ARCH 2020 Architectural History II, 3 hrs.</strong>&lt;br&gt;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.&lt;br&gt;PR: ARCH 2010</td>
</tr>
<tr>
<td><strong>ARCH 2200 Graphics, 3 hrs.</strong>&lt;br&gt;This course is an introduction to architectural presentation drawings. The course emphasizes rendering techniques and perspective drawing.</td>
<td><strong>ARCH 1000 Design Fundamentals I, 3 hrs.</strong>&lt;br&gt;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</td>
</tr>
<tr>
<td><strong>ARCH 2225 Architectural CADD 3 hrs.</strong>&lt;br&gt;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.</td>
<td><strong>ARCH 1050 Design Fundamentals II, 3 hrs.</strong>&lt;br&gt;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&lt;br&gt;Offered: Spring Semester</td>
</tr>
<tr>
<td><strong>ARCH 2210 Design I 4 hrs.</strong>&lt;br&gt;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</td>
<td><strong>ARCH 2000 Design I: Foundation, 4 hrs</strong>&lt;br&gt;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&lt;br&gt;CR: ARCH 2060&lt;br&gt;Offered: Fall Semester</td>
</tr>
<tr>
<td><strong>ARCH 2250 Design II 4 hrs.</strong>&lt;br&gt;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.</td>
<td><strong>ARCH 2050 Design II: Foundation, 4 hrs</strong>&lt;br&gt;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.&lt;br&gt;PR: ARCH 2000&lt;br&gt;Offered: Spring Semester</td>
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<tr>
<td><strong>ARCH 3300 Design III 4 hrs.</strong>&lt;br&gt;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.</td>
<td><strong>ARCH 3000 Design III: Site, 6 credits</strong>&lt;br&gt;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&lt;br&gt;Offered: Fall Semester</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>ARCH 3310</td>
<td>Construction Details &amp; Materials</td>
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<tr>
<td>ARCH 4060</td>
<td>Building Technology II</td>
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<td>ARCH 3350</td>
<td>Design IV</td>
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<td>ARCH 3050</td>
<td>Design IV: Urban</td>
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<td>ARCH 4430</td>
<td>Mechanical &amp; Electrical Systems</td>
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<td>ARCH 4000</td>
<td>Design V: Technology</td>
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<td>ARCH 4460</td>
<td>Design VI</td>
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<td>ARCH 4050</td>
<td>Design VI: Build</td>
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<td>Old Catalog Course Description</td>
<td>New Catalog Course Description</td>
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<tr>
<td>ARCH 2060</td>
<td>Building Technology I</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>ARCH 3060</td>
<td>Architecture Portfolio</td>
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<tr>
<td>ARCH 3399</td>
<td>Special Topics in Architecture</td>
</tr>
</tbody>
</table>
Appendix C
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
B5 Life Safety
B9 Structural Systems
B11 Building Service Systems
C7 Legal Responsibilities

B3 Sustainability
B7 Financial Considerations
B10 Building Envelope Systems
B12 Building Materials and Assemblies
B4 Site Design
B8 Environmental Systems

**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):
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 I: 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 the 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 Morpew, 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

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Learning Outcomes</th>
<th>Assessment Tool</th>
<th>Benchmark</th>
<th>Collection Timeline &amp; Responsibility</th>
</tr>
</thead>
</table>

## Competencies and Methods of Assessment

The following flowchart and table represent the assessment plan and schedule for proposed courses.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Performance Review</th>
<th>Satisfactory Rate</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 &amp; C, Perspective A</td>
<td>PY 1: Co-op performance review by employers</td>
<td>≥ 90% satisfactory</td>
<td>annually by faculty</td>
</tr>
<tr>
<td>2. demonstrate how architectural history, theory, and practice may inform design decisions in a diverse, global society. *NAAB Realm A, Perspective B</td>
<td>PY 1: Co-op performance review by employers</td>
<td>≥ 90% satisfactory</td>
<td>annually by faculty</td>
</tr>
<tr>
<td>3. transition to internship and licensure and gain employment in professional design offices and design and construction-related fields. *NAAB Realm C, Perspective C</td>
<td>PGY 3: Graduate employment</td>
<td>≥ 80% Graduates employed in architecture related field</td>
<td>every 5 years by staff</td>
</tr>
<tr>
<td>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</td>
<td>PY 1: Co-op performance review by employers</td>
<td>≥ 90% satisfactory</td>
<td>annually by faculty</td>
</tr>
<tr>
<td>5. make informed, ethical, and responsible contributions in a diverse and global society to serve the public good. *NAAB Realm B &amp; C, Perspective E</td>
<td>PY 1: Co-op performance review by employers</td>
<td>≥ 90% satisfactory</td>
<td>annually by faculty</td>
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</table>
Assessment Events and Tools

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

Curricular and Program Changes

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 1.1.3
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
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

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