

Architecture Assessment Plan Rev. 9/16/2018

| Architecture | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 |
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ARCHB1 - Introduction to Architecture and Environmental Design

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|---|---|--|---|---|--|---|
| • Upon completion the student will be able to: Develop an awareness of the importance of the field of architecture in today's society and market place and their relationship to the other environmental design fields. | | | | P | | P |
| • Be cognizant of the Bakersfield College requirements for graduation and the process required for transferring to a four-year college or university. | | | P | P | | |
| • Demonstrate an understanding of the educational opportunities and curriculum in Architecture and other environmental design fields. | C | | | | | |
| • Become familiar and acquainted with qualified leaders in the field. | | | P | | | |

ARCHB6 - Materials of Construction

| | | | | | | |
|---|--|--|---|---|--|---|
| • Upon completion the student will be able to: Explain the relationship between materials, architecture and technology. | | | | | | P |
| • Be able to compare and contrast the appearance of materials. | | | P | | | |
| • Be able to compare and contrast the compatibility of different materials and applications. | | | P | | | |
| • Be able to compare and contrast the relationship of cost and availability of materials. | | | P | | | |
| • Demonstrate the ability to analyze how technology affects materials and their selection. | | | | P | | |

ARCHB11 - Design and Perspective Drawing

| | | | | | | |
|--|--|--|---|---|--|---|
| • Upon completion the student will be able to: Demonstrate an understanding of and an ability to use drafting tools and instruments. | | | | | | P |
| • Demonstrate the ability to express three-dimensional objects using orthographic and isometric projection as well as one-point and two-point perspective principles. | | | P | | | |
| • Demonstrate a working knowledge of the principles of shade and shadow. | | | P | | | |
| • Demonstrate an understanding of and an ability to use computer software as it relates to the generation of perspective drawings for use in the production of professional quality presentation drawings. | | | P | | | |
| • Demonstrate a working knowledge of the detail required and become cognizant of the exactness to make renderings appear professional in appearance | | | | P | | |

ARCHB12 - Design Drawing and Color

| | | | | | | |
|--|--|--|---|---|--|---|
| • Upon completion the student will be able to: Understand the fundamental visual cues by which people perceive depth in the physical environment and develop the skill to graphically represent them to create the illusion of depth on a two dimensional surface. | | | | | | P |
| • Synthesize the various principles and skills in this course as an integral tool to visualize, analyze and communicate ideas. | | | P | | | |
| • Provide the principles and skills of freehand drawing as an integral tool of concept development and communication. | | | P | | | |
| • Demonstrate a working knowledge of the principles of color theory and their application to graphic presentation. | | | | P | | |

ARCHB16 - Digital Tools for Graphics Communication

| | | | | | | |
|--|--|--|---|---|--|---|
| • Upon completion the student will be able to: 1. Manipulate a variety of presentation software and obtain the ability to distinguish the best application for each; to contribute to a higher level of design presentation formats. | | | P | | | |
| • 2. Use modern technology such as a scanner, a printer, a computer and the network to create exceptional graphic presentations. | | | P | | | |
| • 3. Manipulate and enhance images by importing and exporting them in and out of graphic software for professional prints and presentations. | | | P | | | |
| • 4. Experiment and quickly determine if spatial design solutions will produce genuine useable designs. | | | | | | P |
| • 5. Create sophisticated design systems that will aid in conveying a spatial thought or develop concrete physical structures. | | | | P | | |

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| ARCHB21 - Architectural Design Fundamentals I | | | | | | |
| • Upon completion the student will be able to: Demonstrate an awareness of two and three-dimensional design composition, space and spatial sequence and the ability to be critical of the appropriate use of these design elements. | | | P | | | |
| • Recognize a wide range of creative problem solving processes and methods. | | | P | | | |
| • Identify, analyze and employ the fundamental principles and elements of design and composition. | | | P | | | |
| • Reconstruct the design process of problem analysis and synthesis by transferring this knowledge to new situations or problems. | | | | P | | |
| • Define a value and relevance or communication theory to design through graphic presentation and physical models. | | | | P | | |
| • Understand the importance of and employ the discipline of craftsmanship and basic joinery as an extension of design. | | | P | | | |
| ARCHB22 - Architectural Design Fundamentals II | | | | | | |
| • Upon completion the student will be able to: Demonstrate an awareness of problems in the built environment and the fundamental understanding of a systematic approach to problem solving. | | | P | | | |
| • Demonstrate the ability to verbally and graphically communicate potential solutions to design problems. | | | P | | | |
| • Be able to employ previously abstract basic design principles into rational, concrete methods and forms that relate directly to the built environment. | | | P | | | |
| • Integrate previously gained knowledge into increasingly complex solutions. | | | | P | | |
| ARCHB30 - Residential Building Information Modeling | | | | | | |
| • Upon completion the student will be able to: know how to use BIM software as a design tool and utilize the software to develop a full set of working drawings to be used for construction. | | | P | | | |
| • be able to apply methods and techniques used in developing architectural working drawings, understanding architectural drafting communication methods. | | | P | | | |
| • develop a complete set of working drawings including construction and architectural details for wood frame structures. | | | P | | | |
| • a basic understanding of city or county zoning ordinances and the CA Building Code as well as a basic understanding of state of CA mandatory energy measures. | | | | P | | |
| • will have knowledge of how a building is put together by drawing necessary construction details, sections and views that communicate the building process to people in the trades. | | | | | | P |
| ARCHB33 - Architectural Computer Practice | | | | | | |
| • Upon completion the student will be able to: Supply methods and techniques used in developing architectural design development drawings and construction documents. | | | P | | | |
| • Utilize and understand the use of BIM (building information model) software in the design process, from the design development phase to the construction phase, and develop construction documents for a light commercial structure. | | | P | | | |
| • Demonstrate an understanding of architectural conventions and symbols and be able to organize this material onto the set of documents. | | | P | | | |
| • Display an understanding of city or county ordinances and its requirements and limitations upon the construction of buildings. | | | | | | P |
| • Display an understanding of the CA Building Code, the scope, requirements and impact on the design and construction process. | | | | P | | |
| ARCHB48WE - Occupational Work Experience Education/Internship | | | | | | |
| • Upon completion the student will be able to: Articulate the specific work experience objectives in architecture as described by employer and identify the various skills, knowledge and attitudes necessary to the accomplishment of those objectives. | | | P | | | |
| • Upon completion the student will be able to: Demonstrate the acquisition of the various skills, knowledge and attitudes necessary to the completion of the work experience objectives in Architecture and the ability to effectively meet employer's job expectations. | | | P | | | |
| • Upon completion the student will be able to: Identify and analyze the application of acquired skills, knowledge and attitudes to career opportunities in architecture. | | | | P | | |

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| ARCHB55 - Residential Building Codes | | | | | | |
| • Upon completion the student will be able to: Demonstrate a knowledge of the contents within the California Building Code. | | | | | | P |
| • Demonstrate the effective application of the significant commercial code requirements. | | | | | P | |
| • Demonstrate the ability to research the code for the purpose of answering questions of code compliance. | | | | | P | |
| ARCHB56 - Commercial Codes | | | | | | |
| • Upon completion the student will be able to: Demonstrate knowledge and application of the contents of the California Building Code. | | | | | | P |
| • Demonstrate the effective application of the significant commercial code requirements. | | | | | P | |
| • Demonstrate the ability to research the code for the purpose of answering questions of code compliance. | | | | | P | |