COURSE OUTLINE

Course Number          Course Title              Credits
ARC227                ARCHITECTURE DESIGN I          5

Hours:                 Co- or Pre-requisite       Implementation
lecture/Lab/Other      ARC123 with a minimum C grade   sem/year
1 / 8

Catalog description (2014-2015 Catalog):
Sophomore level design course emphasizing the exploration and development of architectural design concepts and their transition into physical form. Two to Three major design problems challenge the student’s preconceptions about architecture and stimulate the growth of an architectural vocabulary.

Revision date: 2014       Course coordinator: Perryman, 609-586-4800 x 3357 perrymag@mccc.edu

Information resources:
• Architectural Graphic Standards, on reserve in Library
• Fine Homebuilding Magazine,
• Architecture and Architecture Record Magazines, in library

Other learning resources:
Course Competencies/Goals:
Students in Architecture Design I shall gain the skills and knowledge defined by the following performance criteria which constitute the minimum requirements for meeting the demands for success in course. The criteria encompass three levels of accomplishment:

**Ability, Understanding, Awareness**
The student shall;

1. *Demonstrate the ability to* apply basic organizational, spatial, structural, and constructional principles to the conception and development of interior and exterior spaces, building elements, and components.
2. *Demonstrate the ability to* employ basic methods of data collection and analysis to inform all aspects of the programming a project and process of design.
3. *Demonstrate the ability to* employ appropriate representational media, (Graphic Skills) including computer technology, to convey essential formal elements at each stage of the programming and design process.
4. *Demonstrate Critical Thinking Skills through the ability to* make a comprehensive analysis and evaluation of a building, building complex, or urban space.
5. *Demonstrate the ability to* respond to natural and built site characteristics in the development of a program and design of a project.
6. *Demonstrate the ability to* identify and assume divergent roles that maximize individual talents, and to cooperate with other students when working as members of a design team and in other settings.
7. *Demonstrate the ability to* design both site and building to accommodate (accessibility) individuals with varying physical abilities.
8. *Demonstrate the ability to* discuss his/her work during a critique and critically evaluate and justify his/her own design and process.

Course-specific General Education Knowledge Goals and Core Skills.

**General Education Knowledge Goals**

**Goal 1. Communication.** Students will communicate effectively in both speech and writing.

**Goal 2. Mathematics.** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

**Goal 3. Science.** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

**Goal 4. Technology.** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

**Goal 9. Ethical Reasoning and Action.** Students will understand ethical issues and situations.

**MCCC Core Skills**

**Goal A. Written and Oral Communication in English.** Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.

**Goal B. Critical Thinking and Problem-solving.** Students will use critical thinking and problem solving skills in analyzing information.

**Goal C. Ethical Decision-Making.** Students will recognize, analyze and assess ethical issues and situations.

**Goal D. Information Literacy.** Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

**Goal E. Computer Literacy.** Students will use computers to access, analyze or present information, solve problems, and communicate with others.

**Goal F. Collaboration and Cooperation.** Students will develop the interpersonal skills required for effective performance in group situations.
Units of Study in Detail.

Unit 1
The student will be able to:
- Demonstrate prior learning of fundamental design skills through a quick design project.
- Demonstrate a graphic and verbal language for describing concepts, form and organizing principles of design.
- Demonstrate ability to conceptualize and articulate visually his/her ideas using basic organizational, spatial, structural, and constructional principles in the development of a design project.
- Employ appropriate Graphic Skills, (media and medium) to convey essential formal elements for a comprehensive design at each stage of the design process.
- Discuss his/her work during a critique and critically evaluate and justify his/her own design and process.
- Make technically precise descriptions and documentation of a proposed design for purposes of review.
- Understand the nature of a specific material, the Concept of modularity and basic methods of joinery.

Unit 2
The student will be able to:
- Employ basic research methods of image and fact collection for a comprehensive analysis and evaluation of a significant building and its architect.
- Demonstrate critical thinking through a comprehensive analysis and evaluation of a significant building.
- Employ appropriate representational media, including computer technology, to convey essential formal elements for a comprehensive analysis and evaluation of a significant building and its architect.
- Demonstrate ability to articulate visually his/her analysis and evaluation of a significant building and its architect.

Unit 3
The student will be able to:
- Analyze natural and built site characteristics in the development of a program and design of an architecture project.
- Employ appropriate representational media, (Graphic Skills) including computer technology, to convey essential formal elements at each stage of the programming and design process.
- Identify and assume divergent roles that maximize individual talents, and to cooperate with other students when working as members of a team.

Unit 4
The student will be able to:
- Respond to natural and built site characteristics in the development of a program and design of an architecture project.
- Design an architecture project informed by a comprehensive program, from schematic design through the development of programmatic spaces, structural, accessibility, wall sections, and building assemblies, as may be appropriate; and to assess the completed project with respect to the program’s design criteria.
- Demonstrate the understanding of design both site and building to accommodate individuals with varying physical abilities.
- Make technically precise descriptions and documentation of a proposed design for purposes of review.
- Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice.
REQUIREMENTS:

1. **READINGS**: Readings will be assigned as they relate to the lecture topics. These will come primarily from required and suggested texts but also from a variety of references, which will either be photocopy handouts or available on reserve. It is important to do the readings and develop a WORKING KNOWLEDGE of the ideas they contain.

2. **PROJECTS**: Students are required to complete all the parts of the projects throughout the semester. Each part will be given a percentage of the semester’s total grade; any part missed because of absence will not be given credit.

3. **SKETCHBOOK**: Compilation of a sketchbook throughout the semester is an essential aspect of this course. The student will be expected to sketch from the planned field trips during studio time throughout the semester. You will be encouraged to keep a documentation/sketches and notes of your observations and analysis/evaluation of places and buildings in your search for design solutions the built environment. You should purchase a sketchbook (8 1/2" x 11" or larger will be required). In addition, you should have a variety of drawing instruments, charcoal, soft pencil, and ink pens.

4. **QUIZZES**: There may be pop quizzes during the semester at the discretion of the instructor. These will normally occur at the beginning of the class to test if you are doing the readings and understanding the readings and lectures.

5. **EVALUATION**: Your final grade for the course will be compiled from the relative excellence of your DESIGNS, SKETCHBOOK, your ATTENDANCE, CLASS PARTICIPATION, PROFESSIONALISM and, QUIZ grades. Attendance and participation are of extreme importance since it is the primary source of learning and will be reflected in the final grade.

6. **PORTFOLIO**: You are required to submit a copy of all projects and (some) sketches completed in the course in a portfolio on the date and time of the final exam. This is to be a copy (photocopies of reductions) 8 1/2" x 11" format. This will not be returned to the student. This portfolio should be bound in a clear covered binder with the students resume as the first page.

**IV. Evaluation of Student Learning / Course Grading**

Instructional modes to be used are: Integrated lecture and laboratory, studio assignments with specifications and limitations set by the instructor, demonstrations by the instructor, and discussions and critiques of student work.

The student is responsible for his or her regular attendance, participation in classroom discussions and critiques of student work, and for including his or her work to be discussed and evaluated.

Evaluation of progress and grades are determined by the instructor, based upon the following considerations: attendance, participation, and estimate of quality of class work and homework assignments (by instructor).
Values of quality, aesthetics, etc., are based upon the instructor’s judgment of the work produced, the effort employed, and the total result achieved. To receive full credit, all assignments are due on time.

The grade of “A” will be earned by students who demonstrate mastery of the essential objectives of the project, as well as demonstrating excellence in aesthetics and originality in completing course objectives with at least 90% accuracy.

The grade of “B” will be earned by students who demonstrate more than adequate mastery of the essential elements of the material presented and acceptable knowledge of the course content. Achievement will be demonstrated when all of the specific course objectives are fulfilled with at least 80% accuracy.

The grade of “C” will be earned by students who demonstrate adequate mastery of the essential elements of the material presented. Achievement will be demonstrated when all of the specific course objectives are fulfilled with at least 70% accuracy.

The grade of “D” is undesirable, but indicates a minimum passing of the course requirements. All of the course objectives must be fulfilled with at least 60% accuracy.

The grade of “F” will be earned by students who do not demonstrate achievement.

The student is responsible for his/her regular attendance, participation in class discussions. The grade of “A” will be earned by students who demonstrate mastery of the essential objectives of the project, as well as demonstrating excellence in aesthetics and originality, and in completing course objectives and learning unit objectives with at least 90% accuracy. The grade of “B” will be earned by students who demonstrate more than adequate mastery of the essential objectives of the project, as well as demonstrating a more than adequate level of aesthetics and originality, and in completing course objectives and learning unit objectives with at least 80% accuracy. The grade of “C” will be earned by students who demonstrate adequate mastery of the essential objectives of the project, as well as demonstrating an adequate level of aesthetics and originality, and in completing course objectives and learning unit objectives with at least 70% accuracy. The grade of “D” is undesirable and indicates a less than adequate mastery of the essential objectives of the project and a less than adequate level of aesthetics and originality, with a minimum level of completion of course objectives and learning unit objectives. The grade of “F” will be earned by students who do not demonstrate achievement.