



## **A Proposal for the Repurposing of Penfield Hall**

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# 1 - Executive Summary

BQVC has researched problems facing Mercer University and has found that the university is in dire need of office and classroom space. Mercer's Sociology Department desperately needs new facilities. The Sociology Department's offices and labs are inadequate and their classrooms are spread across the entire campus. They also can offer Mercer a more prestigious image if their extensive artifact collection, valued at \$70,000, is displayed properly.

The Sociology Department's needs have been broken down into three major points:

1. Centralize the department's classrooms and offices
2. Have access to a properly outfitted archeology lab
3. Proper display room and cases for artifacts

BQVC has decided on an existing building on campus that can satisfy all three of these needs. The Mercer University Bookstore will be vacating the front portion of Penfield Hall when the Lofts at Mercer Village are completed. We propose that the Sociology Department be moved from its current location in Ryals Hall into a slightly remodeled Penfield Hall. Further benefits of this move include freeing up space for other departments in Ryals Hall, and providing Mercer a more organized image.

Penfield Hall will be remodeled to house four classrooms, four professor offices, a computer lab, an archeology lab, one administrative assistant office, and one student worker/lobby desk. A floor plan of the proposed changes as well as a floor plan of the current building layout can be seen in Appendix B. The front of the building will be left open as an artifact display area, which, if properly maintained, could receive museum certification and grant money. Labor for remodeling will be subcontracted out and supervised by BQVC. The total cost for remodeling, including new furniture and teaching devices, has been approximated at \$65,000 and the project would take approximately two months to complete.

We recommend that preparations for the remodeling begin two months before the Mercer Lofts are expected to be finished and remodeling begin as soon as the bookstore has completely vacated Penfield Hall.

## 2 - INTRODUCTION

### 2.1 - PURPOSE AND BACKGROUND

Mercer University strives to recognize the value of the Sociology Department both for its academic potential and its art. The department has produced influential graduates and currently possesses a collection of African artifacts valued at \$70,000.

Despite this, the Sociology Department, and its sub departments Criminal Justice and Anthropology, are forced to share classrooms and offices with the Political Science and History departments. This overcrowding makes it difficult for the three departments that share office space in Ryals Hall to function efficiently and present an organized front to incoming students.

Therefore, the Sociology Department needs its own building in order to function at its full potential as a department as well as resolve the problem of overcrowding in these Liberal Arts Departments. With rising costs discouraging potential students from private colleges, Mercer University needs to present a united and organized front. The dispersed classrooms caused by lack of space do not present this image. The building the Sociology Department needs should be a central location, climatically able to house important artifacts, and contain appropriate rooms to accommodate quality studies.



Figure 2.1 The architecture of the current bookstore is ideal for viewing valuable works of art as well as providing adequate space for the Sociology Department

The purpose of this proposal is to recommend Penfield's current bookstore as the ideal location to situate the Sociology Department and its conjoined departments of Criminal Justice and Anthropology. This building will be able to showcase the valuable collection of artifacts in the front hallway with proper lighting and temperature. There will also be four available offices for staff, four up-to-date classrooms, and an archeology lab to further academic studies in this realm.

Relocating the department will increase communication between students and professors, and thus transform Mercer's atmosphere into one of centrality and easily accessible location. By transferring the department and its collection, the historical value of the bookstore will remain intact and promote a museum-like aura perfect for attracting potential students.

This proposal will show an outline of the potential budget as well as a detailed implementation plan. The total cost of this proposal is equal to \$64,722.78, with construction time estimated at six weeks.

### 2.2 - Proposal Outline

This proposal will incorporate a project rationale, technical details on the proposed plan, and a descriptive itinerary of the operations necessary to complete the project. It will also conclude with further recommendations for the implementation of this endeavor.

### 2.3 - CREDIBILITY

BQVC was formed to deliver efficient, enriching designs for the purpose of bettering Mercer University's campus and overall appeal to potential students. The team consists of Project Manager: Chris Crook, Budget Lead: Thomas Quigley, Logistics Lead: Matt Baker, and Editorial Lead Brittany Vorreiter. A majority of the individuals have collaborated on previous projects, and all are dedicated to quality performance.

Chris, serving as the team's Project Manager, has had prior experience both with creating proposals and as a project manager. He was Project Manager for his Freshman Design Competition Team, as well as Project Manager of Proposal for an Activity Center in Bedford, Massachusetts. Currently pursuing a Master's Of Engineering Management, he is well qualified for the organizational aspects of this project.

Thomas Quigley, the Budget Lead, is a third year student in Mercer University's School of Engineering (MUSE). He is currently pursuing a degree in Electrical Engineering with a minor in Business Administration. He has worked numerous jobs in different positions, and has performed well in each of them. He has also taken an accounting course, and will be gathering figures for cost and implementation of the proposal for this project.

Matt Baker, Logistics Lead for BQVC, has also had previous experience with technical aspects of design. During an internship at a civil engineering firm for two years, he gained knowledge of the program AutoCAD as well as common construction methods and designs. He was also in charge of technical parts of previous projects, including the renovation of a manufacturing plant. These skills, along with his engineering coursework pertaining to his Mechanical Engineering degree, provide the familiarity needed to analyze the technical aspect of this project.

Brittany Vorreiter, the Editorial Lead, is currently a student in Stetson's School of Business and Economics. Previous experience as a Programming Chair for a leadership conference and working with various organizations has provided her with knowledge of realistic expectations for Mercer's Campus. Studies in the fields of Economics and Psychology has also led to intensive research and writing skills. Her educational background will allow her to be focused and pragmatic when analyzing the proposal.



(From left to right) Thomas Quigley, Chris Crook, Brittany Vorreiter, Matt Baker

**Figure 2.2: The well qualified and exemplary team of BQVC**

### 3 - Project Rationale

BQVC has found that Mercer University needs more office and classroom space. The Sociology Department's offices are crowded, their lab is unusable, and their classrooms are spread across the entire campus. Moving the Sociology Department into Penfield Hall will improve the campus and provide a better academic environment for students. This move will also give Mercer a more prestigious image if the Sociology Department's extensive artifact collection is displayed properly.

After determining the need for more office and classroom space at Mercer University, we researched which departments were most affected by the lack of space. A visit to the University Registrar yielded three departments: Sociology, History, and Political Science. These three departments reside in the same building and each has office space for their professors and secretaries, but not enough extra space for classrooms. BQVC has decided that each of these departments would benefit if one of them was moved out and the space freed was redistributed. A merit table, shown below in Table 3.1, was created to decide which department should be moved.

**Table 3.1 - Decision Matrix on a Scale of 1-10**

Merit Criteria	Sociology Department	History Department	Political Science Department
Need for New Facilities	9	3	5
Amount of Decentralization	8	0	5
Impact on Mercer's Overall Image	10	3	5
TOTAL	27	6	15

We determined Need for New Facilities by visiting all of the departments and talking to Donna McDonald, the administrative assistant, about each of the departments. Sociology received a nine for three reasons. First, they have a small office area that is shared with Political Science. Second, they have expensive artifacts that are deteriorating and losing value due to improper display cases. Third, their current archeological lab is unusable for teaching. History received a three because their offices are located on a single floor and they do not share space with any other departments. Political Science received a five because they are share space up with Sociology.

Decentralization is a measure of how scattered the department's offices and classrooms are from each other. Although their offices are together, the Sociology Department's classrooms are

scattered across the entire campus, which resulted in a score of eight. History received a zero because their offices and classrooms are located on the same floor of the building. Political Science received a five because their offices are located together in one building with all of their classrooms located in an adjacent building.

Impact on Mercer's image was determined by considering how the move would be viewed by a visitor to campus. Mercer University has long been a school that prides itself on a beautiful and scholarly appearance, as shown by our landscaping, extensive library, and classic architectural style. Sociology received a ten because of the many benefits the move brings. If sociology is moved to Penfield, they will have the opportunity to properly display their artifact collection and apply for a museum grant, further adding to Mercer's prestige. Their collection will also complement the building's beautiful architecture. Centralizing the department in one building also makes class schedules more organized. This boosts Mercer's overall image as an organized and well managed school. Moving the history department does not have a huge impact on the university's overall image, so it received a relatively low score of three. Political science received a score of five because moving their offices and classrooms into one building would make the university appear more organized.



## 4 - Technical Approach

In order to provide a feasible solution to a problem, practical details and plans must be developed. BQVC engineers have researched the problem with the Sociology Department and have designed a feasible solution. The research and proposed designs will be explained in this section.

The Sociology Department is currently located in Ryals Hall and does not have the space to that it needs to effectively educate students. Its classes are spread throughout campus and some of its facilities are not fully functional. The department contains many rich artifacts that cannot be displayed due to lack of space. Penfield Hall would be an excellent location for the Sociology Department due to its location and size. The building could be remodeled to hold classrooms, offices, a computer lab, and an archaeology lab. The classrooms would be equipped with the latest technology and the new archaeology lab would have lab tables with running water, something that it currently does not have but needs. The proposed facility in Penfield Hall would be an excellent solution to the space problem with the Sociology Department and the move would help enrich Mercer's campus. The proposed facility designs and all other research gathered will be displayed in the following sections:

- Location and Design
- Required Equipment
- Work Designation
- Solution Feasibility and Merit
- Success Criteria.

### 4.1 - Location and Design

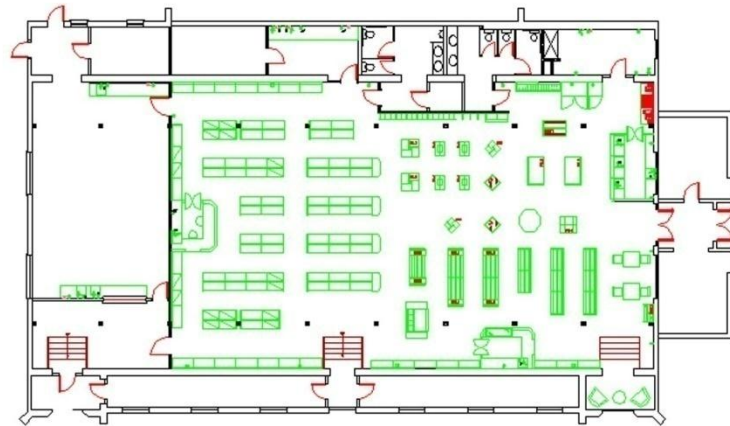
We propose that the Sociology Department be moved to the space currently occupied by the bookstore in Penfield Hall. The bookstore will be moving to the new Mercer Lofts location in December 2010, therefore this space will be unoccupied after that date. This space could be remodeled to provide sufficient room for all of the department's facilities and would provide a central location on the campus. In the following subsections the feasibility of this site will be justified and the designs will be described.

#### *4.1.1 - Site Selection*

Penfield Hall is located behind the Connell Student Center ,next to Porter Patch, giving it a central location on campus. This would be ideal for the Sociology Department because it would provide an easily accessible location, close to the other departments in the College of Liberal Arts. The space currently occupied by the bookstore is approximately 9,000 square feet. The existing facility contains four office spaces, a storage area, and restrooms. The general layout of



the building is open with high ceilings, making it easy to install walls and ceiling for separated classroom space. A diagram of the existing layout can be seen below:

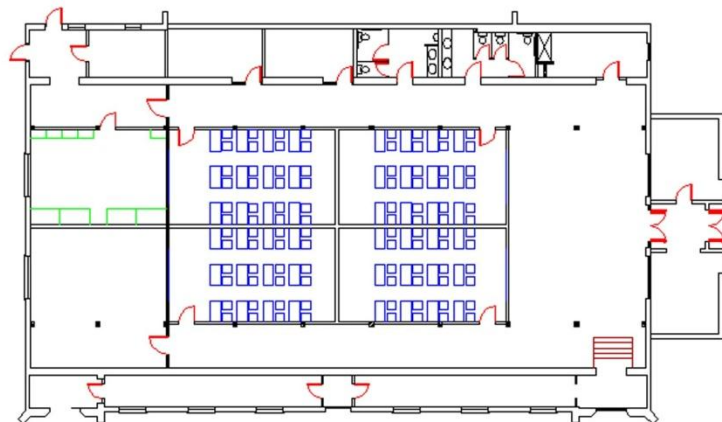


**Figure 4.1. Existing Penfield Layout**

This location would provide enough space for the Sociology Department's facility, also giving it a central location on the campus.

#### *4.1.2 - Site Renovation*

The site renovation plan has been researched and designed by our team of engineers to be the most cost effective and efficient solution. The proposed layout requires minimal deconstruction and construction. Essentially, our plan calls for four classrooms to be built in the center of the building. The walls of these classrooms would be approximately twelve feet tall and would have a drop ceiling that would hang from the existing ceiling, much like Groover Hall. The proposed classrooms are 600 square feet each and will accommodate 24 students each. The back room of the building would be divided by another wall, providing space for both the computer lab and the archaeology lab. The existing office space will fulfill the needs for the Sociology Department. The proposed plan is shown below:



**Figure 4.2. Proposed Penfield Hall Site**

As can be seen in the plan, the bathroom lobbies and the set of stairs in the middle of the building will be removed, giving a hallway running the length of the building on both sides. This will provide access to each of the classrooms. Also the large lobby in the building will provide sufficient space to showcase all of the Sociology Department's artifacts.

#### 4.2 - Required Equipment

The new classrooms and archaeology lab for the proposed space must be furnished with equipment that will accommodate students in an academic environment. BQVC engineers have researched to find the most efficient products that have the highest durability and lowest cost on the market. In this section, each product will be described.

##### Utility Table

Each classroom will be equipped with 12 utility tables. These tables are 2'x4' and will easily seat two students. The table has a steel frame and a high pressure laminate top that will ensure a long life against the normal wear and tear from classroom use. This item, number 31155, is sold by Worthington Direct and costs \$117.95 each.



Figure 4.3. Utility Table

##### Science Storage Cabinet

The archaeology lab has many tools and artifacts that need to be stored in a safe place. Six of these 36" x 22" x 84" storage cabinets will provide adequate storage space for all of the archaeology lab materials. The cabinet is made of solid wood and has a chemical resistant finish so that it will uphold against normal lab use. It also has a three point locking system, providing security for the expensive archaeology equipment that the Sociology Department owns. This item, number 38089, is sold by Worthington Direct and costs \$879.95.



Figure 4.4. Storage Cabinet

##### Fabric Stacking Chairs

These chairs will provide a cost efficient way to seat all students in the new classrooms in addition to being easily moveable and comfortable. They have a steel frame and durable backs and seats to prevent wear and tear caused by normal classroom use. This item, number 97013, is sold by Worthington Direct and costs \$40.95 for each.



Figure 4.5. Stacking Chair

## Lab Tables

The current archaeology lab does not have a real lab table for students to work on. Sociology professors have advised us that lab tables would be an important addition to a new lab space. This 66" x 30" x 36" lab table comes with a running water station, electrical outlets, and storage space. The running water is an especially useful feature for the archeology lab due to the need to rinse away loose dirt from artifacts. The table has a solid epoxy top which will provide security against the use of archaeology tools. Four of these tables would provide adequate work area to accommodate all students. This item, number 38084, is sold by Worthington Direct and costs \$2159.95 each.



Figure 4.6. Lab Table

## Whiteboards

Each classroom will be equipped with a whiteboard to provide visualizations for students. This 4' x 10' whiteboard will provide a surface that the professors can write or draw on to assist in teaching classes. This board provides adequate space and size for every student in the class to see. This product has a 50-year guarantee by Best Rite Co. that it will not malfunction. This item, number 20092, is sold by Worthington Direct and costs \$339.95 each.



Figure 4.7. Whiteboard

## 4.3 - Work Designation

BQVC Inc. has the capability of contracting out all of the work necessary to complete this project. In order to keep costs at a minimum we will keep all of the construction in house. Mercer's Information Technology Department will be utilized in setting up the network for the computer lab as well as any computers needed in offices. Since Mercer already has a contract with Brickman landscapers, they will be used to repair any grounds damage made during construction. This ensures that the work will be done in the most cost efficient manner possible.

#### 4.4 - Solution Feasibility and Merit

The proposed plan will provide a realistic solution to the sizing problem in the Sociology Department. The renovation of Penfield Hall will provide an adequate space for all of the department's needs in addition to a central location on campus. The proposed facility will provide an up to date archaeology lab in addition to a place to display the artifacts owned by the Sociology Department. This will create a museum-like atmosphere, something that Mercer does not currently have. Overall, this proposed plan will provide the Sociology Department with more space and up to date facilities, enriching Mercer's academic environment.

#### 4.5 - Success Criteria

It is necessary to measure the success of this project after its completion. A survey will be given out to all students and faculty, with questions about the utility of the new location for the Sociology Department. A statistical analysis will be run on the grades of sociology students to see how much of a difference having a central academic location makes. Enrollment to this department will be monitored to identify any noticeable increases. This information is important to gather so that Mercer, as well as other schools, can be informed for future decisions. This will help ensure that the school can use its resources in the most effective way possible.

## 5 - Operations Plan

### 5.1 - Management and Organization

Even after extensive planning and design for the proposed renovations, BQVC will continue to manage project development. Our team includes a project manager who will supervise the renovation process of Penfield Hall and interact with representatives from Mercer. The logistics lead will oversee details of the renovation, including construction and utilities; he will make weekly progress reports to the project manager. The budget lead will deal with acquisition and dissemination of project funding; any problems arising from costs will be immediately reported to the project manager. All other work will be subcontracted to various companies, who will report to the project manager on a weekly basis. The project manager will visit the site as necessary to check on progress.

One company will be contracted to complete both deconstruction and construction of the new classrooms, labs and offices. The manager of this company will notify the project manager of any issues as they arise. Once they complete their job, they will clean up any messes created in the process. While this company will be responsible for constructing the walls, subcontracted electricians will install electrical outlets and Ethernet ports in the walls. After this is completed, another subcontractor will put in new tile flooring, as well as refinish any remaining tile floors. Upon completion of the flooring, the building will be thoroughly cleaned prior to moving in the new furniture and equipment.

BQVC will coordinate with Mercer's Physical Plant department to move all the non-personal items (computer lab furniture, office furniture, lab equipment, etc.) from Ryals Hall to Penfield Hall. BQVC will also work with professors or certified individuals when moving the historical artifacts to their new locations on display in Penfield Hall. Professors will be responsible for moving any personal effects.

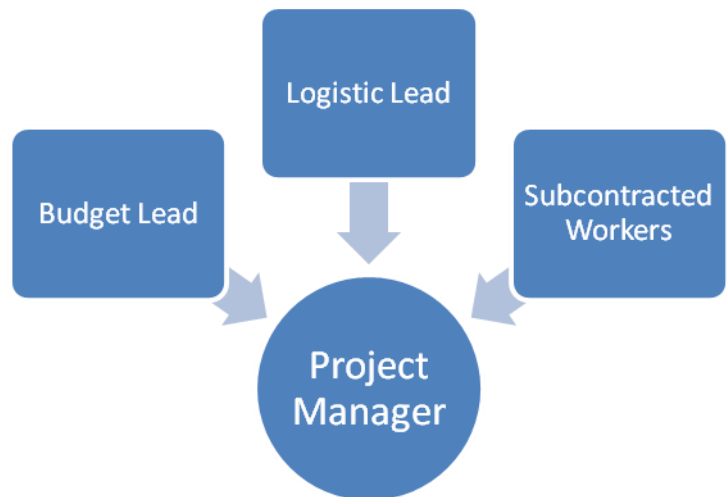


Figure 5.1: All work done is overseen by the project manager.

### 5.2 - Plan Implementation

Punctuality is of great importance to BQVC; we believe that a job should be completed on time, and to the highest standards of quality. We will supervise the work progress of this project, making sure that all building codes, permits and standards are strictly followed. On top of this, we have set various milestones to keep work on track. These milestones will help aid productivity and serve as a reminder of project deadlines. The Gantt chart in Appendix A shows these milestones.

### *OUR MILESTONES*

BQVC has set four different milestones: receiving materials, completion of deconstruction, completion of construction and the project completion. These milestones serve as deadlines for different parts of the renovation and also signify when the next phase of the project may begin. Mercer representatives will be brought in to view progress and quality of the work being done at each of these milestones.

### *GANTT CHART*

The Gantt chart, included as appendix A, the time frame allotted to each task. The start and finish dates for each task are marked, as are the milestones. This allows Mercer representatives to obtain a general idea of how the project should be progressing, as well as giving subcontractors dates for completion.

### 5.3 - Budget Analysis and Justification

BQVC has compiled a preliminary budget estimate based upon cost of materials and services provided on similar projects. The vendor, part numbers, item descriptions and costs for each item have been included, as well as the aggregate cost for the project. The total cost includes a ten percent overhead which will help to cover any issues, should they arise. The budget is shown below in table 5.1.

**Table 5.2 Budget**

<b>Worthington Direct</b>				
Item #	Item Description	Quantity	Cost Per Unit	Total Cost for Item
31155	(48" x 24") Utility Table	48	\$117.95	\$5,661.60
38089	(36" x 22" x 84") Science Storage Cabinet	6	\$879.95	\$5,279.70
38084	(66" x 30" x 36") Lab Tables (w/ water)	4	\$2,159.95	\$8,639.80
97013	2" Fabric Stacking Chairs	96	\$40.95	\$3,931.20
20092	(4' x 10') Whiteboards	7	\$339.95	\$2,379.65
<b>Home Depot</b>				
419109	(4' x 8' x 5/8") Fire-Shield Drywall	200	\$7.48	\$1,496.00
176929	(2" x 4" x 8') Wood	250	\$3.97	\$992.50
367076	25 lb Bucket of 2" Drywall Screws (approx 5000)	2	\$49.74	\$99.48
137632	25 lb Bucket of 3" Lumber Screws (approx	4	\$89.74	\$358.96
<b>Estimated Work Costs</b>				
	Construction			\$5,000.00
	HVAC			\$10,000.00
	Flooring			\$15,000.00
<b>Overhead Estimate Cost</b>				
				\$5,883.89
<b>TOTAL COST</b>				
				\$64,722.78

### *BUDGET JUSTIFICATION*

Since we are proposing new classrooms, all the things a classroom is supposed to have will need to be purchased. We have chosen to use durable, long lasting tables to place in each classroom. Twelve of these will be needed in each class in order to accommodate class sizes of twenty-four students. We've placed a large four foot by ten foot white board in each class giving the professors have ample space to write without erasing, allowing students to take notes at their own pace. We've also placed a white board in the archaeology and computer labs to accommodate teaching, as well as a white board in the lobby for more generalized public notes and announcements. The chairs selected are made of fabric which will last for a long time.

Mercer currently lacks an archaeology lab for students to use; they are forced to use classroom space with inadequate storage to meet their needs. We have proposed a space for an archaeology lab in Penfield Hall. This facility needs counter space, as well as running water. The lab tables listed in the budget sheet accommodate both of these, as well as variable pressure gas nozzles which could be used to supply air to an air hose. The cabinets listed were chosen to accommodate the storage space needed for the items that are currently stored in cheap plastic bins.

The drywall chosen is flame resistant, and the wood is chemically treated to be durable. This will ensure that the walls built will not need to be replaced for decades. We estimated the values of labor done by the subcontractors on various different parts of the renovation. These estimates were based on research into similar projects involving interior renovation of older buildings.

The budget estimate assumes that some processes and items will not have an additional cost for Mercer. The computer lab and offices will both be furnished with items that the university currently owns; the Sociology Department currently has a computer lab located on the second floor of Ryals Hall, but it fails to meet their teaching needs. A larger area in Penfield Hall has been allocated to be computer lab and teaching area that satisfies the needs they have. In addition



to computer equipment and furniture for the computer lab, the furniture that professors already use will be relocated to their new offices. The cases containing the artifacts will be relocated and displayed in a more prominent location that will strengthen the university's appearance.

These costs all serve to create a more prestigious and organized image for the university. This is the first step in organizing classroom space and the efforts to create a more centralized location for the department will not be unrewarded. Prospective students will see the organization of the department, as well as the wonderful architecture and historic artifacts. Visitors will think more highly of an already reputable institution. Mercer could obtain certification as a museum as well as grant money. Expansion of this department could also lead to more artifact discovery, and events that Mercer could use to promote itself.

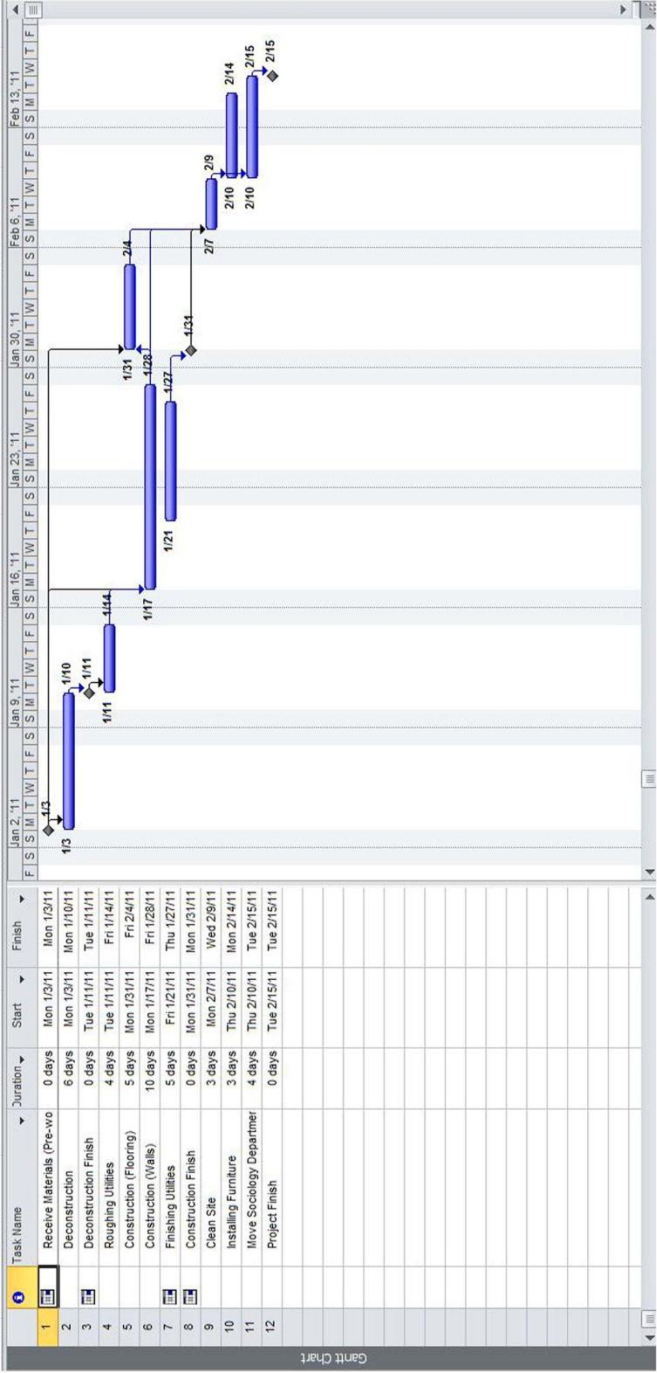
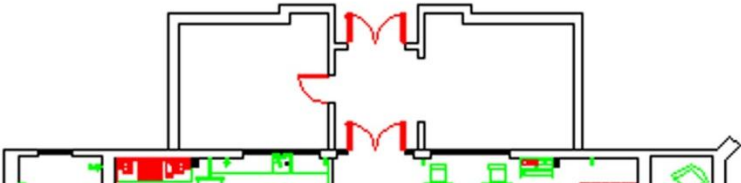
#### 5.4 - Quality Control

In order to maintain Mercer's high standard of performance and appearance, BQVC will make regular visits to the renovation site. During these visits, management will ensure that tasks are being completed to the highest standards. All work will follow established procedures for construction and renovation. Transport of furniture will be done in such a fashion that maintains the integrity and appearance of the objects. BQVC will seek outside assistance from qualified individuals when relocating the museum cases and artifacts; doing this will keep them from degrading further. All of this will be done in accordance with Mercer's high and reputable standards, as well as BQVC's superior expectations for the work we do.

## **6 - Conclusions and Recommendation**

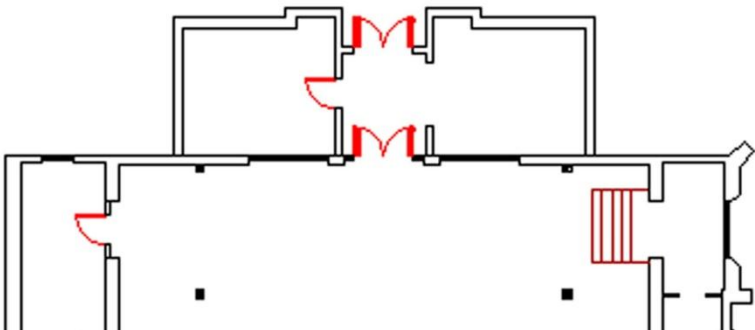
BQVC has found through research that Mercer University's Sociology Department is in desperate need of space. Their offices and classrooms are too decentralized, their lab is not properly equipped for teaching, and their artifact collection is deteriorating due to improper display cases. BQVC recommends that Mercer University modify Penfield Hall to accommodate the Sociology Department's offices, classrooms, and artifact collection. This department has the greatest need for the space out of the other eligible departments on campus, and is best suited to occupy this space. The renovation would be minimal, and the change would make Mercer appear more organized to outside viewers. Moving the Sociology Department into Penfield Hall and applying for a museum grant could simultaneously alleviate Mercer's lack of space while becoming a benefit for the university's students, faculty, and overall image.

## Appendix A – Gantt Chart



**GANTT CHART**  
PROPOSED CONSTRUCTION TIMELINE

Appendix B - AutoCad Drawings of Previous and Proposed Layout



## Appendix C – BQVC Individual Resumes



