



Mercer Optimizing

TRANSMITTAL LETTER

Date: 22 April 2011

To: Dr.

From: Student A: Public Relations/Technical Doc. Designer
Student C: Software and IT/ Layout Designer
Student B: Management of Operations/ Budget Lead

Subject:

The attached report is a response to RFP NO. MU-2011-01: Proposal for Creating a Digital Design Studio. This report contains researched information that will enable Mercer Optimizing to create a well-suited Digital Design Studio for room SEB 236.

Noticing that the current multimedia rooms are held in EGC 216 and Stetson Lab, the Technical Communication Department has expressed concerns of Technical Communication students having limited access of these rooms to work on their digital media projects outside of class time. The department requests a new teaching classroom and studio/lab to be set in room 236 of the Science and Engineering Building. The room offers a large amount of space equipped with internet drops, printers, a scanner, and a Smartboard. However, the room also needs redecorating and more state of the art equipment, such as Mac computers, and an overhead projector. This room will be reconfigured in a way to enhance the appeal to its students. Thus, Mercer Optimizing has begun planning and research, and prepared a budget of \$60,000. Through the proposal, Mercer Optimizing has listed a number of hardware and software equipment and established a floor plan for the studio.

With your permission, Mercer Optimizing will immediately begin ordering equipment at a total cost of \$38,737.60.

Thank you for considering Mercer Optimizing for your company's Request for Proposals. If you have any questions or concerns, please contact *Student C* at (678) 641-0586 or via email at drbryant00@yahoo.com.

Sincerely,
Student C
Student A

A Proposal for the Implementation of a Digital Design Studio



Mercer Optimizing, Inc.

Prepared for: Dr. Helen Grady, MUSE-EI Subcontract Administrator

Prepared By: Mercer Optimizing, Inc.

Student B: Management of Operations/ Budget Lead

Student A: Public Relations/Technical Doc. Designer

Student C: Software and IT/ Layout Designer



Mercer Optimizing

Executive Summary

The purpose of this proposal is to provide a brief description of our anticipated plan for the Digital Design Studio. Currently, Mercer offers two options for rooms to hold media based courses; EGC 216A and the Stetson MAC lab. However, these rooms are used and the Technical Communication students have little access to the proper resources needed to complete class relevant tasks. Due to the time constraint of the Stetson Mac Lab's hours of operation and the limited software in EGC 216A, a new media friendly lab is required. The following report will explain in details our exact plans for the implementation of the Digital design Studio in room SEB236.

Our Company, Mercer Optimizing, specializes in renovating and "making creative usage of your square footage." We propose to meet the preexisting qualifications for creating the Digital Design Studio while being as cost efficient as possible. We decided to conduct research and distribute surveys to gain a better understanding of our problem and users. The equipment and furniture we selected are both cost effective and of high quality. A plan has been developed for the installation and marketing of all components for the Digital Design Studio.

Our proposed plan for the Digital Design Studio is to use the existing furniture in SEB236, and devote funds towards the equipment that the Digital Design Studio will encompass. We propose to begin the process of the implementation in the summer of 2011. This will allow the workers to have plenty of uninterrupted time to complete the renovations so there will be more efficient use of the time allotted.

Low construction cost and high quality will follow this plan of uninterrupted labor. Since research is done for all of the equipment and software being used in the Digital Design Studio, the process from ordering to installment will be streamlined. Upon the students arrival the following fall, there will be a new room in which media based classes can be held.

This proposal will explain in fine details the process from research and audience examination to the repurposing of the adjacent room SEB236D and the implementation of the Digital Design Studio.

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Mercer Optimizing

1. Introduction

1.1 Problem

Upon glancing at Mercer's campus, it is clear that there is constant growth and a never ending push for improvement throughout its infrastructure. Upholding excellence and going beyond and above to cater to its students are goals that Mercer holds high and proudly. Its educators are forever looking for ways to innovate and efficiently use its facilities. One particular opportunity of renovation caught our eyes here at our company, Mercer Optimizing, and that was the implementation of a new Digital Design Studio.

The purpose of this proposal is to provide a brief description of our anticipated plan for the Digital Design Studio. Currently, Mercer offers two options for rooms to hold media based courses; EGC 216A and the Stetson MAC lab. However, these rooms are heavily used and the Technical Communication students have little access to the proper resources needed to complete class relevant tasks. Due to the time constraint of the Stetson Mac Lab's hours of operation and the limited software in EGC 216A, a new media friendly lab is required.



Figure 1.1: Shows a portion of room SEB236 that will be used for the Digital Design Studio.

Our Company, Mercer Optimizing, specializes in renovating and "making creative usage of your square footage." We propose to meet the preexisting qualifications for creating the Digital Design Studio while being as cost efficient as possible. We decided to conduct research and distribute surveys to gain a better understanding of our problem and users. The equipment and furniture we selected are both cost effective and of high quality. A plan has been developed for the installation and marketing of all components for the Digital Design Studio.

1.2 Credibility

Our team consists of Student B, Student A and Student C. B has taken a number of business courses as well as engineering economy which will be of great importance for budgeting and maintaining a realistic approach to this project. As a TCO major, Student A understands the maximum implications of the Digital Design Studio and is knowledgeable with marketing analysis of the needs of the audience of the Digital Design Studio. Student C possesses knowledge in various technologies including MAC and Window's software. His knowledge and know-how on these two operating systems in particular will enable a strong and easy to use interface between software and users. After analyzing each of our characteristics, we organized our research in a very logical manner. See Appendix A for attached resumes.

Student B: Management of Operations/ Budget Lead works for Georgia Tech Research Institute and has experience communicating and providing for a client. She has taken engineering economy as well as a number of classes for her business minor which will provide an understanding of economics, management and human resources. As a result, she will have a realistic approach to the budget and timeline for this project. Her work experience and education combined is a valuable asset to this project.

Student A: Public Relations/Technical Document Designer works as an RA on campus and possess excellent communication skills. As a Technical Communication Major he understands the need for a Digital Design Studio. With a Marketing Principles and Technical Communication class under his belt, his familiarity with marketing analysis is relevant and fresh on his mind. This relation to TCO will also provide him with the motivation to design a Studio which will appeal to students. His technical communication skills and incentive for a Studio are essential to this project and ensures exceptional work.

Student C: Software and IT/ Layout Designer is an Electrical Engineering Major and skilled in Mac technology. He will provide a very technical side to this project. This Mac knowledge will supply an equipment expert in purchasing and installing the Mac computers. He will also install all other needed equipment. His technical skills are crucial to the success of this project.

1.3 Overview

The proposal contains three parts with many subsections. The technical approach section explains how room SEB236 will be designed and laid out for its new use as a Digital Design Studio. Also the labor and equipment that we decided to use to carry out operations will be explained in the technical approach section. By labor, we are referring to the staff of people who will install the equipment encompassed in the Digital Design Studio efficiently and in a timely manner, and the ones who will rearrange the adjacent room SEB236D to accommodate the large printer that was in room SEB236.

The operations section of the proposal will list the series of goals and milestones faced while going from the preliminary stages of the Digital Design Studio to its final stages. It will also sum up all of the costs accrued for the renovation of room SEB236 and comparing it to the budget we received prior to the project. The budget and cost portion of the operational plan will, in details, show exactly where each penny of the budget was distributed to for the Digital Design Studio.

The executive summary section of the proposal provided our client with a brief review of the process and implementation of the Digital Design Studio. The main points we would like our client to get from each section was also explained in the executive summary.

The assurance of Mercer's push for innovation and belief in educational excellence will be throughout this proposal. The Effective use of everything Mercer has to offer is highly emphasized in Mercer Optimizing's plan to promote growth from within by constructing the Digital Design Studio in room SEB236. In the next section, the Technical Approach will be outlined, giving a step-by-step plan for the renovation of SEB236.

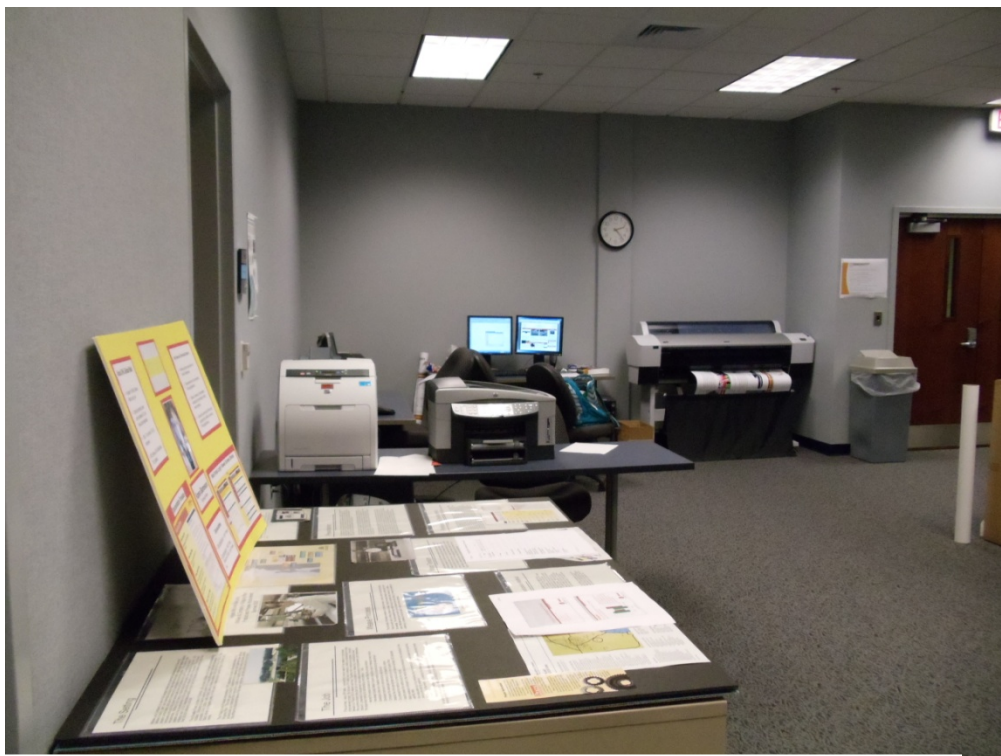


Figure 1.2: Shows the left portion of room SEB236 and the large printer being relocated to the adjacent room.



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2. Technical Approach

In today's society, minimum financial impact while maintaining high standards of quality is important to clients and investors alike, especially when dealing with private institutions and their limited funding. The perception of the end users is also important because how they perceive the dedication of funds towards certain projects determines how much support that project has in terms of usage. Knowing what the money invested in a project is going towards is pertinent to eliminate the time between the proposal of an idea and its implementation.

The technical approach of the proposal for the Digital Design Studio is to clearly describe the software, electronic equipment, furniture, and the layout used for the implementation of the Digital Design Studio. A detailed description of the data collected of the analysis of the end user and a set list of criteria we used to maintain quality and consumer satisfaction will be spelled out within this portion of the document.

2.1 Purpose of Plan

Satisfying our client's needs by being as efficient as possible with the budget presented is important due to the level of difficulty of acquiring funds. Staying within the proposed budget is imperative to the Digital Design Studio since the money for it is mostly donations. Apart from cutting costs and sticking to the budget, was the redesigning of room SEB236 and using its preexisting furniture.

Our approach to the Digital Design Studio was to be as resourceful as possible and repurpose the equipment that is already being used in room SEB236. The amount of tables used for the computer stations are the perfect amount for the MAC computers we are going to fill room SEB236. The only furniture we would have to consider ordering is chairs since the number present is not sufficient to support the twenty-four computer stations. With the equipment already being used, certain inspections of the equipment were done to ensure high standards of quality to maintain consumer satisfaction.

2.2 Equipment

The equipment we intend to purchase involves twenty-four 21.5" iMac computers along with some software applications, four extension cords, four twelve-outlet surge protectors, and an overhead projector. The list software equipment for the Macintosh computers is a dual operating system, Adobe Creative Suite, Microsoft Office, Microsoft Project, Microsoft Visio, Microsoft Publisher, Adobe Acrobat 9 Professional, iMovie, Adobe Illustrator, Audacity, and GarageBand. All of the information about each piece of equipment is given below:

Hardware Equipment

21.5" iMac

Estimated Cost: \$1,149 each, \$27,756 for all 24

Description: The iMac includes a monitor, mouse, and keyboard. It offers a hard drive size of 1TB and system memory (RAM) of 4GB. This computer also has a 2.7GHz Quad-Core Intel Core i5 processor. It has four USB 2.0 ports, and a built-in AirPort Extreme enabling wireless networking. The product weighs 20.5, measuring 20.8" X 17.75".

Features: 4 GB RAM; 2.7GHz Processor; Mac OS X Snow Leopard operating system preinstalled; built-in Hi-def display; edge-to-edge glass covers; seamless enclosure of aluminum surface; Wi-fi cordless keyboard and touch only mouse (Magic Mouse) with cool inertial scrolling; built-in speakers and microphone; power cord; USB-to-iPod cable; LED backlighting; IPS(in-plane switching) technology; and cool and silent components.

Ativa 3-Outlet Indoor Extension Cord, 12', Black

Estimated Cost: \$9.99

Description: This type of extension cord is a flat cord, right angle plug that enables resistance of being pulled out accidentally.

Features: flat cord; right angle plug; and grounded 3-prong connector and outlets.

Belkin Home/Office – 12 outlets – 10' cord – 3669 Joules – Phone/Ethernet/Coaxial Protection

Estimated Cost: \$22.95 each

Description: The surge protector serves as a power protection for professional work areas and electronics. This model features a detachable cord-management clip that helps organize cables.

Features: 12 Surge-protected outlets with 3-line AC protection; 3669 Joule energy rating providing maximum power protection; 10' extended cord; simple detachable cord management system to help reduce cable clutter; filters EMI/RFI noise up to 75 dB reduction; Ethernet and coaxial protection; right angle plug; and sliding cover for each outlet.

BOXLIGHT ProjectoWrite2 LCD Video Projector

Estimated Cost: \$1,299.00

Description: The projector has a built-in CCD camera which detects IR interruption. This allows for use of the mouse, e-pen or e-wand to manipulate text, data or images. The user can modify, save or email anything that's visible on the screen.

Features: Resolution of 1024 x 768, Dimensions 12.8" x 10.24" x 3.8", weight of 6.4 lbs, and it has 33 dB of audible noise. It is compatible with VGA, SVGA, XGA, SXGA, UXGA, Mac.

Complete False Ceiling Projector Mount

Estimated Cost: \$220.99

Description: The Projector Mount has a false ceiling adapter plate which allows for suspended projector installation and the adaptor is hidden above the ceiling tiles.

Features: 360° rotation, +/- 20° tilt and roll, cable routing inside pipe, adapter hides above ceiling, dual-knockouts, Escutcheon Ring, lifetime guarantee

Creative Cambridge Soundwork Speakers

Estimated Cost: \$19.99

Description: Multimedia speakers

Features: 8-3/4" high x 5-1/2" deep x 4" wide

Software Equipment

Boot Camp

Estimated Cost: Free

Description: Boot Camp is software that enables the Macintosh computers to have dual operating systems. It will enable the computer to install such operating systems like Microsoft Windows XP, Windows Vista, Windows 7, or Gui/Linux.

Required operating software: Mac OS X

Windows 7

Estimated Cost: \$199.95

Description: Windows 7 is latest updated version of Microsoft Windows operating system produced by Microsoft.



Figure 2.1: Having dual Operating Systems will greatly benefit students

Adobe Creative Suite Design Premium CS5 Institutional Edition

Estimated Cost: \$598.95

Description: Adobe Creative Suite is a collection of all creative Adobe software products, including graphing design, video editing, and web development.

Compatibility: Mac OS X

Features: Adobe Acrobat 9 Pro, Adobe Acrobat Connect, Adobe After Effects, Adobe Audition, Adobe Bridge, Adobe Contribute, Adobe Device Central, Adobe DreamWeaver, Adobe Dynamic Link, Adobe Encore, Adobe Fireworks, Adobe Flash Professional, Adobe Illustrator, Adobe InDesign, Adobe OnLocation, Adobe Photoshop, Adobe Premiere Pro, and Adobe Version Cue; 2D and 3D images with Photoshop extended; roundtrip editing with other NLEs; encoding and delivery for virtually any screen; roto brush in after effects; integration with CS live online services; compositing and animation tools in after effects; tight integration between adobe premiere pro and after effects; script-to-screen workflow; import native illustrator files into after effects; interactive design with flash professional or new flash catalyst; and pristine audio creation in sound booth.

Microsoft Office 2010

Estimated Cost: Free (Mercer has a Global License)

Description: Microsoft Office is a proprietary commercial office suite that contains familiar software applications such as Microsoft Word, Excel, Outlook, PowerPoint, and Publisher. Microsoft Word serves a word processor program that enables users to read and write on electronic documents. Microsoft Excel is a spreadsheet program that enables users to input, organize, and store data. Microsoft Outlook is a manager and e-mail communication software used for business purposes and Microsoft PowerPoint is a presentation program that serves as a tool to present electronic information to a larger audience. Microsoft Publisher is a desktop publishing application that makes use of professional designs to make marketing materials and other documents.

Compatibility: Microsoft Windows

Features: Microsoft Word, Microsoft Excel, Microsoft Outlook/Entourage, Microsoft Publisher, and Microsoft PowerPoint.

Microsoft Project

Estimated Cost: \$199.95

Description: Microsoft Project is project management software that assists users in making plans, assigning tasks, tracking progress, managing budgets, and analyzing workloads.

Compatibility: Microsoft Windows and Mac OS X

Features: management tools that keep track of events and create network charts and Gantt charts.

Microsoft Visio

Estimated Cost: \$175

Description: Microsoft Visio is diagramming tools software that enables users to use vector graphics to create diagrams.

Compatibility: Microsoft Windows and Mac OS X

Features: tools enabling user to create diagrams, shapes, and flowcharts; various types of stencils; ability to customize stencils; and different extensions for storing drawings and templates.

iMovie

Estimated Cost: Free

Description: the iMovie is proprietary video recording studio software that imports video footage to the Mac through FireWire interface, USB port, or files from a hard drive.

Compatibility: Mac OS

Features: movie making software tools; movie trailers; all-new audio editing; one-step effects; people finder; and sports and news themes

Audacity

Estimated Cost: Free

Description: Audacity is an audio production recording software that allows users to edit sound clips.

Compatibility: Microsoft Windows and Mac OS

Features: record and play sounds; import and export files such as WAV, AIFF, MP3, and OGG; edit sounds using cut, copy, and paste features, mix tracks, or apply effects to recordings; a built-in amplitude-envelope editor, a customizable spectrogram mode, and a frequency-analysis window for audio-analysis applications; built-in effects that include bass boost, wah wah, and noise removal; and VST plug-in effects.

GarageBand

Estimated Cost: Free

Description: GarageBand is an audio recording studio software that allows users to create music or podcasts.

Compatibility: Mac OS

Features: tutorial of new lessons for piano and guitar; guitar/piano recorder; flex timing; groove matching; and guitar amps and effects.

2.3 Audience Analysis

Different approaches were taken to fully handle the scope of implementing the Digital Design Studio: Surveying the potential audience, researching technical services, and getting comparative estimates on the equipment that will be used. Each aspect of the different approaches brings a sense of insight on how to maintain a positive perception in the end user's eyes, create the most ergonomic layout of the room, and to keep a balance between high quality equipment and minimum financial impact.

Survey Analysis

Getting feedback from the students who will be using the Digital Design Studio is highly important. Proper analysis of them is crucial for predicting the impact the Digital Design Studio has, and its projected amount of use. To correctly assess the audience, we used student surveys to collect data about their perception.

TCO Majors vs. Non-TCO Majors

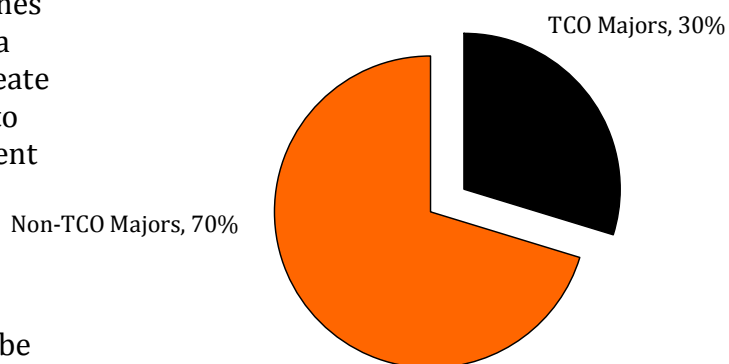


Figure 2.2: shows the percentages of Tech. Comm. Majors compared to Non-Tech. Comm. Majors.

We distributed a survey to twenty-seven random students on campus to ensure equal opportunity and a variety of students with different majors. The different majors sampled accurately correspond to the different perceptions of the entire population of that particular major. We categorized all of the surveyors into two categories: Technical Communication majors, and Non-Technical Communication majors. The contrast of these two groups will provide whether or not the implementation of the Digital Design Studio is only accepted by people who will receive direct benefits, the Technical Communication majors, or will it be a more ubiquitous acceptance across Mercer's Campus from the sampling of Non-Technical Communication majors.

The following data is from the analysis of two of the main questions, number one and four, on the survey which reflect the initial perception of the potential users of the Digital Design Studios, and the prediction of future use of it. The five choices for question one was: Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree.

According to the survey analysis, *100 %* of the Technical Communication majors "strongly agreed" or "agreed" that there should be another Digital Design Studio. As far as the Non-Technical Communication majors, there was a pretty high acceptance of the implementation of the Digital Design Studio; *79 %* to be exact. The other students either felt "neutral", *5 %*, or "strongly disagreed" or "disagreed" with its construction, *16 %*.

After checking how the distribution of funds towards a new Digital Design Studio would be perceived by Mercer's students, we analyzed how frequently the Technical Communication majors and Non-Technical Communication majors would use the Digital Design Studio. The five choices for question four was: Never, Seldom, Neutral, Frequently, or Always.

According to this analysis, *88%* of the Technical Communication majors would "always" or "frequently" use the Digital Design Studio, and the remaining *12%* would "seldom" or "never" use it. As far as the Non-Technical Communication majors, *47%* would "always" or "frequently" use the Digital Design Studio. The remaining said they would "sometimes" use the Digital Design Studio, *32%*, or "seldom" or "never" use it, *21%*.

2.4 Criteria of Success

Mercer Optimizing will measure the success of the Digital Design Studio on the following criteria; cost effectiveness, project duration, and quality. Since our client is currently raising funds we want our overall project to stay with-in, or even under, the allotted budget. Mercer Optimizing strives to provide high quality while keeping to the budget since this is the most import criteria for a successful Design Studio. Another criterion we have chosen for a successful Design Studio is project duration. In order to be successful we must finish the project in a timely manner by keeping to the schedule displayed in the Gantt Chart in Appendix B. This will make transitioning between tasks very simple. The last criterion is quality, since this room will be greatly used by both students and professors it is import for all equipment to well made.

2.5 Location

The Digital Design Studio will be done in lab room 236 located in Mercer University's Science and Engineering Building. The room can be entered through either the back of classroom 201/202 or the side of the corridor opposite to offices 234 and 235. For a better illustration, view [Figure 2.3](#).

2.6 Dimensions

We have successfully measured room 236 with dimensions 30ft X 40ft. The back door was measured to be 10ft X 3.75ft. More detailed dimensions can be seen in the Original Layout ([Figure 2.4](#)).

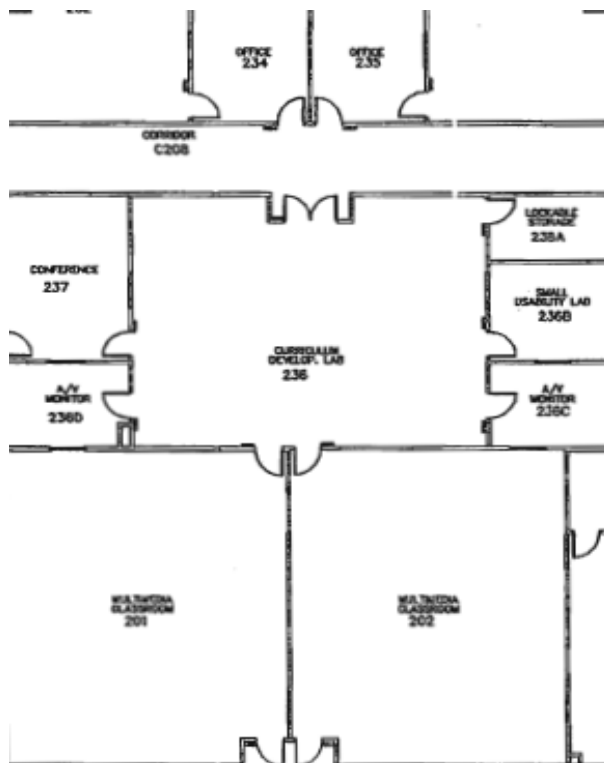


Figure 2.3: Location of SEB room 236. On the second floor of the Science and Engineering Building, you will find SEB 236 through the back doors of classrooms 201 and 202. Also, you may access room 236 through the door opposite to offices 234 and 235 in the corridor.

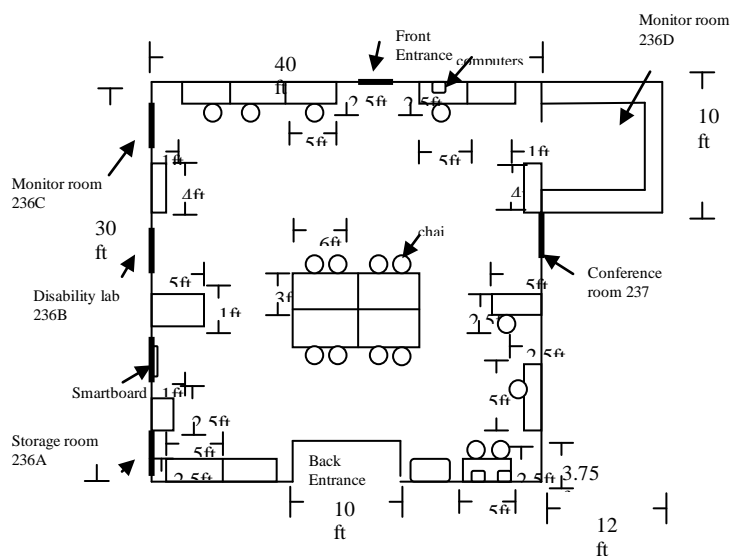


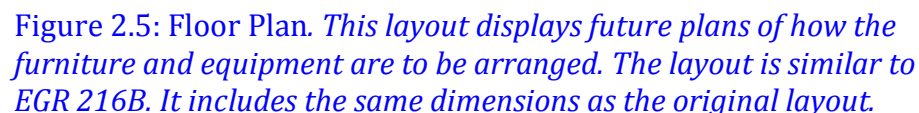
Figure 2.4: Original Layouts. This layout displays the current layout of the furniture and equipment as of 4/18/11. It also displays the dimensions of the room as well as the furniture and equipment within it.

2.7 Floor Plan

Original display

As displayed in the figure above, the room contains ten 25ft X 5ft tables, four 3ft X 6ft tables with two suitable chairs, a printer, smart board, bookshelf, two file cabinets, one 1ft X 5ft, and three computers. The four 3ft X 6ft tables are joined together in the center of the room whereas the other tables are set against the walls at random locations. The smart board is located toward the right end of the room along with the bookshelf while the other is placed between the doors of room 237 and the monitor room.

This plan is similar to the layout found in EGR 216B in the engineering building, in which the tables will be arranged in the center of the room in the same manner as shown in [Figure 2.4](#). The instructor's station will be set to the far left end of the room where the two 3ft X 6ft tables will be joined in an "L" shaped style. There, an existing Mac computer will be placed on the table closest to the smart board. The printer will be placed in the monitor room and the two cabinets will join together in the left corner of the first entrance. The projector will be placed to the center left of the room. The smart board will be placed against the wall to the right of room 237. The chairs will be placed evenly around the center section. Two computers will be set on each table of this perimeter. The lone 1ft X 5ft table will be placed in the far right corner of the room. The bookshelf will be placed approximately four feet away from the instructor's station.



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3. Operational Plan

In this section, Mercer Optimizing demonstrates its ability to implement a plan of action, a realistic budget, and a quality control plan for the Digital Design Studio.

3.1 Management

Mercer Optimizing takes pride in all projects and as a result our management team is organized, skilled and efficient. Our team has a variety of skill sets and experience making us excellent managers.

Our team includes an Operations Manager/ Budget Lead who will supervise all processes and team members for the Digital Design Studio. This manager will also purchase all equipment and review financial transactions to keep the project within the allotted budget.

Our team also includes a Public Relations Liaison/Technical Document Designer who will interact with the Mercer representatives directly relaying all information to other team members. Also any problems which arise from the client will be reported to the Public Relations Liaison.

The Software and IT Manager/Layout Designer will install all the computers and software as well as coordinate team members while arranging the furniture and equipment.

All aspects of the project will be properly completed and thoroughly inspected by all managers prior to completion.

3.2 Plan Implementation

Mercer Optimizing strives to keep every project on schedule and work vigorously to complete all tasks in a timely manner. In order to keep to our strict schedule we will follow a detailed Gantt chart and implement project milestones and checkpoints.



Figure 3.1: iMac Computer is an excellent asset to Mercer's Digital Design Studio

Milestones

Milestones are the significant accomplishments of the project. They are used to keep all tasks on schedule as well as provide workers with specific goals to accomplish. Every two days represents a milestone in the project. Each milestone is illustrated on the Gantt chart by a black diamond. Overall, the milestones will aid in effortless transitioning from one task to the next.

Checkpoints/Gantt Chart

The Gantt chart is a useful tool used to clearly portray all checkpoints and the duration of each task. This chart displays our projected timeline for the Digital Design Studio. The days on the chart do not represent consecutive days of the week; they represent days of the project. This allows for variations in shipping time. Checkpoints are when the managers of Mercer Optimizing will meet to discuss and inspect that each task is going as planned. The milestones and checkpoints are labeled on the Gantt chart. The checkpoints are labeled as yellow squares on the Gantt chart. The detailed Gantt chart is shown in Appendix B.

3.3 Budget and Cost Analysis

Budget

Mercer Optimizing intends to keep the costs of the digital design studio within the running budget provided. To ensure this we will purchase high quality equipment which is also cost efficient. The amount of money dedicated to implementing the Digital Design Studio will be raised through donations and funding from Mercer's strong Alumni network.

According to documentation provided by our client, the running budget for this project is roughly \$50,000-\$60,000. This budget includes MAC computers, the projector, the additional software and service packages costs, the additional furniture needed to complete the room and the maintenance work required to accommodate the printer in the adjacent room.

Cost Justification

Mac computers:

Mercer Optimizing will install 24 iMac Computers that are 21.5 inches diagonally and have a 2.7GHz Intel Quad Core i5 processor, as seen in [Figure 3.1](#). Each individual iMac is \$1,149 and all 24 iMacs will be \$27,576.

Projector:

Mercer Optimizing will use the BOXLIGHT ProjectoWrite2 LCD Video Projector which is the same projector installed in other rooms in SEB. Using this standard projector will lessen

the learning curve of students, faculty, and staff. It will also be compatible with hardware already used by maintenance such as the replacement bulbs.

Software:

Every Mac already comes with the Mac OS X Snow Leopard operating system as well as the following included software: iTunes, Time Machine, Quick Look, Spaces, Spotlight, Dashboard, Mail, iChat, Safari, Address Book, QuickTime, iCal, DVD Player, Photo Booth, Front Row, Xcode Developer Tools, iPhoto, iMovie, GarageBand, iWeb, and iDVD.

In addition to the included software Mercer Optimizing will install Adobe Creative Suite 5.5 (\$598.95), Audacity (Free), Microsoft Office 2010 (Free), Microsoft Visio (\$175), and Microsoft Project (\$199.95). These software's are necessary to digital design

classes and will be very helpful for students.

The Mac's will have dual operating systems, using Boot Camp, of Mac OS X Snow Leopard and Windows 7(\$199.95). Having dual operating systems will allow students to use whichever operating system they prefer and to use programs which may work only on one system.

Insurance:

Mercer Optimizing will have Apple Care (\$119.00 per unit), an extended protection plan, auto enrolled for each Mac computer. Apple Care provides hardware coverage, technical and software support to all Mac's purchased for three years from the original date of purchase.

Furniture:

We will use the preexisting furniture to be as cost efficient as possible. We only need to purchase seven additional chairs. The current chairs are from Seating Inc. and these chairs are model E311-Q32 Heavy Duty Basic Task, Encore 350 Task with Grade 1 color. They are \$770 each with \$10 shipping per chair.

Shelving Renovation:

The client requested moving the large printer, shown in Figure 3.2, to the adjacent room, room 236D. This room has shelving, as shown in Figure 3.3, which would need to be



Figure 3.2: Large printer that is being moved to room 236D.

removed to accommodate the large printer. Since Mercer employees would be providing the required labor and equipment there would be no charge for this renovation.

Total Cost

Table 3.1: Mercer Optimizing's perspective budget for the Digital Design Studio is under the clients estimated budget.

Item	Unit Cost	Net Cost
Mac Computers	\$1,149.00	\$27,576.00
Projector	\$1299.00	\$1299.00
Projector Mount	\$220.99	\$220.99
Speakers	\$19.99	\$19.99
Insurance	\$119	\$2,856.00
Software	\$1173.85	\$1173.85
Furniture	\$780	\$5460
Shelving Renovations	\$0	\$0
Surge Protector	\$9.99	\$39.96
Extension Cord	\$22.95	\$91.80
Total		\$38,737.60

3.4 Quality Control

Mercer Optimizing guarantees to use the highest quality materials available while being as cost efficient as possible. We propose to initiate the following quality control plan to ensure satisfactory, systematic and consistent review of the Digital Design Studio. Our plan has three parts; inspection, review of feedback, and modifications.

The Project Manager will plan, coordinate and control all aspects of the project from inception to completion. Inspections will be performed by the Project Manager at every checkpoint of the project. These inspections will include both budget and quality standards. After each inspection feedback will be provided to the client. The client will review it for budget and quality awareness. The project must stay within budget and the quality of all purchases and labor must meet or exceed the client's expectations. If there are any modifications which need to be made after review from the client we will be happy to accommodate.



Figure 3.3: Shelving in Room 236D which needs to be removed.