The following project was completed in conjunction with the CAP 402 studio in spring 2007. The project was intended to give a complete view of the entire design process and allow us to experience issues normally not focused upon within a traditional studio. The project is considered to be a semi-permanent installation and was designed to gracefully attach onto the building rather than connect. The following book was created as a way to encapsulate the entire design life of the project. The pages that follow chronologically track the design process throughout the semester.

**Contents:**
- Setting Study
- Project Outline
- Site Analysis
- Concept
- Building Process
- Presentation Documents
- Finished Project
- Closing Statements
Project Outline:

From the beginning of the project, the intention was to create an installation piece for the design studio. The installation would be a series of design process. The project was to be a series of workshops, and also work on the building process, by setting up personal goals and the experience of the project itself. We felt that as a team, we would gain a small sense of the design process and the process of working through the installation. We had to solve the problem of setting up personal goals and the experience of the project itself. We had to solve the problem of setting up personal goals and the experience of the project itself.

As designers we felt that our past studio project only gave us a small sense of the design process and the process of working through the installation. We had to solve the problem of setting up personal goals and the experience of the project itself. We had to solve the problem of setting up personal goals and the experience of the project itself.
site analysis
The First task required was choosing a site and program for the installation place. We began the process by selecting three specific spaces that we felt would be interesting to design. Through an extensive analysis of each site and the specific program designed for each site we chose the site we felt best complimented our design intentions.

The site chosen is located on the basement floor of the CAP building in what is now called the café area. There was already an attempt to create that space into a sitting area with the addition of tables and chairs. The problem is that although there is furniture within the site, it is still not used. We felt that the site itself was very inviting and gave a complex view of the many details of the CAP building. We wanted to create an installation that would draw users to begin to actually use the site.

It was important to our client that our installation worked alongside of the existing tables and chairs.
Before we began designing our installation we did a seating study of the existing seats within the CAP building. We walked around and sat within each seat to try to decide how different seats feel. We also photographed the process to give an idea of the general ergonomics of seating works. As an added bit of research we went to various furniture sites on the internet and found specific heights and sizes of modern and contemporary seats.
Our study taught us that rather than there being a specific height for seats, there is a standard range within which seats tend to fall. We found that most seats tend to be 14" to 18" tall, bar stools range from 24" to 29", and a bar itself ranges from 36" to 43" in height. We felt that rather than designing furniture to a specific height that our installation could become a piece that showcased the various heights and styles of furniture today.
The original design idea for the project was to create a variety of seating possibilities for the user. Many of the original design concepts revolved around the creation of a bar area with multiple seating spaces that form around the bar. Many of the original concepts included the creation of a wall or cover piece that helped to focus the space.
We have multiple ways of laying out the chairs:

- Concept 1
- Concept 2
- Concept 3

breathing space

The pad is important

site to create a
make the cushion stitching
and visual use meaningful
how not to encroach on people

a type of built-in and
lighting elements

connection of spaces
multi-use flexibility

connection to the wall

flow through site

juxtapose the concrete
with warm materials

comfortable seating

To do list:

- present to Michelle, Feb 9
- present to Andrew, Feb 6
- hold over some for Michelle

Make chair

Further design boards

- New model 11% or 10%
- Analysis of site and seating

Meeting at 2:00 with Michelle Wednesday

cushion

different colors
patterns

- shrugs for patterns

- make three stools

Can we use make to pattern?

use screen print to

design patterns for
cushions

use design patterns to

screen print t-shirts

Seating areas

multi-use spaces

bar

normal

floor

table

storage

Diagram 1

Near storage seating

Hallway style seating

Tie for seating

Storage

Entry

Cubicle

Paper

Cork board

Cork board
Baklet
- president / project outline
- site analysis
- concept
- presentation documents
- reception materials
- building process / CWS
- final proj. presentation
- overview of project
- closing statements

- small room not moving
- wall not moving
- bar not moving 3 - 1/4 - 1/4 - 1/4 - 1/4
- bar itself 13° - 38°
- x2 seating moving 3 strips
- x2 not moving

- pieces of furniture

- seating for 11 people 76°
- 18 x 9
- 10 x 10
- 10

- wheeling the project: crate knock down
- massive box key

- Board
- section cut of wall system - section of our piece
- diagrams of furniture seating
- diagrams of use
- diagram of mounting wall
- concept diagrams basons
- finished model designs
- wood piece
Images of the various study models built from our concepts.
Images of the Final study model. The ideas of the various other study models and concepts were combined to create the climbing design.
The Finalized concept focused upon three equal strips that flow along the floor forming various seats, benches, and a bar. The strips continue to flow up the wall bending at various angles until they all reach up the top of the window wall. At a certain point all the wall strips line up creating a projection wall used to showcase projects or a movie during an all niter.
presentation documents
Installation place

Light penetration diagram

Wood density diagram

Light Filter diagram

Video wall diagram

Furniture movement diagram

Seating diagram
The final design of the installation incorporates four benches and a bar that sit along the originally designed strips and a twenty foot wall piece that runs the length of the window wall. In contrast to the original concept, the continuous strips were cut to create separated furniture that could move along the chosen linear path of the design. We felt that giving students the option to move the furniture along a path gave the space more versatility. We hope that the versatility available will cause the project to be used in ways unseen to us as designers.

We chose to use laminated wood as the major material throughout the project. We felt that wood was a naturally beautiful material and would juxtapose the concrete that is exposed throughout the entire CAP facility. Various species of wood were laminated together in strips to create a sense of movement throughout the site. We maximized the site by allowing the installation to draw visitors from every floor of the CAP building. The wall pieces visually pull views down to the site and the furniture draws the eye to the wall and up from the basement floor.

We were asked to create a piece that did not physically attach to the building, so we designed the pieces to gracefully clamp to the building. The major weight of the pieces would be held by a steel beam located at the top of the window wall. The pieces would flow down the wall attaching to the mullions on its way to finally touching the floor.
The following pages visually document the weeks spent constructing the project. The construction took up the largest portion of the semester to complete. Every week numerous hours were spent in the wood shop cutting, gluing, and fabricating the various pieces of the project. Once everything was fabricated the pieces were installed one by one onto the site. Although tedious at times the building process was very educational and enjoyable.
After an entire semester of work, the project was finally completed. Seeing the finished project was truly a sense of accomplishment, as it was a culmination of our skills and hard work.

Although every student had given his or her best effort, there were still areas that needed improvement. One of the main issues was the installation of the project. We worked closely with our professors to ensure that the installation was done correctly.

The site where the project was installed was a previously unused area of the building. We transformed it into a functional space that was both aesthetically pleasing and practical. The students expressed great pride in seeing their work come to life.

The project was a wonderful learning experience for us all, and we are confident that it will be a valuable addition to the building.

In conclusion, the project was a successful culmination of our efforts. It was a true reflection of our skills and understanding of the subject matter. We hope that the project will be an inspiration to future students and a testament to our hard work.
In closing we would like to thank all of our professors and mentors for believing in us and allowing us to create the project. It was a busy semester but both of us feel that once completed the project was one of our best accomplishments during our four years at Ball State. The skills learned within the project better prepared us for the future.

We hope that future students will look at the installation not only as an enjoyable place to site but also as an inspiration. We hope that students will see the project and be inspired enough to go through the experience of creating their own installation pieces. Part of the beauty of architecture is understanding how things are actually built. Being able to design and build a project gives students the opportunity to experience first hand the designing of connections and the boundaries of materials.