University of Houston-Clear Lake

UH-Clear Lake Master Plan 2011 to 2020

Executive Review

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Vice President Administration and Finance  
Senior Vice President for Academic affairs and Provost

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University of Houston System

Introduction

This University of Houston System Master Plan Executive Summary is the work of DesignLAB-Houston. As the professional research arm of the University of Houston Gerald D. Hines College of Architecture, DesignLAB generates preliminary design studies and research and development work across the disciplines of architecture, planning and industrial design. The DesignLAB’s approach to this master planning effort is to make seamless the academic, fiscal and land use plans of each University of Houston System campus.

Patricia Belton Oliver, FAIA
Dean of the Gerald D. Hines College of Architecture

Process

The master plan process followed for each campus includes the documentation and analysis of current space utilization for each building and floor area within the project scope, mapping the reported utilization on current floor plans and then conducting in-person walkthroughs. DesignLAB verified the utilization with the physical facilities conditions and determined additional capacity for teaching and other activities to accommodate growth within the existing facilities.

We also reviewed the academic course schedule for a snapshot semester (Fall 2010) to determine the fill rates for each existing course resulting in additional capacity within the existing teaching resources.

Once the space utilization of existing facilities was measured, we developed multiple scenarios for growth and expansion within the parameters of enrollment projections, revenue projections, and available resources.

For the investigation of research at UH, DesignLAB mapped the principle investigator space assignments onto the lab floor plans, verified these assignments with in-person walkthroughs, and mapped these assignments’ square footage totals to develop a comparative productivity metric for the research space. Our goal was to identify additional research capacity and assess maintenance and operations concerns related to the flow of IDC support to assist in the development of a campus research policy.

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CHAPTER 1 - INTRODUCTION ROLE AND SCOPE

Institutional Profile

Since its inception in 1974 as an upper-level educational institute, the University of Houston-Clear Lake has served with distinction its mission of providing fair and equitable learning opportunities to the Houston/Galveston metropolitan area, communities along the upper Texas Gulf Coast and beyond.

- Since opening its doors the university has conferred more than 53,965 degrees to about 51,438 alumni from the state, nation and abroad.
- In fall 2010, extensive class offerings and programs attracted 8,099 students to UH-Clear Lake. 59.3 percent of these students were enrolled in undergraduate programs and 40.7 percent were enrolled in graduate programs.
- Approximately 42 percent of students were enrolled full-time and 58 percent were enrolled part-time.
- UH-Clear Lake serves a diverse student body as indicated by its ethnic diversity and international representation. In fall 2010 student ethnicity consisted of 49 percent White; 10.2 percent African American; 21.8 percent Hispanic; 6.5 percent Asian; 0.4 percent American Indian; 9.7 percent International and 2.4 percent other.
- In fall 2010, UH-Clear Lake employed a total of 744 faculty supported by 529 staff.
- The Schools of Business, Education, Human Sciences and Humanities, and Science and Computer Engineering currently offer 41 bachelor’s degrees, 45 master’s degrees and one doctoral degree.
- About 79 percent of the undergraduate students transfer from local community colleges.
- 47.3 percent of UH-Clear Lake students reside in Harris County.
- UH-Clear Lake accounts for 10.7 percent of FTE enrollment produced by the UH System and has the second largest graduate enrollment rate with 1,043 graduate degrees awarded for fiscal year 2010.

UH-Clear Lake emphasizes academic excellence through teaching, research and service, and delivers educational opportunities via new technologies (online education) and distance learning (Pearland educational offerings). The Schools of Business, Education, Human Sciences and Humanities, and Science and Computer Engineering currently offer 41 bachelor’s degrees, 45 master’s degrees and one doctoral degree. Undergraduate students typically complete lower division work at area community colleges before enrolling at UH-Clear Lake. About 79 percent of the undergraduate students transfer from local community colleges, the top three being San Jacinto College, Alvin Community College and Houston Community College. 47.3 percent of UH-Clear Lake students reside in Harris County. UH-Clear Lake accounts for 10.7 percent of FTE enrollment produced by the UH System. It has the second largest graduate enrollment among all UH System institutions.

The University of Houston-Clear Lake Mission

The University of Houston-Clear Lake is a student-centered, community-minded, partnership-oriented university that offers bachelor’s, master’s and selected doctoral programs to enhance the educational, economic, and cultural environment of the Houston-Galveston metropolitan region. UH-Clear Lake serves a diverse student body with special emphasis on undergraduate transfer, graduate and international students. The university offers the highest quality instruction and nationally accredited academic programs designed to develop the critical thinking, creative, quantitative, leadership and communication skills of students. The university conducts applied and basic research and engages in community and professional service that support both the economic development and the quality of life of the area. The university is committed to community engagement through partnerships with educational institutions, businesses, government agencies, and nonprofit organizations.
UH-Clear Lake Strategic Planning Goals

GOAL #1
University of Houston-Clear Lake will achieve academic excellence through the offering of high quality programs delivered by an outstanding faculty and staff in an environment supportive of teaching and research.

OBJECTIVES
• Recruit, develop, and retain high quality faculty and staff to enhance academic and research excellence and to accommodate enrollment growth.
• Ensure compensation for faculty and staff is competitive relative to peer institutions.
• Achieve and maintain nationally accredited programs and other forms of national recognition.
• Increase the number of academic programs with international connections and perspectives.
• Support increased levels of applied and basic research as well as creative activities.

GOAL #2
University of Houston-Clear Lake will provide a supportive student-centered campus environment focused on student access and success.

OBJECTIVES
• Achieve downward expansion.
• Develop new academic programs and enhance existing programs to meet community and student needs.
• Develop and deliver quality online and off-campus programs.
• Increase student financial support, including scholarships.
• Provide academic and support services to increase student enrollment and retention.
• Develop the critical thinking, creative, quantitative, leadership and communication skills of our students.
• Enhance and support student life including student government and organizations, recreation, housing, community service, leadership development, research and other activities.

GOAL #3
University of Houston-Clear Lake will enhance a campus which is attractive, functional, safe and supportive of the university’s mission; promote an environment for effective collaboration; and maintain fiscal responsibility.

OBJECTIVES
• Acquire and maintain an appropriate infrastructure, including property, facilities, and technology.
• Ensure the physical safety and security of the campus.
• Promote a collaborative university shared governance system which includes faculty, staff, students and administrators.
• Support ethnic and gender diversity within the faculty, staff and student body.
• Exercise prudent stewardship of human, financial, physical and environmental resources.

GOAL #4
University of Houston-Clear Lake will build mutually beneficial partnerships through outreach activities for the benefit of faculty, staff, students, alumni and the community.

OBJECTIVES
• Develop and enhance partnerships with educational institutions, including school districts, community colleges and universities.
• Develop and enhance collaborative education, research and training partnerships with businesses, governmental agencies and non-profit organizations.
• Engage the university’s alumni through professional development, social and university service opportunities.
• Engage the community through life-long learning programs, the cultural arts and other activities.
• Increase resources from the broader community in support of the university’s mission.
Clear Lake City
Annexed by Houston over 20 years ago, this community has its own unique personality. With an estimated population of 63,500, it is home to NASA/Johnson Space Center, University of Houston Clear Lake and is a master-planned residential area.

Clear Lake Shores
Is an island community of about 1,400 citizens, located on the southeastern side of Clear Lake at the entrance to Jarboe Bayou. It is home to four major marinas, one of which, with 1,300 boat slips, is the largest privately owned marina in the country. Clear Lake Shores is about a 25 minute drive from the UHCL.

El Lago
Previously the home of Jean Lafitte’s pirates, El Lago is located on the west bank of Taylor Lake to the northern shore of Clear Lake. This residential community of about 3,400 is a 5 minute drive from the UHCL.

Kemah
This seaside community is home to about 1,525 residents and unique area shops, galleries and restaurants in a “Waterfront District”. Local shrimpers sell their days catch in markets and wholesale to many Houston restaurants making the Kemah area a noted stop on the Galveston Bay. Kemah is a 20 minute drive from UHCL.

League City
Located on the south shore of Clear Lake, League City is the largest and fastest growing city in the area with a population of about 83,560. League City is a 20 minute drive from UHCL.

Nassau Bay
Directly across from the Johnson Space Center, Nassau Bay is home to 4,500 residents, hotels and the state-of-the-art Christus-St. John Hospital. Nassau Bay is a 5 minute drive from UHCL.

Seabrook
With a Galveston Bay and Clear Lake waterfront, Seabrook is a zoned community of just over 9,500. Seabrook is a 15 minute drive from UHCL.

Taylor Lake Village
Taylor Lake Village is a quiet bedroom community with about 4,200 residents. Taylor Lake Village is a 5 minute drive from the UHCL.

Webster
Located at the gateway to the NASA/Bay Area, off the I-45 freeway, this community of about 8,225 residents and offers institutional, commercial, and many retail outlets. Webster is a 15 minute drive from UHCL.

University of Houston-Clear Lake
2700 Bay Area Boulevard
Houston, Tx 77058
### Clear Lake Community - Non-Profit Organizations/Businesses

#### Non-Profit Organizations
- Armand Bayou Nature Center
- Goodwill
- Galveston Bay Foundation
- Chamber of Commerce
- Big Brothers Big Sisters
- American Legion Post 490
- Raytheon Co
- Society of Imaas Inc
- Bay Area Houston
- Clear Lake Emergency Medical
- Seabrook Volunteer Fire Department
- Young Life International
- Harbor View Care Center
- San Jacinto Day Foundation
- Pasadena Moose Lodge
- Pasadena Chamber of Commerce

#### Churches
- Temple Beth Tikvah
- University Baptist Church
- Clear Lake Baptist Church
- New Beginnings Church
- Gateway Community Church
- First Baptist Church Webster
- OnsLife Church
- Nassau Bay Baptist Church
- Gloria Del Lutheran Church
- Clear Lake Bible Church
- Clear Lake Church of Christ
- Clear Lake United Methodist Church

#### Businesses
- Lockheed Martin
- Boeing
- Scholastic Books

#### Cultural Arts
- Bay Area Houston Ballet & Theater
- Clear Lake Symphony
- Arts Alliance Center of Clear Lake
- Visual Arts Scholastic Events
- Clear Lake Area Seniors Program
- Kennedy Dance Center
- Intercultural and International Student Services
- Cultural Extravaganza
- the Vagina Monologues
- World AIDS Day Art Contest
- Celebrating Our Elders

#### Religion
- Global Interfaith Dialogue

**CHAPTER 2: COMMUNITY**

**UNIVERSITY of HOUSTON**

GERALD D. HINES COLLEGE of ARCHITECTURE
Clear Lake Community - Athletics

- Sylvan Beach Park
- Fairmont Park
- Strawberry Park
- Gulf Palms Park
- Bay Oaks Country Club
- Bay Area Park
- Pine Gully Park
- Rex L Meador Park
- Taylor Lake Village Community Park
- Clear Lake Park
- Nassau Bay City Park

- LPHS Athletics
- City of Pasadena: Pal Gym Athletics
- Crossfit Unity
- Wheelhouse Baseball School Llc
- Softball Lessons

University of Houston-Clear Lake
2700 Bay Area Boulevard
Houston, Tx 77058
Houston's climate is classified as humid subtropical. Houston with the warmest month (on average) as July at 84.5 °F (29.2 °C), and the coldest month being January at 54.3 °F (12.4 °C). The average yearly precipitation level is 54.0 inches (1,370 mm). Houston has occasional severe weather, mostly in the form of flooding. Spring supercell thunderstorms sometimes bring tornadoes to the area. Houston sometimes experiences tropical cyclones during the hurricane season, which can bring significant damage to the city. The last to hit was Hurricane Ike in 2008.

Precipitation is plentiful in the humid subtropical climate zone in North America. Although most areas tend to have precipitation spread evenly throughout the year.

### Monthly Wind Data

<table>
<thead>
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<td>MPH</td>
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### Monthly Temperature Data

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<td>Max °F</td>
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<td>Mean °F</td>
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<td>Min °F</td>
<td>45.2</td>
<td>48.2</td>
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<table>
<thead>
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<th>Oct</th>
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<td>Max °F</td>
<td>93.6</td>
<td>93.4</td>
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<td>65.4</td>
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<tr>
<td>Mean °F</td>
<td>84.5</td>
<td>84.4</td>
<td>80.5</td>
<td>72.2</td>
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<td>Min °F</td>
<td>75.3</td>
<td>71.6</td>
<td>62.3</td>
<td>53.4</td>
<td>46.7</td>
<td>39.3</td>
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### Monthly Precipitation Data

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<th>Jun</th>
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<td>Inches</td>
<td>4.76</td>
<td>3.11</td>
<td>3.38</td>
<td>3.42</td>
<td>5.16</td>
<td>6.66</td>
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<table>
<thead>
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<th>Month</th>
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<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches</td>
<td>4.63</td>
<td>4.52</td>
<td>5.90</td>
<td>4.37</td>
<td>4.78</td>
<td>3.79</td>
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</table>

### Clear Lake Storm History

Hurricane Ike was the third-costliest hurricane ever to make landfall in the United States. Due to its immense size, Ike caused devastation from the Louisiana coastline all the way to the Kenedy County, Texas region near Corpus Christi, Texas. Damages from Ike in U.S. coastal and inland areas are estimated at $29.6 billion (2008 USD). The hurricane also resulted in the largest evacuation of Texans in that state’s history.

**Summers** - June through August in Houston is very hot and humid, often with regular afternoon thunderstorms. The average daily high temperature peaks at 94 °F (34 °C) at the end of July,[3] with an average of 59 days per year above 90 °F (32 °C).[4] The average relative humidity ranges from over 90 percent in the morning to around 60 percent in the afternoon.

**Autumn** - Houston is warm, with temperatures averaging in the upper 60s to lower 80s °F (20-28 °C) during the day and in the 50s to lower 60s °F (10-17 °C) at night.[12] Cold fronts that move through the region during the fall can bring rain.

**Winters** - Houston is very mild and temperate. With the average high in January, the coldest month, is 63.3 °F (17.4 °C) and the low 45.2 °F (7.3 °C). Houston has an average of 18 days per year of freezing temperatures. Cold fronts during the winter drop nighttime lows into the 30’s, averaging out at 36°F (2.2°C) but usually above freezing.

**Spring** - Lasting from March 20 through May, temperatures are generally not hot yet, averaging from 75–82 °F (23.9–27.8 °C) in the day and 56–64 °F (13.3–17.8 °C) at night. Spring thunderstorms are not uncommon, often with spectacular lightning shows.
Utilities and Site Easements

After the Bayou Park areas of the UHCL Campus the next largest land use of is the easement system for above-ground electrical power and below-ground gas pipes which runs north and south through the property. The grounds under the towers cannot be used for any program but may be crossed by road. This area is largely open-grass field (please see drawing and photo) and runs the length of the UHCL campus across Space Center Boulevard and runs the full length of the adjacent NASA campus. These power lines are serviced from the Upper San Jacinto Bay power station to the north and are a major element in the commercial and community power grid system. The electricity lines are owned by Center-point and they service the meters, but Noble Energy provides the electricity to the grid.

- Water: Clear Lake City Water Authority
- Electricity Provider: Noble Energy Solutions
- Natural Gas: Luminant and Centerpoint Energy Resources
- Telephone: AT&T

No Build Zone. Bayou Flood Easement
No Build Zone. Power and Gas Easement
The University of Houston-Clear Lake campus is bordered by three roads: Bay Area Boulevard to the west, Space Center Boulevard to the south, and Middlebrook Drive to the north and east.

One of the two main entries to the UHCL campus is from Bay Area Boulevard, a main street in the Clear Lake community that connects directly with the I-45 freeway, about four miles from campus. From south Bay Area Boulevard, one enters on University Drive South at Campus Entry #1 from which the existing Arbor Building and Delta Buildings are accessed. All athletic areas of the south campus are also currently accessed from University Drive South.

The second entrance access is at University Drive South, which intersects Bayou Road, a main internal campus loop that accesses the main parking areas of the campus to the east. University Drive South then turns into University Drive North, just beyond the Bayou Bridge and accesses the entry to the Bayou Building and Student Service and Classroom Building. University Drive North then turns west to intersect Bay Area Boulevard at Campus Entry #2. Bayou Road runs north to intersect Middlebrook Drive at Campus Entry #3.

There are approximately 2.2 miles of campus roadways and 1,063,000 sq ft of surface parking in the existing plan. An additional 1.7 miles of campus roadway and 635,000 sq ft of surface parking are proposed for the 2020 Plan.

Bayou Bridge

With the freshman housing and most of the parking located at the north end of campus, and courses offered at the south in the newly developed Arbor Building and the active Delta Building, students will be traveling over the Bayou Bridge by bike and by foot in greater numbers. The bridge is a two-lane auto bridge with a sidewalk along both sides. Care should be taken to provide lighting, speed control and a safe division of passage for pedestrians.
Parking Demand and Supply - Parking Counts Required for Projections

Existing parking lots currently hold 3,216 spaces today and are observed to be at a near-full level at current peak-use periods (first evening session). With the expansion of the morning course offerings, UHCL should see a period of increased enrollment without added impact to parking. However, even with the best class usage schedule, UH-Clear Lake should look to add 385 to 450 spaces to meet the 2020 projections and should complete the work by 2015 in order to meet the 2016 enrollments.

If we assume staff and faculty to be at a full count, and if we take the SCHs (Student Contact Hour) load and distribute it evenly over the five-day week and assume a five SCH factor per student, we see that the above chart shows the existing parking supply of 3,216 spaces going red in 2016.

We know that historically the parking demand is not even but hits high class-scheduled periods. We also know that we are loading many more classes into the early periods and Fridays through the downward expansion scheduling which should flatten the historic demand spikes. The ASTRA scheduling system provides UHCL a way to help distribute course offerings so that facilities and parking resources can match demand.
CHAPTER 3: SITE ANALYSIS
UNIVERSITY of HOUSTON
GERALD D. HINES COLLEGE of ARCHITECTURE

Bayou and Wooded Reserve

UHCL is adjacent to the headwaters of Clear Lake via the Armand Bayou complex and Mud Lake. Because of the natural low elevation of the site, issues related to seasonal flooding, storm run-off, and storm surge dictate building floor elevations are required to be above historic markers (please see plan for year flood levels-sheet 3.1).

Opportunities to elevate primary first floor level of buildings through the integration of base-level parking or mounding of earthworks to create protection from flood zones and gulf storm surges should be encouraged in building design. Building basement areas and belowground vaults should be avoided without careful study.
### SPACE USAGE

#### Existing Campus Plan 2011

<table>
<thead>
<tr>
<th>Room Type</th>
<th>Sq Ft</th>
<th>%</th>
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<tr>
<td>Classroom Facilities</td>
<td>68,257.42</td>
<td>9%</td>
</tr>
<tr>
<td>Laboratory Facilities</td>
<td>74,480.31</td>
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<tr>
<td>Office Facilities</td>
<td>167,040.80</td>
<td>22%</td>
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<tr>
<td>Study Facilities</td>
<td>98,988.25</td>
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</tr>
<tr>
<td>Special Use Facilities</td>
<td>52,137.86</td>
<td>7%</td>
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<tr>
<td>General Use Facilities</td>
<td>66,372.51</td>
<td>9%</td>
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<tr>
<td>Non-Assignable Space</td>
<td>72,616.07</td>
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<tr>
<td>Un-Assigned Space</td>
<td>10,763.62</td>
<td>1%</td>
</tr>
<tr>
<td>Circulation</td>
<td>157,769.30</td>
<td>21%</td>
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<tr>
<td><strong>Total</strong></td>
<td>768,426.14</td>
<td>100%</td>
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</tbody>
</table>

**Total Square Footage:** 768,426.14

**Assignable Square Footage:** 652,366.17

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**Diagrams:**

- Campus North
- Campus South
- Arbor Building
- Delta Building
- Student Service Building
- Bayou Building
- Facilities Building

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**Release June 1, 2011**
**Revised Aug 5, 2011**
### Arbor Building

- **First Floor**
- **Second Floor**
- **Third Floor**

### Bayou Building

- **First Floor**
- **Second Floor**

### Delta Building

- **First Floor**
- **Second Floor**
- **Third Floor**

### Student Service Building

- **First Floor**
- **Second Floor**

#### Room Type

- **Classroom Facilities**
- **Laboratory Facilities**
- **Office Facilities**
- **Study Facilities**
- **Special Use Facilities**
- **General Use Facilities**
- **Non-Assignable Space**
- **Un-Assigned Space**

#### Assignable Square Footage

- **Campus Total**: 768,426.14 sq ft
- **Assignable Square Footage**: 538,840.77 sq ft
Assignable Square Footage 49,116.00
Total Square Footage 63,630.00

Classroom Facilities 9,924.00 16%
Laboratory Facilities 3,008.00 5%
Office Facilities 3,372.00 5%
Study Facilities 0.00 0%
Special Use Facilities 9,323.00 15%
General Use Facilities 19,078.00 30%
Non-Assignable Space 6,101.00 10%
Un-Assigned Space 4,411.00 7%
Circulation 8,413.00 13%
Total 63,630.00 100%

First Floor Plan

A. Arbor Building
B. Building Use Percentage
C. Arbor Total
D. Arbor Assignable

CHAPTER 4: SPACE USAGE
UNIVERSITY of HOUSTON
GERALD D. HINES COLLEGE of ARCHITECTURE
### Delta Building

#### Floor Plan

<table>
<thead>
<tr>
<th>Building Use Percentage</th>
<th>Total Square Footage</th>
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</thead>
<tbody>
<tr>
<td>1 Classroom Facilities</td>
<td>3,343.93 11%</td>
</tr>
<tr>
<td>2 Laboratory Facilities</td>
<td>9,092.19 29%</td>
</tr>
<tr>
<td>3 Office Facilities</td>
<td>7,945.11 25%</td>
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<tr>
<td>4 Study Facilities</td>
<td>0.00 0%</td>
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<tr>
<td>5 Special Use Facilities</td>
<td>0.00 0%</td>
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<tr>
<td>6 General Use Facilities</td>
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<tr>
<td>7 Non-Assignable Space</td>
<td>3,037.90 10%</td>
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<tr>
<td>8 Un-Assigned Space</td>
<td>0.00 0%</td>
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<td>9 Circulation</td>
<td>7,927.05 25%</td>
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<tr>
<td>Total Square Footage</td>
<td>31,571.83 100%</td>
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**Assignable Square Footage:** 20,606.88

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<thead>
<tr>
<th>Building Use Percentage</th>
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<tbody>
<tr>
<td>1 Classroom Facilities</td>
<td>3,940.94 17%</td>
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<tr>
<td>2 Laboratory Facilities</td>
<td>8,605.59 36%</td>
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<tr>
<td>3 Office Facilities</td>
<td>0.00 0%</td>
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<tr>
<td>4 Study Facilities</td>
<td>0.00 0%</td>
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<td>5 Special Use Facilities</td>
<td>4,749.05 20%</td>
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<tr>
<td>6 General Use Facilities</td>
<td>1,104.37 5%</td>
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<tr>
<td>7 Non-Assignable Space</td>
<td>0.00 0%</td>
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<tr>
<td>8 Un-Assigned Space</td>
<td>0.00 0%</td>
</tr>
<tr>
<td>9 Circulation</td>
<td>5,274.81 22%</td>
</tr>
<tr>
<td>Total Square Footage</td>
<td>23,674.76 100%</td>
</tr>
</tbody>
</table>

**Assignable Square Footage:** 17,295.58

---

**Release June 1, 2011**

**Revised Aug 5, 2011**

**Design LAB HOUSTON**

**CHAPTER 4: SPACE USAGE**
## Student Service Building

**Floor Plan**

### Building Use Percentage

<table>
<thead>
<tr>
<th>Floor</th>
<th>Classroom Facilities</th>
<th>Laboratory Facilities</th>
<th>Office Facilities</th>
<th>Study Facilities</th>
<th>Special Use Facilities</th>
<th>General Use Facilities</th>
<th>Non-Assignable Space</th>
<th>Un-Assigned Space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third</td>
<td>15,415.18</td>
<td>23,590.12</td>
<td>44,614.93</td>
<td>631.14</td>
<td>0.00</td>
<td>28,487.38</td>
<td>4,618.62</td>
<td>3,426.23</td>
<td>148,442.49</td>
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<tr>
<td>Second</td>
<td>23,590.12</td>
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<td>28,487.38</td>
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<td>3,426.23</td>
<td>148,442.49</td>
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<tr>
<td>First</td>
<td>15,415.18</td>
<td>23,590.12</td>
<td>44,614.93</td>
<td>631.14</td>
<td>0.00</td>
<td>28,487.38</td>
<td>4,618.62</td>
<td>3,426.23</td>
<td>148,442.49</td>
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</table>

### Total Square Footage

<table>
<thead>
<tr>
<th>Floor</th>
<th>Total Square Footage</th>
<th>Assignable Square Footage</th>
</tr>
</thead>
<tbody>
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<td>34,586.55</td>
</tr>
<tr>
<td>Second</td>
<td>41,112.46</td>
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<tr>
<td>First</td>
<td>40,465.97</td>
<td>34,586.55</td>
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### Assignable Square Footage

- Classroom Facilities: 34,586.55
- Laboratory Facilities: 34,586.55
- Office Facilities: 34,586.55
- Study Facilities: 34,586.55
- Special Use Facilities: 34,586.55
- General Use Facilities: 34,586.55
- Non-Assignable Space: 34,586.55
- Un-Assigned Space: 34,586.55
- Total: 34,586.55
One of the largest effects of the inclusion of a freshmen and sophomore class at UH-Clear Lake will be to greatly improve the Space Usage Efficiency of the campus by using classrooms and general facilities in the early parts of the day. Morning and early afternoon class periods currently not filled by the upper level students are used to accommodate the new undergraduate instruction. Space Usage Efficiency scores are used by the Texas Higher Education Coordinating Board to allocate resources to campuses within the system. With the downward expansion UH-Clear Lake could move from an overall 57% SUE score to near an 82% SUE score thus allowing the University to become eligible for resources to every level of education offered based on an overall efficiency rating.

Ad Astra Information Systems

UHCL currently uses the Ad Astra Information Systems for room scheduling, tracking of room usage and percentage of classroom "fill". This system acts as the management tool through which Space Usage Efficiency (SUE) is scored. Classroom spaces set in the system are measured first by how many times they are used and then by the percentage of students that fill each class based on the room capacity. Some spaces that have specialized use are held out of the scoring system.

With the large number of variables in class scheduling, some classes over creating a potential contractual problem. Some classes may under fill, resulting in a scoring and economic problem. We found to achieve a better than 75% fill and use rate the scheduling target should be near 80%, with the understanding that there will be a "drift" plus or minus of about 5%. As courses move online and other educational paths open this percentage of drift may increase.

<table>
<thead>
<tr>
<th>Planning Target</th>
<th>Existing UHCH Classroom SCHs Capacity</th>
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<tbody>
<tr>
<td>% of Fill</td>
<td>SCHs per week</td>
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<td>1</td>
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<td>0.7</td>
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<td>0.65</td>
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<td>0.6</td>
<td>1590</td>
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<tr>
<td>0.55</td>
<td>1457.5</td>
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<tr>
<td>0.5</td>
<td>1325</td>
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</table>
In this example of a classroom scheduled (UHCL Fall 2010) from Ad Astra for one week, you see 10 courses that are scheduled into the space. The 7 blue blocks illustrate an unused capacity for 7 new course offerings of 3 hours. About 85% of the downward expansion course demands are picked up in existing space, mostly in the early parts of the day. Because some of the freshman classes are scaled at 80+ the demand for large classroom spaces will exceed the current large classroom supply.

A base line Student Contact Hours (SCH) capacity for the University can be set by looking at the classroom facility plan for a 5 day week with three class meetings per day of three hours each.

It is important to have a menu of room sizes that reflects the scale of courses that are offered by the departments. Placing a class of twenty into a room that can hold forty will score poorly as will not using classrooms. The SUE system requires one of the two, build to teaching class sizes or teach to built room size, for a successful SUE score. Some segments of any curriculum are new and in flux, starting up and growing as new offerings, they could score poorly for a period as they reach a mature position in the department schedule. In the current system a balance of strong fully filled to new lightly filled course must be maintained.
Faculty Offices

Faculty offices can be integrated into the existing spaces of the Bayou Building to meet the planning imperative of faculty coordination and community.

While faculty offices may be outside the Bayou Building, it is felt that opportunities to have each major School (Business, Education, Human Sciences and Humanities, Science and Computer Engineering) present and working in the Bayou Building fosters cross-educational relationships. Renovation to areas of the Bayou Building to allow for faculty and department staff growth will be required. (See drawings) As the Student Life Building and Science and Academic building come on line space in the Bayou Building will be freed for use for Faculty and Staff growth.

- Total possible office add is 84 using existing standards with TI budget construction levels (100%)
- Faculty demand is projected at 51, so we are within our target of keeping faculty together in existing areas

Existing Capacity of 51 - After walk-thru 43 unused offices were observed and an area (rm 2102) that could offer open seating for 8

With TI Work Capacity of 13 - unused space on level 1 & 2

With TI Work Capacity of 20 - unused space in library

<table>
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<tr>
<th>Estimated Number Faculty FTE Needed by School and by Type</th>
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<tbody>
<tr>
<td>BUS</td>
</tr>
<tr>
<td>FT Lecturers</td>
</tr>
<tr>
<td>Adjuncts</td>
</tr>
<tr>
<td>HSH</td>
</tr>
<tr>
<td>FT Lecturers</td>
</tr>
<tr>
<td>Adjuncts</td>
</tr>
<tr>
<td>SOR</td>
</tr>
<tr>
<td>FT Lecturers</td>
</tr>
<tr>
<td>Adjuncts</td>
</tr>
<tr>
<td>SOE</td>
</tr>
<tr>
<td>FT Lecturers</td>
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<tr>
<td>Adjuncts</td>
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<tr>
<td>Total</td>
</tr>
<tr>
<td>FT Lecturers</td>
</tr>
<tr>
<td>Adjuncts</td>
</tr>
</tbody>
</table>

51 new faculty offices
Phased Growth Needs for 2020

Budget Projections

The fundamental purposes of university master planning is to bring together diverse elements into a coordinated effort to achieve a united purpose. A master plan must be able to project the scope, allocated resources, and the period that the work is to be completed for the major elements of the university. UHCL has a long history of institutional coordinated planning and we have used that history to model projections. It is important to see budget amounts as a scale to the scope of work that is set to be accomplished. As the projected scope of work completed by a department is met the allocations to that department are increased.

Figure 5.3.A shows the percentage breakout by department of the 2010 operating expenses. With the move toward the downward expansion (the shift from a two year and graduate to a four year and graduate university) you see a shift in the percentage of budget allocations. As illustrated, instruction moves down from near 40% to 34% and scholarship moves up from 8.8% to 12%. These new percentages were reviewed by the University and tested against peer universities that are now four year plus graduate schools to create a guide for the planning process. As the University grows and the number of Student Contact Hours completed in a semester increases, the income to departments increases based on the percentage allocations. (Please see Projected Department Budgets diagram Figure 5.4.A.

We then focus on the Instruction section of the chart and break it down to the projected SCH by School (HSH, BUS, SCE and SOE). The chart shows a flat price of $310.27 for resident undergraduates and $558.02 for resident graduates for the fall semester of study in the projected years until 2020. This gives a baseline projection that would move up with increases to tuition or fees or down with discounts or givebacks. With a formula funded system the baseline is projectable with the understanding that this is a working plan and allocations will move based on actual results achieved in affecting the price or SCH taught by a School. (Please see sheets 5.5, 5.6, 5.7 and 5.8).

The last chart in this section, Figure 5.9.A Master Plan Resource Projection Model, looks at income (Sources) to expenditure (Uses) in a comprehensive modeling of the UHCL system based on the variables stated for the projection until FY2021.

The Master Plan Resource Projection Model sets;

- Enrollment
- Student to Faculty Ratios
- Revenue Increases
- Rate Increases
- Utility Increases
- M&O, Capital Increases

The graph illustrates a $3.2M surplus in the FY2021 based on the variables presented.

While the price of SCH is constant across the Schools it is very clear that the cost of delivering an SCH varies from School to School and major to major. Thus with fixed pricing, a careful balance of the scale of more costly programs to less costly ones is key within the budget of a School.

Space Needs

Most academic projected-space needs are met by increasing facility use in the early parts of the day, meeting on Fridays, and moving to a higher SUE use-rate and fill-rate to the year 2015. About 85% of the downward expansion projections are met through efficiency planning, but there is a demonstrated need for 30,000 sq. ft. three years into the Downward Expansion Plan to meet growth projections (please see phase one study for downward expansion). Both larger-scaled classroom areas and smaller-scaled seminar type areas are needed in the space usage matrix in order to meet the requirements of the university.

In addition to classroom space, undergraduate wet lab space configured for freshman and sophomore teaching is needed. Lab space in general is a tricky issue in terms of demand and specificity. As labs become more specific in their ability to meet research demands, care in scheduling and flexibility in design are key to allow the most utility to the most people. While one size or type of lab does not fit all needs, the over-tailoring of spaces can exclude too many users. The careful balance of these issues in higher education space usage is assisted by two planning and scheduling tools in the UH system: ASTR and FAMIS. UHCL will have a master plan to assist in campus growth and strategic decisions and a term-by-term means to tactically meet space usage for academics and research.
### UHCL Enrolment Projections Fall 2010 through Fall 2020

<table>
<thead>
<tr>
<th>Term</th>
<th>Fall 10</th>
<th>Fall 11</th>
<th>Fall 12</th>
<th>Fall 13</th>
<th>Fall 14</th>
<th>Fall 15</th>
<th>Fall 16</th>
<th>Fall 17</th>
<th>Fall 18</th>
<th>Fall 19</th>
<th>Fall 20</th>
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<tr>
<td>Subtotal</td>
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### Projected Department Budgets based on 2011 Listed SCH Price and Projected Budget Distribution

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### UHCL Total contract value based on 2011 price

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<th>Fall 16</th>
<th>Fall 17</th>
<th>Fall 18</th>
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<tr>
<td>$27,305,830.97</td>
<td>$28,834,067.38</td>
<td>$30,965,139.54</td>
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<td>$63,021,354.07</td>
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### Projections for University Departments From Fall 2011 to Fall 2020

- **Instruction:** $10,894,656.28 - $11,504,792.88
- **Research:** $382,268.64 - $403,676.94
- **Public Service:** $54,609.81 - $57,668.13
- **Academic Support:** $3,522,332.48 - $3,719,594.69
- **Student Services:** $1,064,891.22 - $1,124,528.63
- **Institutional Support:** $4,286,869.77 - $4,526,948.58
- **Physical Plant:** $1,965,953.01 - $2,076,052.85
- **Scholarship and Fellowship:** $2,402,831.46 - $2,537,397.93
- **Auxiliary Enterprises:** $1,447,159.86 - $1,528,205.57
- **Depreciation and Amortization:** $1,283,330.44 - $1,355,201.17
- **Total:** $6,779,289.78 - $7,198,930.79

**Note:** Figures are based on 2011 listed SCH price and projected budget distribution.
### School of Business Mission Statement

The mission of the School of Business at the University of Houston-Clear Lake is to provide quality lifelong education at the junior, senior and master’s level for the Houston/Galveston metropolitan population. Undergraduate business programs primarily serve the region’s community college systems by providing transfer students the opportunity to complete a four-year degree. Graduate programs serve both full-time students and working professionals in the region. Instruction is designed for small classes and flexible hours and fosters development of business skills with global applicability. Faculty pursue a blend of research contributing to knowledge in professional practice, innovative pedagogy and discipline-based scholarship. Worldwide, the School of Business is among 540 institutions accredited by AACSB, and one of 168 schools with a specialized accreditation for accounting. That puts us in an elite group that includes less than 10 percent of the world’s business schools. We are proud to have the highest accreditation available to business schools, and even prouder of our alumni who continue to prove that we provide a rewarding education.

### Undergraduate Degree
- Accounting Unit
- Administrative Sciences Unit
- Economics, Finance, Marketing and Decision Sciences Unit
- Healthcare Administration Unit
- Management Information Systems Unit

### Graduate Degree
- Accounting Unit
- Administrative Sciences Unit
- Economics, Finance, Marketing and Decision Sciences Unit
- Healthcare Administration Unit
- Management Information Systems Unit

### M.B.A. Program
- Online M.B.A. Degree
- M.B.A. Master’s Business Administration Degree

<table>
<thead>
<tr>
<th>SCH Actuals by School</th>
<th>Enrollment Management SCH Projections by School</th>
</tr>
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<tr>
<td><strong>Fall 2006</strong></td>
<td><strong>Fall 2007</strong></td>
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<td>Undergraduate</td>
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<td>Lower Level (Fr/Soph)</td>
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<td>Upper Level (Jr/Sr)</td>
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<td>Total</td>
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<td><strong>Fall 2014</strong></td>
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<td><strong>Fall 2021</strong></td>
<td><strong>Fall 2022</strong></td>
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**School Of Business Projected Budget from Tuition & Fees (in 2011 Dollars)**

<table>
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<tr>
<th>Fiscal Year</th>
<th>Total SCH Undergraduate</th>
<th>Total SCH Graduate</th>
<th>Total SCH Undergraduate &amp; Graduate</th>
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<td>2008</td>
<td>$3,036,352.38</td>
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<td>$5,374,865.02</td>
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<tr>
<td>2009</td>
<td>$3,015,240.04</td>
<td>$3,319,062.38</td>
<td>$5,334,302.42</td>
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<tr>
<td>2010</td>
<td>$2,994,127.70</td>
<td>$3,299,612.04</td>
<td>$5,293,739.74</td>
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<td>2011</td>
<td>$2,973,015.36</td>
<td>$3,284,161.72</td>
<td>$5,253,177.08</td>
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<td>2012</td>
<td>$2,951,903.02</td>
<td>$3,269,611.38</td>
<td>$5,212,544.40</td>
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<td>2013</td>
<td>$2,930,790.68</td>
<td>$3,255,061.04</td>
<td>$5,171,861.72</td>
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<td>2014</td>
<td>$2,909,678.34</td>
<td>$3,240,510.68</td>
<td>$5,131,189.04</td>
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<td>2015</td>
<td>$2,888,566.00</td>
<td>$3,225,960.32</td>
<td>$5,109,536.32</td>
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<tr>
<td>2016</td>
<td>$2,867,453.66</td>
<td>$3,211,410.96</td>
<td>$5,086,893.62</td>
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<tr>
<td>2017</td>
<td>$2,847,672.00</td>
<td>$3,196,861.60</td>
<td>$5,066,153.60</td>
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<tr>
<td>2018</td>
<td>$2,832,000.00</td>
<td>$3,182,212.24</td>
<td>$5,045,412.24</td>
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<td>2019</td>
<td>$2,817,327.60</td>
<td>$3,167,662.88</td>
<td>$5,024,672.48</td>
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<td>2020</td>
<td>$2,802,655.20</td>
<td>$3,153,113.52</td>
<td>$5,003,932.72</td>
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**Chapter 5: Projections**

*Release June 1, 2011 Revised Aug 5, 2011*
School of Human Sciences and Humanities

The School of Human Sciences and Humanities (HSH), is dedicated to the study of people from a variety of perspectives. We foster the ideals of the liberal arts, believing that a broad education provides students with the best foundation for creating a life that is meaningful and fulfilling. Our programs also provide practical preparation for many professional careers.

Undergraduate Degrees

- Anthropology
- Art and Design (BFA)
- Behavioral Science
- Communication
- Criminology
- Fitness and Human Performance
- Geography
- History
- Humanities
- Literature
- Political Science
- Psychology
- Public Service Leadership
- Social Work (BSW)
- Sociology
- Women’s Studies

Graduate Degrees

- Behavioral Science
- Criminology
- Cross-Cultural Studies
- Digital Media Studies
- Family Therapy
- Fitness and Human Performance
- History
- Humanities
- Literature
- Psychology Programs:
  - Applied Cognitive
  - Behavior Analysis
  - Clinical Psychology
  - Family Therapy
  - General Psychology
  - Industrial/Organizational
  - School Psychology
  - Sociology

HSH Certificates

- Behavior Analysis
- Public Service Leadership
- Women’s Studies

### School Of Human Sciences and Humanities

<table>
<thead>
<tr>
<th>SCH Actuals by School</th>
<th>Enrollment Management SCH Projections by School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 2006</td>
</tr>
<tr>
<td>Price per SCH undergrad</td>
<td>$310.27</td>
</tr>
</tbody>
</table>

HSH Projected budget from Tuition & Fees (in 2011 Dollars)

- $3,508,961.02
- $3,629,168.23
- $3,350,708.86
- $3,682,829.80
- $4,076,550.68
- $4,364,707.02
- $4,601,771.94
- $4,763,528.31
- $4,932,555.30
- $5,126,048.87

CHAPTER 5: PROJECTIONS                  SHEET 5.6
Release June 1, 2011
Revised Aug 5, 2011
School of Science and Computer Engineering

The School of Science and Computer Engineering (SCE) offers high-quality academic programs within the vibrant atmosphere of a modern university. SCE prepares its graduates for careers in the natural sciences, mathematics, computing sciences, computer engineering, and software and systems engineering. Our faculty adheres to a professional model that balances the vital components of our educational mission: teaching, research, and service. Our course of study supports a variety of disciplines including telecommunications, robotics, control systems, industrial modeling, mathematical and statistical modeling analysis, and petrochemical processes. As they work toward their academic goals, SCE students strengthen their abilities to solve problems, study independently, and think critically. They learn to adapt existing knowledge and apply it to new situations to benefit society. They also acquire professional values and ethics as they refine their skills in specific subject areas. SCE prepares its graduates for careers in the natural sciences, mathematics, computing sciences, computer engineering, and software and systems engineering. Our faculty adheres to a professional model that balances the vital components of our educational mission: teaching, research, and service.

Computing and Mathematics Division

- Computing Information Systems
  - Bachelor of Science and Master of Science

- Computer Science
  - Bachelor of Science and Master of Science

Information Technology
- Bachelor of Applied Sciences

Statistics
- Master of Science

Mathematical Science
- Bachelor of Arts, Bachelor of Science and Master of Science in Mathematics

Natural Science Division

- Biological Sciences
  - Bachelor of Science, Bachelor of Arts and Master of Science

- Biotechnology
  - Bachelor of Science and Master of Science

- Chemistry
  - Bachelor of Science, Bachelor of Arts and Master of Science

- Environmental Science
  - Bachelor of Science and Master of Science in Mathematics

- Physics
  - Bachelor of Science and Master of Science

Physical Sciences
- Bachelor of Science and Master of Science

School of Science and Computer Engineering

<table>
<thead>
<tr>
<th>SCH Actuals by School</th>
<th>Enrollment Management SCH Projections by School</th>
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</thead>
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<tr>
<td>Fall 2006</td>
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<td>5,224</td>
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<td>6,531</td>
<td>6,834</td>
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<td>10,029</td>
<td>12,220</td>
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</table>

Projected Budget Under Graduate

- 2006
  - Fall: $885,219.67
  - 2007: $920,118.82
  - 2008: $938,821.63
  - 2009: $1,071,662.35
  - 2010: $1,048,085.92
  - 2011: $1,155,644.42

- 2012
  - Fall: $1,139,836
  - 2013: $1,196,843
  - 2014: $1,254,850
  - 2015: $1,312,857
  - 2016: $1,370,864
  - 2017: $1,428,871

- 2018
  - Fall: $1,486,878
  - 2019: $1,544,885
  - 2020: $1,602,892

Projected Budget Graduate

- 2006
  - Fall: $1,012,015.21
  - 2007: $1,037,315.59
  - 2008: $1,074,288.07
  - 2009: $1,101,261.20
  - 2010: $1,124,331.35
  - 2011: $1,147,401.50

- 2012
  - Fall: $1,160,474
  - 2013: $1,183,544
  - 2014: $1,206,614
  - 2015: $1,229,684
  - 2016: $1,252,754
  - 2017: $1,275,824

- 2018
  - Fall: $1,298,894
  - 2019: $1,321,964
  - 2020: $1,345,034

Total Budget Undergraduate and Graduate

- 2006
  - Fall: $1,957,434.41
  - 2007: $2,300,297.05
  - 2008: $2,593,288.97
  - 2009: $2,658,121.20
  - 2010: $2,724,574.23
  - 2011: $2,862,505.80

- 2012
  - Fall: $2,905,556
  - 2013: $3,082,605.66
  - 2014: $3,201,658
  - 2015: $3,308,710.63
  - 2016: $3,405,762.66
  - 2017: $3,502,814.69

- 2018
  - Fall: $3,609,866.72
  - 2019: $3,717,918.76
  - 2020: $3,825,970.80

School of Science and Computer Engineering

- Revised Aug 5, 2011
- Release June 1, 2011

Design Lab Houston

HOUSTON

CHAPTER 5: PROJECTIONS

Gerald D. Hines College of Architecture

UNIVERSITY OF HOUSTON
School of Education

The School of Education offers programs leading to a Bachelor of Science Degree in Interdisciplinary Studies; Master of Science Degrees in Curriculum and Instruction, Counseling, Early Childhood Education, Educational Management, Instructional Technology, Multicultural Studies in Education, Reading, and School Library and Information Science; and the Doctor of Education (EdD) in Educational Leadership. Also offered are a variety of programs leading to teacher and other professional educator certifications and endorsements. Programs are fully accredited by both the National Council for Accreditation of Teacher Education (NCATE) and the State Board for Educator Certification (SBEC). Our students demonstrate consistently high pass rates on The Texas Examinations of Educator Standards (TExES).

Doctor of Education Degree

Program Description:

UHCL’s Doctor of Education in Educational Leadership program is the answer for educational leaders wishing to advance their careers. Our doctoral program provides extensive development in sound research and administrative practices so educational leaders thrive in current and future educational environments. From strategic planning, to dispute resolution, to program evaluation, the School of Education’s 30+ doctoral faculty members impart a broad scope of practical experience and theoretical knowledge.

Undergraduate Degree

Interdisciplinary Studies BS

EC-6 Certification

- Generalist
- Early Childhood Concentration
- Reading Concentration
- Bilingual Generalist
- Generalist and EC-6 ESL
- Generalist with EC-12 SPED
- TEA Matrix

4-8 Certification

- Generalist
- ESL Generalist
- Social Studies

HSH Joint Degrees

4-8 Certification

- Literature BA English Language Arts and Reading
- Literature BA English Language Arts and Reading
- History BA
- Geography (Social Studies Cert)
- History (Social Studies Cert)

SCE Joint Degrees

4-8 Certification

- Science BS
- Mathematics BA
- Mathematics Certification
- Biological Science BA
- Life Science Certification
- Mathematics BA
- Mathematics Certification
- Mathematics BS
- Mathematics Certification
- Physical Science BS
- Physical Science Certification

Graduate Degree

- EdD
- Educational Leadership EdD
- Graduate
- Counseling MS
- LPC Certification
- School Counselor Certification
- Curriculum and Instruction MS
- Early Childhood Education
- Educational Management MS
- Instructional Technology MS
- Multicultural Studies in Education MS
- Reading MS
- with Reading Specialist Standard EC-12 Certificate
- School Library And Information Science
- with School Librarian Standard Certificate (EC-12)
- Dual Masters of Science Degree
- Reading MS with Reading Spec
- EC-12 Cert School Library and Information
- Science MS with School Librarian Standard Cert (EC-12)

School of Education

<table>
<thead>
<tr>
<th>SCH Actuals by School</th>
<th>Enrollment Management SCH Projections by School</th>
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<tbody>
<tr>
<td>Fall 2006</td>
<td>Fall 2007</td>
</tr>
<tr>
<td>Lower Level (FTE units)</td>
<td>Upper Level (FTE units)</td>
</tr>
<tr>
<td>Undergraduate</td>
<td></td>
</tr>
<tr>
<td>3,217</td>
<td>6,449</td>
</tr>
<tr>
<td>Graduate (Master's/Doctoral)</td>
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<tr>
<td>7,803</td>
<td>6,597</td>
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<tr>
<td>Total (Grad/Under)</td>
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<td>$2,549,610.57</td>
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Projected Budget Undergraduate 2006-2020

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<tr>
<th>Year</th>
<th>SCH</th>
<th>Lower Level (FTE units)</th>
<th>Upper Level (FTE units)</th>
<th>Total (FTE units)</th>
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<td>2006</td>
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<td>$2,446,425.23</td>
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<td>$3,833,028.07</td>
<td>$3,978,106.64</td>
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Projected Budget Graduate 2006-2020

<table>
<thead>
<tr>
<th>Year</th>
<th>SCH</th>
<th>Lower Level (FTE units)</th>
<th>Upper Level (FTE units)</th>
<th>Total (FTE units)</th>
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<tbody>
<tr>
<td>2006</td>
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<td>$1,357,588.14</td>
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<td>$1,555,857.18</td>
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<td>$2,122,877.83</td>
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<td>2009</td>
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<td>$1,714,310.86</td>
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<td>2012</td>
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<tr>
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<td>$2,365,285.15</td>
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<tr>
<td>2014</td>
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<td>$1,854,404.93</td>
<td>$2,365,285.15</td>
<td>$2,415,767.30</td>
</tr>
<tr>
<td>2015</td>
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<td>$1,901,278.55</td>
<td>$2,415,767.30</td>
<td>$2,465,326.94</td>
</tr>
<tr>
<td>2016</td>
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<td>$1,948,362.94</td>
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<td>2017</td>
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<td>$1,996,060.52</td>
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<tr>
<td>2018</td>
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<td>$2,046,428.35</td>
<td>$2,566,760.46</td>
<td>$2,617,538.71</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>$2,096,428.35</td>
<td>$2,617,538.71</td>
<td>$2,668,407.05</td>
</tr>
<tr>
<td>2020</td>
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<td>$2,149,017.91</td>
<td>$2,668,407.05</td>
<td>$2,719,372.45</td>
</tr>
</tbody>
</table>

Total SCH Actuall by School | $2,315,690.43 | $2,393,202.69 | $2,446,425.23 |

Total SCH Projections from Table & Fees (in 2006 Dollars) | $2,315,690.43 | $2,393,202.69 | $2,446,425.23 | $2,497,715.64 | $2,621,017.91 | $2,682,612.92 |
Resource Projection Model

University of Houston Clear Lake - Master Plan Resource Projection Model

<table>
<thead>
<tr>
<th>Resource Projection Model</th>
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<tbody>
<tr>
<td>Annual M&amp;O, Capital Increase 2.0%</td>
</tr>
<tr>
<td>Staff (after FY 2012)</td>
</tr>
<tr>
<td>Faculty (after FY 2012)</td>
</tr>
<tr>
<td>Annual revenue increases after FY2012</td>
</tr>
<tr>
<td>Sources less Uses</td>
</tr>
<tr>
<td>Total Estimated Tuition and Fees per Credit Hour</td>
</tr>
<tr>
<td>Estimated Scholarship Funds (non-federal)</td>
</tr>
<tr>
<td>General + Designated Scholarships ($ millions)</td>
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<tr>
<td>Change from prior year</td>
</tr>
<tr>
<td>Projected Budget Surplus (Deficit)</td>
</tr>
</tbody>
</table>

Variables

| Fall Enrollment in 2020 | 12,429 |
| Student HO/FIT Faculty Ratio in Fall 2020 | 37.0 |
| Annual revenue increases after FY2012 | 2.0% |
| State General Revenue Appropriation | IDC Support for General Funds | 0.5% |
| Annual Rate Increase after FY2012 | General Designated Tuition | 5.5% |
| General Designated Tuition | Differentiated Designated Tuition | 3.1% |
| Annual Rate Increase after FY2012 | Incidental / Other Fees | 3.3% |
| Faculty (after FY 2012) | Annual Merit & Rank Promotion Pool | 3.0% |
| Staff (after FY 2012) | Annual Merit & Across-the-Board Pool | 3.0% |
| Annual Utility Cost Increase | 3.8% |
| (after FY 2012) | Annual M&D, Capital Increase | 2.0% |

Figure 5.9.A

Revised Aug 5, 2011

Release June 1, 2011
Chapter 6 - Phase Growth Scenarios
Supporting Downward Expansion 2014

UHCL Planning

It is important to view the master plan drawings, models and case study photos as “place holders” for future steps for the University of Houston-Clear Lake.

Each example is used to help show its place in the overall scheme, and illustrates scale, adjacencies, and proposed orientation of probable program sets. These are not meant to be viewed as architectural proposals themselves, but rather as holders or places for future architectural detailed development as proposed buildings. It must also be recognized that projected phased steps of growth in academic programs and research are directly related to the expansion of the built infrastructure of the campus. Changes in the financial plan or academic plan will change the scale and phasing of building allocations. Changes in research allocations may affect the launch of construction phases or programs using a particular building. The UHCL Campus Master Plan is a product of the Academic Plan and projections, the Financial Plan and the Facility/Land Use Plan. Phasing and implementation of the Plan must be flexible as circumstances dictate, but the University’s Mission and Goals are held as imperatives that must be supported by design decisions.

Freshman Housing

Current planning is for an entering class of 540 freshmen in the fall semester of 2014. To accommodate this there are a number of remodeling projects in the Bayou building for faculty offices and the need to accommodate additional staff positions in both the Bayou Building and the Student Service and Classroom Building.

Freshman Housing is planned at a site north of the Student Service and Classroom Building with the Athletic North facility and a Student Life building. These new structures are sited along the University Walk and would act together as the next major addition to the Campus Master Plan. (Please see plan diagram)

The fitness and wellness functions now in the Student Service and Classroom and Bayou Building would move to the new Athletic North facility and free space for added staff growth. The Athletic North facility would act as the office and support for the wellness center functions and provide spaces for basketball, badminton, weightlifting, gymnastics and yoga.

Environmental Institute of Houston

Prior to the development of the Freshman Housing the existing Environmental Institute of Houston, now in a portable building near the site, should move to the location next to the existing facilities building. The EIH would use this area for field offices, equipment and collection staging. The EIH currently uses lab facilities in the Bayou building and this would continue until dedicated space could be provided in the new Science Building planned in a later phase. The existing native planting gardens could be expanded at the current location.
Phase Growth Scenario
Supporting Downward Expansion 2017

Development of Expanded Dining Facilities

With the increase in students, faculty and staff on campus and the extended hours of UHCL to Friday and morning class starts there is a clear need for additional dining accommodations. While upper class housing offers cook areas in the units, the freshman housing will not. Three main meals and convenience break meals will have to be met by on campus service. By 2016 a projected count of 3,339 faculty, staff and students would be on campus per day. The proposed plan shows the extension of the existing dining deck with enclosed and covered decks. A review of the current kitchen plan will be needed to meet new projections. This deck would cover a part of the existing loading dock at the basement level of the Bayou Building.

Welcome Center

Campus Entry #1 is the main entry and would be the site of the newly proposed Welcome Center. The building would be a mixed-use building with academic, student support and administrative functions. The Welcome Center building is needed to meet the downward expansion projections by the year 2016 and offers the opportunity to shift some of the introduction and entry services from the Student Service Building and Bayou Building to a “front door” position on the campus and free space for staff and faculty offices. This new building would offer educational teaching spaces, community interactive teaching and research spaces, and all of the traditional welcome-based orientation functions needed for UHCL. This building is located off the main Bay Area Boulevard entry to the campus and would need parking below to facilitate the additional demand at the South Campus.
Phase II Upper Level Housing

There is an existing demand for the planned Phase II of upper level housing now but University resources are needed to ready facilities for the entering freshman. By 2016 the development of the Phase II Upper Level Housing should be undertaken to meet the growing graduate and undergraduate housing demand. The site is the south end of the University Walk next to the existing Phase I project and facing the existing athletic fields and greens. There is space for 220 to 275 units with a similar mix of rooms as seen in the phase 1 housing. Parking is planned to be at grade below the units to meet demand and help provide a higher elevation to the living levels.

Athletics South

The development of existing field sport areas to support inter-mural activities for UHCL students and visiting teams would take place at the South Campus. A proposed Field Building would act as a gathering and staging area for teams, gear and spectators that would use the existing sport fields, new Bayou park areas and baseball field. This building could also be a “launch point” for cycle events and bayou boating activities (please see proposed Field Buildings at South Campus).

Science Research and Academic Building

A new research and academic building would be located along Middlebrook Drive frontage at the North Campus next to the Universities Space Research Association to the west and University Entry #3 to the east. This building is modeled to reflect the potential of phased development of labs, greenhouses, research offices, supporting facilities and teaching and graduate student workspaces. This location would act as the northern terminal point in the Master Plan to the main north/south walkway. Funding for this development is projected to be through community and private research partners, TRB allocations, philanthropy and state formula funding. (please see drawings for scale and property allocation).
UHCL is in a unique position in the University of Houston community with NASA-based research opportunities. The UHCL Master Plan has long envisioned joint opportunities along the south end of the campus in the form of a research park. While there is not currently a proposal in place, UHCL would like to “be ready to be ready” if a major proposal for development takes place with a private/public partner. Current changes in the NASA program could bring new opportunities in deep space image analyses, research, and earth resource observation and projections.

The location of the Research Park faces the prestigious Space Center Boulevard, across from the NASA campus this section of the campus would be entered from Space Center Boulevard and/or Middlebrook Drive and impact the existing campus circulation in a minor way (please see drawings for scale and property allocation).

Academic and Research Phase II

Academic and Research Phase II would occupy the property between the Phase One project and Campus Entry # 3, and would face Middlebrook Drive. The site offers the possibility of phased building groups with dedicated research space for School of Human Sciences and Humanities, School of Education and the School of Business. The majority of the required parking should be under the building to offer a higher first floor to the building and conserve the open space of the campus. The university native plant gardens are located to the south edge of this site.
CHAPTER 7: Plan Development
UHCL Master Plan 2020+

Existing
1. Facilities Building
2. Student Services Building
3. Bayou Building
4. Delta Building
5. Arbor Building
6. Upperclassmen Housing

Proposed 2014
1. Environmental Institute of Houston (14,000 SF)
2. Freshmen Housing (250 beds @ 72,000 SF)
3. Athletics Wellness Center North (60,000 SF)
4. Student Life Center (50,000 SF)
5. Baseball Field

Proposed 2017+
1. Academic and Research Building Phase I
2. Food Pavilion (7,000 SF)
3. Welcome Center (100,000 SF)
4. Athletics South (21,000 SF)
5. Phase II Housing (110,000 SF)
6. Research Park (40,000 SF)
7. Academic and Research Building Phase II
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Release June 1, 2011
Revised Aug 5, 2011

- Public
- Private Business Plan
- Student Fees
- Philanthropy
- Formula Funding
- TRB
- Philanthropy
- Grants
- Business Plan
- Based Bond-Meal Plan
- Internal Funding
- Private Funding

1,051,000 Land Area
24.1 acres

CHAPTER 7: PLAN DEVELOPMENT
UNIVERSITY of HOUSTON
GERALD D. HINES COLLEGE OF ARCHITECTURE
Freshmen Housing

On campus housing is proposed as a key element of the downward expansion plan. Freshmen would live on campus or at home with parents or guardians and commute to the UHCL campus for classes. A Freshmen Housing request for proposal was submitted to developers for 200 beds, or 37% of the demand from the entering class of 540 students, and is under review by UHCL.

Key issues in Freshman Housing:

- Freshmen Housing should be established at its own location on the Campus.
- Freshmen Housing should be near food services
- Freshmen Housing should be near Campus Life Activities
- Freshmen Housing should be near Athletic Activities (organized and individual)
- Freshmen Housing should be integrated into the transportation infrastructure such that approach and parking are clearly associated with the Freshmen Housing.
- The Freshmen Housing would be required to meet all current University standards; Security, IT and LEED and meet Federal wage controls during construction and operation. These requirements will add cost to the project that private developments would not be required to meet. To help offset this, if a public-private development approach is utilized, the land costs in the project will be structured as a lease from UHCL to the Developer.
Athletics and Wellness Center

The proposed athletics facility at the North Campus is next to the north edge of the existing Student Service Building and west of the proposed Freshmen Housing. The site runs next to the main walkway and would form an important component of the North Campus. The existing wellness functions would be relocated into the North Athletic building and would be expanded to accommodate the larger user group with downward expansion. This proposed building would house the gym, weights and interior court sports with supporting functions. Additional space for intramural teams and clubs and community activities would welcome users at the entry and help develop a culture of place as UHCL moves to meet the goals of student access and success. The Athletics North Building is the location of coordinated community athletic events and outreach activities.
Student Life

The Student Life Building would help promote the academic, social and welfare interests of students throughout the University. The Student Life Building would provide a range of services to its members including events, socials, publications, and advice and information on student issues, academic difficulties, housing, welfare, disability, financial problems and childcare.

The Student Life Office exists to serve and educate students and the university community by creating a supportive environment that provides opportunities for personal, social, and intellectual development. A three-part approach to Student Life, which involves providing services, programming, and leadership training, affords students the opportunity to enhance their academic experience and achieve their full potential. The Office of Student Life serves as a bridge into the university life for new students and their parents, by providing comprehensive resources and support necessary to make a successful transition into the UH-Clear Lake community.

**Student Accommodation** - Would provide a register containing houses, apartments and rooms to rent in the private sector, and also helps in providing accommodations owned by the University to graduates.

**Clubs, Events and Social Groups** - Clubs covering a wide variety of student interests.

**Common Rooms** – Students would run social events and activities as well as provide support and advice services and a means of voicing student concerns about College affairs.

**Work and Skills Training** - The Careers Service portal would list vacancies for volunteering, work experience, internships and graduate opportunities.

**Student Voice** - Academic, News and Social Publications.

**University Club for Alumni and Students** - A UHCL University Club would offer a range of sporting facilities including a gym, field sports and help tie past graduates to new students and campus endeavors.

**Greek Life** – The strongest aspect of the Greek life system is the supporting legacy and the inter university connections which are offered students.
Environmental Institute of Houston-Field Building

The Environmental Institute of Houston is another example of dedicated space for research which is unique in the UH System due to its location and work in the Armand Bayou system, Clear Lake and Gulf of Galveston. EIH Field Building is scheduled to move near the north of the Facilities Building and grow from 7,000 sq ft to 14,000 sq ft. Additional secure work yard space is needed for boats, survey and testing equipment. As an active research team, EIH would continue to use lab space in the main buildings (please see drawings). The current area of EIH has an indigenous plant garden that has been maintained by faculty and staff and our working group was asked to retain this use in this location. With the removal of the existing EIH temporary building, a new specific design of this area would be needed (please see drawings for scale and property allocation Figure 7.5.A)

Campus Security

UHCL is unique in the University of Houston System in providing two evening sessions of course offerings. The evening offerings where active professionals are able to access educational opportunities has historically been the mainstay of the upper-level and graduate programs. Parking lot lighting and security are important to assure campus safety during evening courses. Clearly marked crosswalks, signage, and controls are important at auto/pedestrian crossings. UHCL’s plan is linear with the bayou dividing the campus into two distinct north and south parts. The campus layout has a long walk from the south end of upper level housing to the Student Service Building and beyond to Middlebrook Drive. As the campus expands to include freshman housing at the north in addition to research facilities, clear definition, signage and lighting of the paths will become even more important. The Campus Security Department is proposed to be located in the existing Main Facility Building by remodeling an area at the south end of the building. Campus Security would also have satellite locations at the Bayou Building in addition to the newly planned Welcome Center.
Welcome Center

The Welcome Center building, like the Bayou Building, would be a mixed-use building with academic, student support and administrative functions. The Welcome Center building is needed to meet the downward expansion projections by the year 2016 and offers the opportunity to shift some of the introduction and entry services from the Student Service Building and Bayou Building to a “front door” position on the campus and free space for staff and faculty offices. This new building would offer educational teaching spaces, community interactive teaching and research spaces and all of the traditional welcome-based orientation functions needed for UHCL. This building is located off the main Bay Area Boulevard entry to the campus and would need parking below to facilitate the additional use at the South Campus for itself and the existing Arbor and Delta Buildings. The design and site development of the building should work to ensure a close relationship to the exterior relationships of the view from Bay Area Boulevard through the tree grove, the court entry into the Delta and the main University walk and Arbor building to the east. Views north to the Bayou Park and west to the tree grove are desirable. A Campus Security office and public desk is planned for the main lobby area as the South campus satellite police position. Programming and Construction of the Welcome Center should meet all current University standards; Security, IT and LEED and meet Federal wage controls during construction and operation. The building should be designed to allow for parking below the main floor areas and should transition to meet critical existing site datum’s using ramps, decks and stairs.

Johnson Wales University

Welcome Center

University of Houston - Welcome Center

Welcome Center - Mixed Use
- 117,500 SQFT Building Footprint
- Welcome - 20,000 SF
- “One Stop” Center
- Enrollment
- Cashier
- Financial Aid
- Student Records
Classrooms - 30,000 SF
Community Interactive Teaching and Research - 15,000 SF
-Campus Security

2 Levels of Parking - 235,000
Upper Level Student Housing - Phase II

The successful nature of the University Forest Apartments student housing along Bay Area Boulevard should be built upon to provide added space for growth and help reinforce the common athletic activities now present at the South Campus. New upper level Student Housing could be added to the existing student housing location (which is now full) in phased steps of growth. This location has been allocated for housing in the past master plan for the campus and we believe it is the best location for residential expansion. The plan illustrates about 275 units at 400 sq ft each with a level of parking at grade for the residents. Scale and type of units in the program could vary to accommodate different student needs. The building configuration illustrated is meant to frame the common green and athletic fields and Bayou Park beyond. This development would act as the southernmost point on the University Walk. The Upper Level Student Housing - Phase 2 would be required to meet all current University standards: Security, IT and LEED and meet Federal wage controls during construction and operation.
Athletics

UHCL currently has open field inter-mural sports and a weight room area. The Clear Lake community is rich in athletic activities but there is currently no athletic director in place to weave together off-campus partnerships and a roster of athletic opportunities for the University. With the addition of the freshmen and sophomore classes, development of a supporting infrastructure for inter-mural sports and college life is proposed. Strong ties to the community’s existing athletic activities include:

- Water Sports: Sailing, Rowing, Kayaking, Swimming, Diving, Fishing
- Field Sports: Football, Baseball, Soccer, Rugby, Field Hockey, Cricket, Volleyball, Track & Field
- Basketball, Badminton, Weightlifting, Gymnastics, Yoga
- Horseback Riding (Western and Jump)
- Archery - Shooting

Athletics South

The development of existing field sport areas to support inter-mural activities for UHCL students and visiting teams would take place at the South Campus. A proposed Field Building would act as a gathering and staging area for teams, gear and spectators that would use the sport existing fields, new park areas and baseball field. This building could also be a “launch point” for cycle events and bayou boating activities (please see proposed Field Buildings at South Campus).
Development of Expanded Dining Facilities

With the increase in students, faculty and staff on campus and the extended hours of UHCL to Friday and morning class starts there is a clear need for additional dining accommodations. While upper class housing offers cook areas in the units, the freshman housing will not. In addition the large percentage of international students desires a more diverse menu than just the traditional fair. The downward expansion will create a 24 hour campus with new demands for three main meals and convenience break meals that will have to be met by on campus service. By 2016 a projected count of 3,339 faculty, staff and students would be on campus per day. While most are commuters and coffee and break areas are set up throughout the buildings, a good number will use the food services each day. The proposed plan shows the extension of the existing dining deck with enclosed and covered decks. A review of the current kitchen plan will be needed to meet new projections for the scale of service and types of menu items. This deck would cover a part of the existing loading dock at the basement level of the Bayou Building. (Please see photos) The existing deck should extend in such a way as to reinforce the main east entry to the Bayou Building and work with the existing tree line at the south end of the parking lots. From the interior views are possible to the south of the Bayou Park areas.
The goal of the current research granting process is used only to maintain all of the operational costs of research projects (personnel, project infrastructure and facility usage). Building construction and start-up costs must be sought first while a careful use plan of the research space to assure the fiscal health of the Research Center is in hand. Funded grants must pay for non-funded work so that a fiscal balance is maintained.

To assist in start-up funding for research, the UHCL Master Plan proposes the allocation of property along Middlebrook Drive and University Entry #3 for a new Science Research and Academic Building and property, long planned, along Space Center Boulevard for a Research Park. These properties offer important street frontage positions in the Master Plan to future community partners in helping to jointly meet the goals of research and education at UHCL.

Research and Academic Building

The research component of space usage at UHCL is made up of four key areas:

1. Funded Research: Research that is funded by outside sources through a granting process. All personnel, project infrastructure and facilities costs are met by the grant.
2. Partially-Funded Research: Research that is limited in its funding through outside sources by a granting process. All personnel costs are met and some project infrastructure costs are met but facilities costs are not covered by the grant and the University or departments of study are required to pay infrastructure costs. (no indirect cost grants).
3. Non-Funded Research: Research that is undertaken by faculty and personnel, project infrastructure and facilities costs are met by the department(s) of study (often called "Seed Research").
4. Non-Funded Research: Research that is undertaken by faculty to meet academic obligations and requirements to achieve tenure based promotion by their departments.

It is clear in the development of research at an academic institution that the correct mix of outside-funded research to departmental-supported research is required to balance the cost of faculty and personnel, project infrastructure and facilities costs. Too far one way and the departmental budgets are stressed and too far the other and the academic development of faculty and students may slow.

The goal of the current research granting process is used only to maintain all of the operational costs of research projects (personnel, project infrastructure and facility usage). Building construction and start-up costs must be sought first while a careful use plan of the research space to assure the fiscal health of the Research Center is in hand. Funded grants must pay for non-funded work so that a fiscal balance is maintained.

To assist in start-up funding for research, the UHCL Master Plan proposes the allocation of property along Middlebrook Drive and University Entry #3 for a new Science Research and Academic Building and property, long planned, along Space Center Boulevard for a Research Park. These properties offer important street frontage positions in the Master Plan to future community partners in helping to jointly meet the goals of research and education at UHCL.
CHAPTER 8: Master Plan Overview

View From Middlebrook Dr

Existing
- Facilities Building
- Student Services Building
- Bayou Building
- Delta Building
- Arbor Building
- Upperclassmen Housing

Proposed 2014
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- Freshmen Housing (250 beds @ 72,000 SF)
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- Student Life Center (50,000 SF)
- Baseball Field

Proposed 2017+
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CHAPTER 8: PLAN OVERVIEW

UNIVERSITY of HOUSTON

GERALD D. HINES COLLEGE of ARCHITECTURE

Revised  Aug 5, 2011
Release June 1, 2011

View From Bay Area Blvd

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