# ADDENDUM No. 3

## February 5, 2019

## REQUEST FOR PROPOSALS
## (BID DOCUMENTS)

## FOR

## STUDENT SUCCESS CENTER
### PROJECT NO. 950512

**The following changes, additions, or deletions shall be made to the following documents as indicated for this Project; and all other terms and conditions shall remain the same. Each Proposer (Design Builder) is responsible for transmitting this information to all affected subcontractors and suppliers before the Proposal Deadline.**

## 1. REQUEST FOR PROPOSALS

A. Project Program & Design Criteria (January 11, 2019)

1. **Delete** the Executive Summary "Introduction" on page 1.1 issued in the Request for Proposal documents and **replace** with the one issued in this Addendum.

2. **Delete** the Project Introduction "Reference Documents" on page 2.12 & Definitions & Abbreviations on Page 2.13 issued in the Request for Proposal documents and **replace** with the ones issued in this Addendum.

3. **Delete** the Project Program "Space Program Summary" page 3.1 issued in the Request for Proposal documents and **replace** with the one issued in this Addendum.

4. **Delete** the Project Program "3.01 Dining Services" page 3.68 issued in the Request for Proposal documents and **replace** with the one issued in this Addendum

5. **Delete** the Project Program "Visual Program" on page 3.6 issued in the Request for Proposal documents and replace with the one issued in this Addendum.

6. **Delete** the "Project Program "Adjacency Diagrams" on page 3.11 issued in the Request for Proposal documents and replace with the one issued in this Addendum

7. **Delete** the Design Criteria "Mechanical Design Criteria" pages 4.79 through 4.92 in their entirety, and **replace** with the ones issued in this Addendum.

8. **Delete** "6.0 Appendix" section in its entirety issued in the Request for Proposal documents and **replace** with the one issued in this Addendum.

**END OF ADDENDUM**

Addendum No. 3, February 5, 2019

# INTRODUCTION

## OVERVIEW

The University of California Riverside (UCR) proposes to develop a Student Success Center (Project), a new facility of 39,820 assignable square feet (ASF). The purpose of the Project is to address UCR's growing student population and its shortfall in classroom capacity. UCR envisions the Project to increase utilization of instructional and student space, and uphold UCR's academic mission through its explicit focus on "student success". The Project consists of three primary program elements:

- General assignment classrooms designed for modern pedagogies and technology;
- Multipurpose student life spaces for use by student organizations, and areas for scholarly activity such as tutoring, mentoring, and study;
- Dining Services space (shelled) for the development and dining services venue on campus.

The Student Success Center's architectural character shall be an expression of the academic vision and programs within the building, while also responding to the external site and climate conditions in a manner that integrates the building into the surrounding campus landscape.

The Project site occupies the last prime spot of the campus' Academic Core, located at the intersection of two prominent pedestrian malls; The Arts Mall and the Carillon Mall. It is in close proximity to other classrooms, the Highlander Union Building, and the Student Services Building. The site offers an optimum opportunity for the Student Success Center to be a campus gateway, utilize the surrounding outdoor space, and complete an existing corridor of student centered facilities.

UCR has a long-term commitment of supporting the environment and helping to cultivate a sustainable future. Sustainability goals for this Project are in alignment with both UCR's Sustainability Policy and the UC Sustainable Practices; The Project shall be LEED Gold.

# REFERENCE DOCUMENTS

## REFERENCE DOCUMENTS

UCR has provided additional documents that must be referenced during the design of this Project. These documents include:

UC Riverside Physical Master Plan Study
May 2016

Physical Design Framework University of California, Riverside
Building the Promise, 2009

Long Range Development Plan (LRDP)
2005, Amendment November 2011

UCR Master Spec & Campus Standards

Site Selection Study
June 2017, Capital Asset Strategies

Student Success Center Classroom Component Summary of Campus Feedback
May 2017, Provost and Executive Vice Chancellor

Central Campus Neighborhood Study
April 2017, HKS, Spurlock

Student Success Center Visioning Workshop
April 2017, Capital Asset Strategies

Mobility Hub and Central Campus Linkages
November 2017 Capital asset Strategies and A&E, Gruen Associates

Warm Shell Tenant Improvement Space Guideline
UCR Dining Services March 2018

Site Feasibility Report University of California, Riverside
January 2018, Steinberg Hart

UC Sustainable Practices Policy
September 2016

UCR Principles of Community

UCR Campus Process: Gender Inclusive Facilities 2015
November 2015

Regents Policy 4400: Policy on University of California Diversity Statement
September 2010

# DEFINITIONS & ABBREVIATIONS

## DEFINITIONS & ABBREVIATIONS

The following definitions will assist in the use of this Project Description and Criteria.

| | |
|---|---|
| **ASF** | Assignable Square Feet - the usable area required to accommodate a function, equipment, an occupant, or an occupant group. The assigned square footage of space (equal to capacity times ASF/unit); typically described as "wall-to-wall" or "usable area" |
| **AV** | Audio Visual |
| **DBE** | Design Build Entity (DBE), same as "Design Builder" |
| **Core** | Vertical circulation, restrooms, and building service |
| **General Sound Insolation** | Acoustical privacy is necessary to allow for private conversations, walls, ceilings, and floors must inhibit sound from passing through, attenuating sound transmission between the spaces |
| **General Sound Insulation** | Walls, ceilings, and floors must reduce sound transmitted through them |
| **GSF** | Gross Square Feet - the total floor area of a building including all levels, that are totally enclosed within the building envelope |
| **N/A** | Not applicable |
| **Natural Lighting Terminology** | |
| • Required | • Natural lighting must be provided |
| • Preferred | • Provide natural lighting when possible |
| **RC** | Room Criteria |
| **Secure Zone** | Access by restricted personnel only |
| **STN** | Station - refers to employee workstations or student desk in a classroom<br>OFDBI - Owner-Furnished and Design-Build Entity Installed<br>OFOI - Owner-Furnished and Owner Installed<br>DBFDBI - Design-Build Entity Furnished and Design-Build Entity Installed |
| **A&E** | Architects & Engineers department is now being referred as Planning, Design & Construction also abbreviated as PD&C |

Addendum No. 3, February 5, 2019

# SPACE PROGRAM SUMMARY

## INTRODUCTION

The Student Success Center shall provide modern, innovative, and forward looking spaces where active learning, collaboration, and flexibility are prioritized. Spaces to be incorporated into the building are general assignment classrooms, student affairs/student life spaces, Auxiliary Services / Dining Services, and building support.

Refer to the Space Program, Room Criteria, and Design Criteria Section 4.0 for additional program information.

## STUDENT AFFAIRS

Student Affairs for the new Student Success Center shall provide amenities for students, faculty, staff and visitors. They include Lobby, Multipurpose Rooms, Group Meeting Rooms, Group Study Rooms, Student Lounge, and Open Student Study spaces.

### MULTIPURPOSE ROOMS

Multipurpose space to allow student organizations to meet, hold events, and hold performance rehearsals.

### GROUP MEETING ROOMS

Medium sized meeting rooms for student club organizations. When not reserved for meeting, the space may be used for student study.

### GROUP STUDY ROOMS

Small group study rooms for four to six students shall provide students work surfaces and a place to study.

### A STUDENT LOUNGE

A social space that provides students a location to connect, engage, interact, and relax. With a small food prep area, including microwaves, the Student Lounge provides students with an alternate option to the Dining Services Venue located in the building.

### OPEN STUDENT STUDY SPACE

To meet student's needs, informal open student study space shall be provided throughout the Student Affairs Space. Types and sizes of study areas shall vary, giving students size, functionality, and location options.

# 3.01 DINING SERVICES

## DESCRIPTION

The Student Success Center shall provide a Dining Services area. The DBE shall provide a shell space (raw-shell) meeting the requirement identified herein; University Auxiliary Services will design, construct, and fund the dining services venue. Information about the proposed dining services venue is included here for information only and may evolve as Auxiliary Services develops the dining services venue. Tenant Improvement (TI) of space is expected to occur after substantial completion of the Student Success Center construction; DBE shall coordinate utilities with TI of space.

Auxiliary Services plans to provide smaller food stations throughout the space to offer a variety of food and beverage options. The food stations may either be operated by UCR Dining or 3rd party vendors. Priority is to handle all cooking and most food preparation off-site, providing only food warming and some assembly within the space. No grease cooking requiring hoods shall be present. A commercial grade dishwasher requiring exhaust shall be present. Auxiliary Services anticipates a single point of sale to serve the space.

## ACCESS & ADJACENCIES

Dining Services space (shelled) space shall be located on the ground floor, adjacent to and with access from the building lobby. The space shall be in close proximity to the Dining Seating space. Dining Services shall not be located along the Arts Mall or the Carillon Mall. Dining Services may be placed anywhere along the north and east edges of the site. The Dining Services space shall have prominent access from the rest of the Student Success Center.

The Dining Services space shall be a secured space. At the connection to the building lobby, Auxiliary Services envisions a large, open connection, with the ability to close and secure the entrance through a motorized overhead grille door (or similar).

The space shall have an exterior entry/exit connected to the back-of house area for food delivery and trash pick-up.

Restrooms shall be located within a the maximum distance to the food service location, as determined by Health Code requirements. If the building restrooms do not meet this requirement, the Design Build Entity may locate a single rest-room inside the Dining Services space to meet code requirements; however, this additional restroom shall not reduce the overall square footage allocated to the Dining Services assignable square feet.

## SHELLED SPACE CRITERIA

The Design Build Entity shall schedule and coordinate with the Tenant Improvement (TI) scope. Design Build Entity shall provide the necessary infrastructure and utility services for each discipline to support the Dining Services Venue' performed by University Auxiliary Services. Provide head-in equipment such as air handling units, exhaust fans, grease interceptors, duct work distribution, main electrical switchboard, electrical panels, fire alarm, fire protection, etc. Provide utility and building systems design and installation to support development of the Dining Service space Provide sub-meters for electric and gas (if applicable) for Dining Services demised space. Food stations do not require submetering for gas, water, electrical, and HVAC.

Refer to Section 4.0 for additional Mechanical, Electrical and Plumbing criteria.

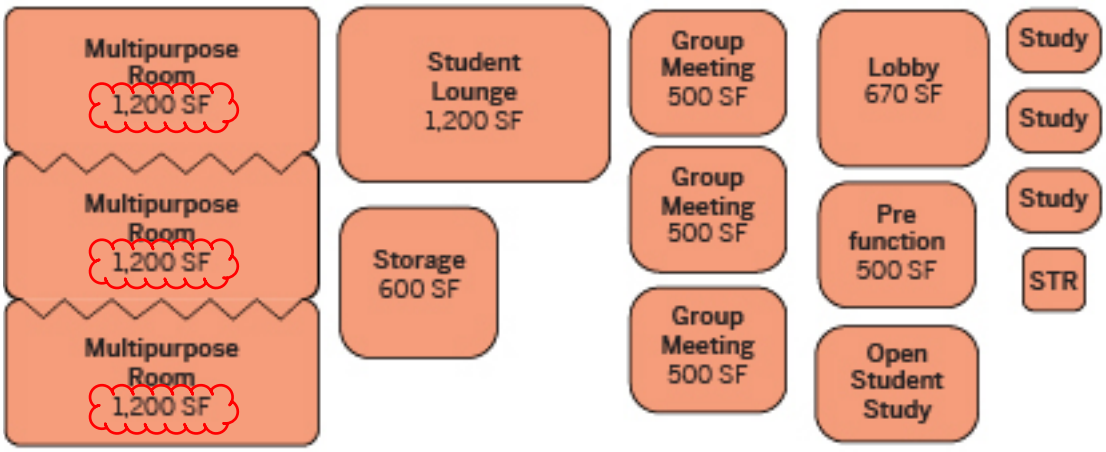
### SITE & BUILDING

- Provide an exterior door to the shelled space. Door shall be directly connected to the back-of-house area, allowing for food delivery and trash pick-up. Site improvements shall provide a concrete path from exterior door to connecting site pathways leading to the HUB trash compactor.
- Provide demising walls framed, sheetrock per code (including any fire rating requirements), taped and spackled (Level 3 paint ready) to underside of deck.
- Provide finished demising wall at Lobby with electrically operated roll down shutters (or similar) to secure space when not in operation. Electrical rough-in for signage located at Lobby common demising wall.
- Provide concrete slab with smooth level finish ready for flooring.
- Concrete slab shall contain 3" slab depression in designated food service locations.
- In case post tension slab is utilized, provide preformed utility trench grid in back of house slab locations shall accept underground kitchen-related utilities.
- Provide an exposed ceiling deck, metal or concrete (no finished ceiling is required).

Addendum No. 3, February 5, 2019

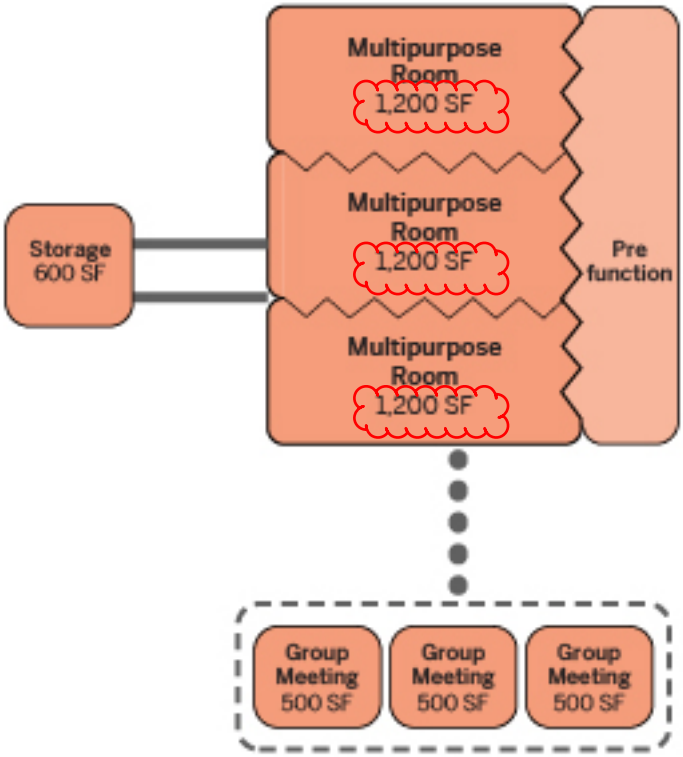
# VISUAL PROGRAM

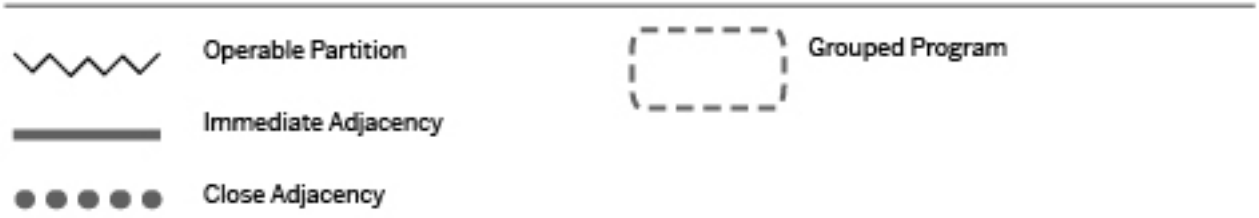
## STUDENT AFFAIRS



# ADJACENCY DIAGRAMS

## MULTIPURPOSE ROOM



# MECHANICAL DESIGN CRITERIA

## OVERALL PROJECT REVIEW

Refer to all project information including project program to fully understand the space program requirements. Refer to the University of California, Riverside (UCR) 2016 Physical Master Plan Study and Campus Standards to understand overall goals of the campus.

Summarized, the project involves the new ground up construction of a Student Success Center for the University of California, Riverside in Riverside California. There are existing campus utilities that are in the vicinity of the project for mechanical, electrical, and plumbing. Refer to other sections for other campus utilities.

The space programming has been separated into four (4) categories. Refer to the Space Program Matrix for all space types and area requirements.

1. Student Life / Student Affairs
    a. Lobby
    b. Prefunction
    c. Storage
    d. Multipurpose Room
    e. Group Meeting Rooms
    f. Group Study Room (Small)
    g. Student Lounge
    h. Open Student Study
2. General Assignment Classrooms
    a. Classrooms
    b. Large Classrooms
    c. Small/Medium/Large Lecture Halls
    d. Labs & Classroom Service
    e. Testing Center
    f. Lecture Hall Prep Rooms
    g. Group Break-Out Study Spaces
    h. Prefunction Space
3. Auxiliary Services
    a. Dining Services
4. Support Spaces
    a. Restrooms
    b. Nursing / Mother's Room
    c. Building Housekeeping
    d. Building Trash and Recycling

## PROJECT HOLISTIC PERFORMANCE REQUIREMENTS

The following goals are holistic project goals that involve multiple disciplines.

1. LEED
    a. Project shall be LEED Gold Minimum.
2. Energy / Carbon Neutrality
    a. The building shall exceed Title-24 by 20% in the Energy Compliance Performance Model as calculated with the CBEC-Compliance Software.
        i. Greater emphases for the technical criteria review of the Design Build proposal shall be placed on teams that are able to achieve this requirement without the use of excessive renewable energy sources. It is encouraged the design build teams reduce all loads prior to considering renewables. Ideally, this goal can be met without the use of renewable energy systems such as photovoltaics.
    b. The building shall perform for a year within 10% of the modeled energy performance. Provide necessary metering as required for monitoring.
    c. No natural gas is allowed for the project.
3. Thermal Comfort
    a. All regularly occupied spaces shall meet ASHRAE 55. ASHRAE 55 calculations shall be submitted at the end of Design Development.
4. Acoustics
    a. See Acoustical BOD for acoustical performance requirements of Mechanical, Electrical, and Plumbing systems. In general for HVAC, refer to Chapter 48: "Noise and Vibration Control" of the "ASHRAE Handbook – HVAC Applications," and "A Practical Guide to Noise and Vibration Control for HVAC Systems," published by ASHRAE, for acoustical basis of design.
5. Lighting
    a. Post construction testing of the ambient lighting systems in classrooms, study areas, student working areas, or testing center. The ambient lighting system shall be able to maintain an average light intensity of 20 foot candles or more, measures on the horizontal plane, 30 inches above finished floor. The lights shall be dimmed in the presence of daylighting, but they are able to independently achieve these levels. The lighting intensity at the work surface shall be 30 foot candles or greater. (Reference: International WELL Building Standard)
6. Accessibility and Maintenance
    a. The routing and location of MEP systems shall be made such that equipment is able to be replaced and that all valves, components, equipment, etc. that requires access has the appropriate code clearance and maintenance clearances. Equipment replacement paths shall be identified during the design phase such that demolition of other systems or walls is not required during replacement.
    b. The routing and location of MEP systems in the building, particularly in the ceiling plenum space, shall conform to this hierarchy (from closest to the floor slab to closest to the ceiling):
        i. Mechanical Systems
        ii. Electrical / Dry Utilities
        iii. Wet Utilities

c. Wet utilities shall not be installed such that they are difficult to access or visually survey in the event of a leak. Wet utilities shall not be "buried" above other equipment/components. Wet utilities shall not be located above electrical equipment. Wet utilities shall not be located in electrical rooms unless they serve equipment within the electrical room.

d. All MEP major components, equipment, panels, ductwork, piping, and valves shall be uniquely labeled with system information or equipment tag information.

e. Provide shut off valves for equipment and major components to isolate the equipment or component for replacement.

f. All stamped record drawings and operating & maintenance manuals shall be submitted to the University Representative after construction.

### Air Distribution

Ductwork design criteria (maximum allowable air pressure drops and air velocities) to meet high efficiency operation with minimal acoustical noise. Duct static pressure friction loss shall not exceed 0.2" per 100 feet in mechanical rooms and shafts. Low pressure supply duct static pressure friction loss based on a maximum of 0.08" per 100 feet. Low pressure return and exhaust duct static pressure friction loss based on a maximum of 0.06" per 100 feet. Medium pressure ductwork shall not exceed a duct static pressure friction loss based on a maximum of 0.1" per 100 feet. Air intake velocities shall not entrain rain and shall be no great than 750 fpm velocity or as required to avoid water entrainment. Air outlet velocities shall not exceed 0.1 in.w.g. of pressure drop across a louver and shall not exceed 750 fpm velocity or as required by acoustician.

See Acoustical BOD for maximum allowable noise levels as generated by HVAC systems by space type.

The maximum supply, return and exhaust duct air flow velocities shall meet the following criteria set forth by the acoustical consultant. Refer to Acoustical Report for NC Requirements per room type.

See table below for design guidelines for maximum air velocities in rectangular ducts (FPM).

**Table 1 - Maximum Air Velocities in Rectangular Ducts**

| LOCATION | Noise Criteria (NC) | | | |
|---|---|---|---|---|
| | 40 | 35 | 30 | 25 |
| Main Branch | 1700 | 1500 | 1200 | 800 |
| Duct more than 10' from grille/diffuser | 850 | 800 | 700 | 600 |
| Duct within 10' of grille/diffuser | 600 | 500 | 400 | 300 |
| Open return duct above ceiling | 650 | 600 | 550 | 450 |
| Size diffuser/grille so the manufacturer's rating does not exceed | NC-35 | NC-30 | NC-25 | NC-15 |

7. In shafts: maximum 2000 fpm velocity
   a. Confirm that there is no adjacency to an acoustically sensitive space and that proper acoustical provisions can be made or provide acoustical separation.
8. Ducted transfer air: 350 fpm velocity

### Hydronic Distribution

1. General
    a. All piping shall be domestic piping from the USA.
    b. Per the University, cathodic protection is not required for the project. Confirm with the geotechnical report for corrosivity requirements.
    c. All underground piping and fittings shall be provided with an engineered preinsulated piping system.
    d. Provide all necessary anchors and expansion loops.
2. Chilled Water / Heating Hot Water / Condenser Water
    a. Piping shall be provided in accordance with the following design requirements. The most stringent pipe sizing technique (pressure drop or velocity) shall be used.
    b. Max water pressure drop: 4 ft.wg./100 ft.
    c. Max water velocity: 6 fps up to 5" pipe, 7 fps for 6" to 12" pipe.
    d. Max allowable water velocity: 10 fps in mechanical rooms.
    e. Provide shut off valves for isolation of major areas, at each piece of equipment, and each air handling system.
    f. All piping 2" or smaller shall be Type K copper for the University Standard. All piping greater than 2" shall be Schedule 40 Carbon Steel.
    g. Groove fittings such as Victaulic or Press Fit fittings shall not allowed be for heating hot water systems or for systems that may experience large temperature differentials between fill temperature and operating temperature.
    h. Provide blind flanges and isolation valves at the building point of entry for local water treatment.
3. Steam / Condensate Return
    a. Steam: Heater Hot Water heat exchanger shall be used such that heating hot water is the medium piped within the building.
    b. Steam Piping shall be sized to not exceed 100 ft./s.
    c. Steam piping shall be Schedule 40 steel.
    d. Condensate Return piping shall be Schedule 80 steel.
    e. Condensate and steam sloping:
    f. Branch piping (sloped back to main): 1" per 20'-0".
    g. Main piping (sloped in direction of flow): 1" per 40'-0".

### Campus Hydronic System

The hydronic systems near the building are:

1. Chilled water: There is an existing steam / condensate return system throughout the campus. Per the May 17, 2016 Physical Master Plan Study, there appears to be available capacity in the chilled water main utility line traveling east/west south of the proposed site. Refer to the chilled water exhibit. Temporary or permanent recirculation loops/valves shall be provided such that the building's hydronic system can be filled, treated, recirculated, and filtered separate from the campus loop. The hydronic treatment for the building shall be completed prior and the campus must approve of the results of the hydronic treatment testing prior to opening isolation valves to connect to the campus loop.
    a. Chilled Water entering water temperature: 42°F

   b. Chilled Water leaving water temperature: 60°F
   c. Chilled Water Loop differential pressure: Assume that there is no differential pressure available from the campus loop. The chilled water pump shall be sized to accommodate the pressure loss to/from the points of connection to the chilled water supply/return.
2. Steam / Condensate Return: There is an existing steam / condensate return system throughout the campus. Refer to the steam exhibit.
   a. Steam Operating Pressure: 85 psi
   b. Condensate Return Pressure: 0 psi (gravity drain)

### Mechanical Systems

The following systems are preferred by the University for use on this project. The system shall be selected to aid in the overall performance goals of the project. ASHRAE 55 calculations shall be submitted at the end of DD for review by the campus.

1. Natural Ventilation/Conditioning
2. Baseboard Radiant Heating (in-slab radiant heating/cooling is not preferred by the University.)
3. Ceiling Macro Fans
4. Variable Refrigerant Flow
5. Chilled Water Air Handling Units with Variable Air Volume Terminal Units
6. 4-Pipe Fan Coil Units

The following systems can be considered, but they are not preferred systems by the University due to concerns of condensation. Shall these systems be used for energy efficiency measures, submit mitigation measures for dew point and condensation control.

1. Active Chilled Beams
2. Radiant Floors and Radiant Cooling Panels

### Coils

Coils shall be designed such that:

1. Maximum face velocity: 450 fpm
2. Maximum fins per inch: 12
3. Maximum air pressure drop - cooling coil: 0.75" wc (wet coil)
4. Maximum air pressure drop – heating coil: 0.25" wc
5. Maximum tube pressure drop: 10 ft. wg.
6. Minimum tube pressure drop: 2 ft. wg.
7. Minimum tube rows – cooling coil: 4
8. Minimum tube rows – heating coil in air handler: 1
9. Minimum tube rows – reheat coil in VAV terminal unit: 2
10. Minimum thickness per outside diameter dimension (o.d.):
    a. 3/8" o.d.: 0.028"
    b. 1/2" o.d.: 0.032"
    c. 5/8" o.d.: 0.049"

### Natural Ventilation Considerations

The following conditions shall be monitored and reported to determine if the space shall use natural conditioning methods:

1. Outside Air Dry Bulb
2. Outside Air Wet Bulb
3. It is recommended that the Outside Air Quality Index as determined by the Environmental Protection Agency South Coast Air Quality Management District be made readily available. This shall include reporting on the following:
    a. Carbon Monoxide
    b. Nitrogen Dioxide
    c. Ozone
    d. PM2.5
    e. PM10

If windows or doors are opened for long periods of time, the HVAC system serving the zone shall turn off.

### Controls

Provide new direct digital building automation system (BAS) to operate all system functions and schedules. The BAS shall be by Siemens, Johnson Control, or Allerton; all to be BAC Net compatible. All controls are to be connect to, communicate with, and be controlled from the existing campus Siemens BAS. All controls shall be non-proprietary and open protocol. Ensure that all necessary control points are provided for commissioning, retrocommissioning, load metering, load submetering, and troubleshooting. Ensure all necessary duct smoke detectors are provided where required and coordinate with fire alarm contractor for proper connection to fire alarm system. Provide animated graphical displays of equipment and systems viewable with monitored point information accessible from the campus building automation system. The following is an example, but the controls are not limited to the following:

1. Outside Air and Supply Air Airflows
2. Supply Air, Mixed Air, and Return Air Temperatures
3. Supply and Return Duct Static Pressures
4. VFD Information including, but not limited to Alarms, kWh, Speed
5. Fan and Pump Status
6. VAV Temperature
7. Active Chilled Beam Induced Air and Primary Air Airflows
8. VAV and Active Chilled Beam Entering Air and Supply Air Temperatures
9. Chilled Water and Heating Water Supply/Return Temperatures
10. VAV and Active Chilled Beam Entering Air and Supply Air Temperatures
11. Valve and Damper Positions
12. Radiant Zone Valve Position and space Dew Point
13. Environment Quality Index (based on dry bulb deviation from setpoints)

A BAS Control Station shall be provided with a computer and monitors shall be provided for the building.

A detailed graphics package shall be developed for the project.

### Submetering

Submetering shall be tied into the Building Automation System. At a minimum, the following shall be submetered:

1. Electrical
    a. Overall Building
    b. HVAC
    c. If chilled water or steam is used from the central plant, account for the electrical usage per btu/hr for the equipment in the central plant.
    d. Lighting
    e. Receptacles
2. HVAC (depending on the system)
    a. Chilled Water
    b. Heating Water
    c. Steam
3. Water
    a. Cubic Feet (Shall be tied into BAS)

## ZONING CRITERIA

Zoning shall be configured to ensure that a substantial temperature gradient does not exist across a regularly occupied zone. Zones shall not have multiple envelope exposures. Based on the room layout, consideration shall be made for dividing spaces into envelope and interior zones. At a minimum, zoning shall be provided as follows:

1. Lobby: one zone (temperature sensor) per 1,000 square feet
2. Prefunction: one zone (temperature sensor) per 1,000 square feet
3. Multipurpose Room: one zone (temperature sensor) per 1,000 square feet
4. Group Meeting Rooms: one zone (temperature sensor) per room
5. Group Study Room (Small): one zone (temperature sensor) per room
6. Student Lounge: one zone (temperature sensor) per room
7. Open Student Study: one zone (temperature sensor) per 1,000 square feet
8. Large Classrooms: one zone (temperature sensor) per 1,500 square feet
9. Small/Medium/Large Lecture Halls: one zone (temperature sensor) per 1,500 square feet
10. Testing Center: one zone (temperature sensor) per room
11. Lecture Hall Prep Rooms: one zone (temperature sensor) per room
12. Group Break-Out Study Spaces: one zone (temperature sensor) per space
13. Dining Services: one zone (temperature sensor) per space.
    a. The Dining Services space shall be kept under negative pressure to mitigate odor transmission to adjacent spaces.
14. Dining Seating: one zone (temperature sensor) per space
15. Building Lobby: one zone (temperature sensor) per 1,000 square feet
16. Nursing / Mother's Room: one zone (thermostat) per room
17. Data/telecom: one zone (temperature sensor) per room

Zones with an occupancy density greater than 40 sq.ft. per person where

airside economization is available requires a carbon dioxide sensor with demand control ventilation reporting to modulate the associated air handling unit's minimum outside air.

Zoning of air handling units shall be such that the zones within a given air handling unit zone have the same or similar hours of operation.

## APPLICABLE CODES & REFERENCE ORGANIZATIONS AND GUIDELINES

1. Americans with Disabilities Act (ADA).
2. NFPA 90A: Standard for the Installation of Air-Conditioning and Ventilating Systems, 2018 Edition.
3. NFPA 90B: Standard for the Installation of Warm Air Heating and Air-Conditioning Systems, 2018 Edition.
4. NFPA 101: Life Safety Code, 2018 Edition.
5. ASHRAE 2015 Handbook, HVAC Applications.
6. ASHRAE 2016 Handbook, HVAC Systems and Equipment.
7. ASHRAE 2017 Handbook, Fundamentals.
8. ASHRAE 2018 Handbook, Refrigeration.
9. ASHRAE 55-2016 Thermal Environmental Conditions for Human Occupancy.
10. ASHRAE 62.1-2016 Ventilation for Acceptable Indoor Air Quality.
11. ASHRAE 90.1-2010 Energy Standard for Buildings except Low-Rise Residential Buildings.
12. Applicable year to the date of your first official submittal review for new construction is anticipated during the 2019 year, and therefore, utilizing the adopted 2016 codes for the project. DB Teams are ultimately responsible for verifying and conforming to all applicable codes. 2016 California Building Codes enforced by the Authority Having Jurisdiction (AHJ):
    a. 2016 California Building Code (CBC), California Code of Regulations, Title-24, Part 2 (based on the 2012 International Building Code with State and Local Amendments).
    b. b. 2016 California Mechanical Code (CMC), California Code of Regulations, Title-24, Part 4 (based on 2012 Uniform Mechanical Code (UMC) with State and Local Amendments).
    c. 2016 California Plumbing Code (CPC), California Code of Regulations, Title-24, Part 5 (based on 2012 Uniform Plumbing Code (UPC) with State and Local Amendments).
    d. 2016 California Fire Code (CFC), California Code of Regulations, Title-24, Part 9 (based on 2012 Uniform Fire Code with State and Local Amendments).
    e. 2016 California Electric Code (CEC), based on the 2014 National Electrical Code with State and Local Amendments.
    f. 2016 California Building Energy Efficiency Standard for Residential and Nonresidential Buildings, California Code of Regulations, Title-24, Part 6.
    g. 2016 California Green Building Standards Code, California Code of Regulations, Title-24, Part 11.
    h. Additional state and local jurisdiction requirements.

### Outdoor Design Conditions

## DESIGN CONDITIONS

1. Location: Riverside, California
2. Summer: 100°F DB/69°F WB (0.5% Joint Appendix 2 California Climate Zone Descriptions)
3. Winter: 27°F (Winter Median of Extremes Joint Appendix 2 California Climate Zone Descriptions)
4. Elevation: 840 ft.
5. Climate Zone: 10

### Indoor Design Conditions

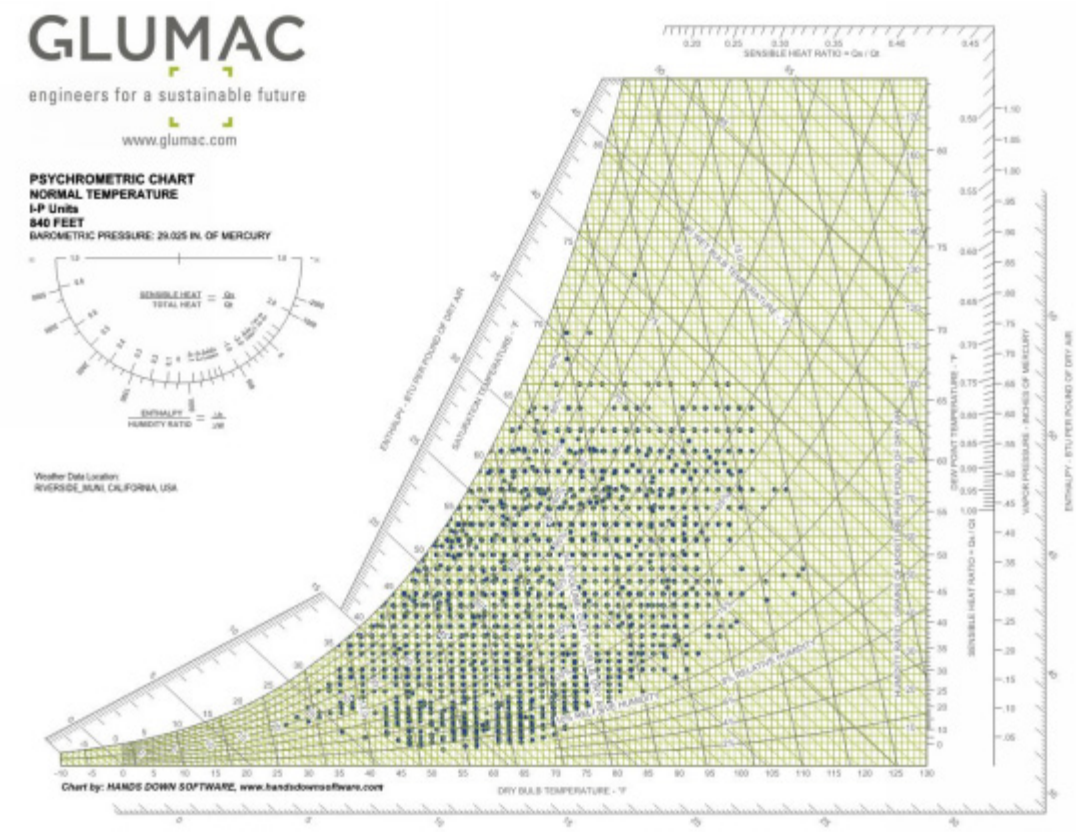



**Figure 1 - Psychrometric Chart for Riverside, CA | Sun. – Sat. | Jan – Dec | 06:00 – 22:00**

1. summer and winter. The following are recommended values to be considered, however, the radiant effects, air distribution quality index, metabolic rates, air velocities, and anticipated clothing levels shall be evaluated.
   a. Cooling: 75°F+/-2°F
   b. Heating: 70°F +/-2°F
2. Exceptions:
   a. Elec. Rooms: 90°F +/-2°F maximum
   b. Data/telecom rooms: cooling only, 78°F +/- 2°F (maximum)
   c. Elevator machine rooms: cooling only, 85°F +/- 2°F (maximum)
3. Specific Humidity control

a. Humidity shall be evaluated during the ASHRAE 55 study. There are no specific humidity range restrictions for the project.

b. Dew Point temperatures shall be monitored for zones using radiant cooling panels or active chilled beams.

4. Design Pressure

a. Positive: All Spaces (Unless otherwise noted).

b. Negative: Toilet rooms, custodial closets, Dining Services spaces.

### California Ventilation Criteria

1. All areas: 15 cfm/person or 0.15 cfm/sq.ft., whichever is greater. Per 2016 Building Energy Efficiency Standards Section 1210.1.b.2, number of people to be half of those calculated using the California Building Code Table 1004.1.2 rounded up the nearest whole number. For spaces with fixed seating, the expected number of occupants shall be the number of fixed seats and in accordance with the California Building Code Section 1004.4. (See Occupancy Criteria in California for more information).
2. Comply with California Building Energy Efficiency Standard.
3. Comply with Chapter 4 of CMC, Chapter 12 of CBC and ASHRAE 62.1.
4. Note that this project is seeking LEED certification, therefore, minimum ventilation shall be achieved in accordance with LEED ventilation prerequisites.
5. Ensure that all outside air intakes are not located near any pollution generating sources. Ensure adequate clearance between exhaust/relief openings and outside air intakes to prevent entrainment of exhaust. Coordinate exhaust/relief opening locations to not be upwind of outside air intakes.

### Exhaust to Outdoors (minimum rates)

1. Toilet rooms: 12 air changes per hour or 75 cfm/fixture, whichever is greater.
2. Custodial closet: 100 cfm or 10 air changes per hour, whichever is greater.
3. Shower rooms: 12 air changes per hour.

### Mechanical Occupancy Design Criteria in California

4. Lobby: 1 person/100 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
5. Prefunction: 1 person/10 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
6. Multipurpose Room: 1 person/15 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
7. Group Meeting Rooms: 1 person/15 sq.ft.; occupant heat: 245 Btuh sensible/205 Btuh latent
8. Group Study Room (Small): 1 person/15 sq.ft.; occupant heat: 245 Btuh sensible/205 Btuh latent
9. Student Lounge: 1 person/30 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
10. Open Student Study: 1 person/15 sq.ft.; occupant heat: 245 Btuh sensible/205 Btuh latent
11. Large Classrooms: 1 person/20 sq.ft.; occupant heat: 245 Btuh sensible/205 Btuh latent
12. Small/Medium/Large Lecture Halls: 1 person/20 sq.ft.; occupant heat:

245 Btuh sensible/205 Btuh latent

13. Testing Center: 1 person/20 sq.ft.; occupant heat: 245 Btuh sensible/205 Btuh latent
14. Lecture Hall Prep Rooms: 1 person/100 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
15. Group Break-Out Study Spaces: 1 person/15 sq.ft.; occupant heat: 245 Btuh sensible/205 Btuh latent
16. Dining Services: 1 person/15 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
17. Dining Seating: 1 person/30 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
18. Building Lobby: 1 person/100 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent
19. Nursing / Mother's Room: 1 person/100 sq.ft.; occupant heat: 250 Btuh sensible/250 Btuh latent

### Internal Heat Gains

1. Lighting: The indicated heat loads below are suggestions. Confirm final lighting power densities with the lighting consultant and electrical engineer.
    a. Lobby: 0.95 w/sq.ft.
    b. Prefunction: 1.2 w/sq.ft.
    c. Multipurpose Room: 1.2 w/sq.ft.
    d. Group Meeting Rooms: 1.2 w/sq.ft.
    e. Group Study Room (Small): 1.2 w/sq.ft.
    f. Student Lounge: 0.9 w/sq.ft.
    g. Open Student Study: 1.2 w/sq.ft.
    h. Large Classrooms: 1.2 w/sq.ft.
    i. Small/Medium/Large Lecture Halls: 1.2 w/sq.ft.
    j. Testing Center: 1.4 w/sq.ft.
    k. Lecture Hall Prep Rooms: 1.2 w/sq.ft.
    l. Group Break-Out Study Spaces: 1.2 w/sq.ft.
    m. Dining Services: 1.0 w/sq.ft.
    n. Dining Seating: 1.2w/sq.ft.
    o. Building Lobby: 0.95 w/sq.ft.
    p. Nursing / Mother's Room: 1.2 w/sq.ft.
2. General convenience receptacle power: The indicated heat loads below are suggestions. Confirm final power requirements with architect and electrical engineer based on equipment in the space and proposed use.
    a. Lobby: 1.0 w/sq.ft.
    b. Prefunction: 1.0 w/sq.ft.
    c. Multipurpose Room: 2.0 w/sq.ft.
    d. Group Meeting Rooms: 1.2 w/sq.ft.
    e. Group Study Room (Small): 1.5 w/sq.ft.
    f. Student Lounge: 1.2 w/sq.ft.
    g. Open Student Study: 1.2 w/sq.ft.
    h. Large Classrooms: 1.2 w/sq.ft.

i. Small/Medium/Large Lecture Halls: 1.2 w/sq.ft.
j. Testing Center: 20.0 w/sq.ft.
k. Lecture Hall Prep Rooms: 1.2 w/sq.ft.
l. Group Break-Out Study Spaces: 1.2 w/sq.ft.
m. Dining Services: 3.5 w/sq.ft.
n. Dining Seating: 2.0 w/sq.ft.
o. Building Lobby: 1.0 w/sq.ft.
p. Nursing / Mother's Room: 0.5 w/sq.ft.

3. Electrical transformers: Shall meet DOE10 CFR Part 431 (2016) Efficiencies
   a. 15kVA: 517W
   b. 30kVA: 732W
   c. 45kVA: 1271W
   d. 75kVA: 1761W
   e. 112.5kVA: 2306W
   f. 150kVA: 2560W
   g. 225kVA: 4103W
   h. 300kVA: 4491W
4. Elevator machine rooms: 10,000 Btuh/Elevator (or as required by manufacturer)
5. Data rooms: 40 w/sq.ft.

### Building Envelope

The building envelope shall be designed such that it adds benefit towards the overall project energy goals. Ensure that all California Energy Code Mandatory Measures are met.

### Maintenance, Startup & Training

The final size and location of equipment and associated equipment rooms shall be coordinated and designed based on the final mechanical system type and final load calculations. All clearances shall be provided in accordance with code, manufacturer clearance requirements, or per the requirements set forth by the campus representative (whichever is most stringent). If the campus requires specific equipment to be readily replaced, ensure a path of easy removal without shut down of major systems. Wherever possible, ensure coil clearance on side opposite of the coil connection. All balancing valves shall be easily accessible for proper testing and balancing at project close out. Valves shall be in locations to allow for easy rebalancing as required in the future.

After furnishing and installing equipment, all equipment shall go through a startup and testing process. Prior to occupancy, ensure proper start up and checkout procedures are followed per manufacturer's recommendation to determine proper function of equipment. After startup, all HVAC air and hydronic systems shall be tested, adjusted, and balanced by an approved independent AABC or NEBB certified agency. After balancing, assist with additional functional and performance testing procedures with the commissioning agents and controls contractor. The controls contractor shall ensure adequate functionality of controls system. It is recommended that commissioning functional tests and alarms be provided with alarm delays as appropriate. Coordinate commissioning alarms, alarm delays, and controls points with the commissioning agent and controls contractor.

The following TAB contractors are preferred by the University:

1. American Air Balance Co. (714-693-3700)
2. Zeretzski (714-334-7857)
3. Precision Air Balance: (714-630-3796)
4. Penn Air Group (714-220-9091)
5. Los Angeles Air Balance Co. (909-931-1114)
6. Winaire, Inc. (714.901.2747)

For each mechanical system, demonstrate the operation and maintenance procedures to ensure proper training of campus staff appointed by the campus representative. Completion of adequate training shall be determined by the commissioning agent.

### Redundancy

1. Chilled Water Pumps: N+1
2. Heating Water Pumps: N+1
3. Boilers or Steam Heat Exchangers: N+1
4. VFD's: N+1 on Supply/Return Fans of Air Handling Units greater than 5HP
5. PRV's for Steam: N+1
6. Fans: Provide additional 5% for duct leakage

### Acoustic

The following acoustical measures shall be taken in order to comply with the acoustical performance requirements of the project. Confirm all requirements and specifics with the acoustical consultant.

1. All equipment used on the project shall have sound power level data in octave bands 63 Hz – 4,000 Hz available as generated by laboratory testing at a certified laboratory or calculation performed by manufacturer.
2. Confirm noise generation at inlets/outlets of fans with acoustical consultant. Confirm radiated noise from equipment with acoustical consultant and coordinate equipment placement as required.
3. All fans shall have Variable Frequency Drives or Electronically Commutated Motors. VVT systems and constant volume trimming damper systems are not acceptable.
4. Terminal units serving an occupied space shall be selected 5 NC lower than the space requirements. See Air Distribution Section for room specific design requirements for diffusers and ductwork.
5. Coordinate sizes and locations of duct silencers with acoustical consultant. Assume noise control will be necessary and coordinate with other trades to provide space in the design for duct silencers at all paths. Coordinate the use of acoustical louvers verses traditional louvers with the acoustical consultant. Acoustically line ductwork for 20' from fan inlets/outlets or as required by the acoustical consultant.
6. Per the acoustical consultant, isolate equipment and piping from the building in accordance with the requirements of Table 47, "Selection Guide for Vibration Isolators" contained in Chapter 48, HVAC Applications, ASHRAE Handbook, 2015 Edition. Provide seismic restraint to meet all applicable building codes, following general SMACNA Guidelines. For suspended vibration-isolated equipment and piping, utilize slack aircraft cable to avoid short-circuiting the isolation.
7. There shall be no perceptible vibration in the building structure in occupied spaces as generated by mechanical equipment.
8. The sound level in occupied spaces due to structure borne noise as generated by mechanical equipment shall not exceed 30 dBA.

### Seismic

Anchorage and restraints must be coordinated with structural engineer and authority having jurisdiction.

# 6.0

## APPENDIX

- Project Process & Participants

- Open Student & Faculty Forum Results

- UCR Campus Context (Refer to University furnished information - 26. UC Riverside Campus context - Jan 2019)

- Classroom Reference Character Images

- Student Affairs Reference Character Images

-

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- Equipment List

# PROJECT PROCESS & PARTICIPANTS

## INTRODUCTION

This document records the aspirations, vision, goals and needs of the Student Success Center as gathered through an inclusive process over a seven month period from December 2017 through June 2018.

Workshops and meetings were held with the User Groups to discuss and refine items such as design objectives, limitations, general criteria, assignable area, space requirements, spatial relationships, building constraints, furniture and equipment, and technology requirements. In addition, Technical Group meetings were held to discuss project status updates, scope and feasibility, and existing infrastructure.

Together, Steinberg Hart developed a work plan and interactive process to create the project vision, goals, and space needs defined in the Design Criteria Document.

An outline of the workshops is provided below:

- Site Feasibility Workshop
- Goals and Visioning Workshops
- Programming Workshops
- Adjacency and Spatial Relationship Workshops
- Site Planning
- Technical Requirements Workshops

These workshops included a variety of meetings with different user groups and University technical staff.

User Groups:

- Student Affairs
- Classrooms (including faculty, staff, and students)
- Academic Advising
- Auxiliary Services

Campus Planning:

- Capital Asset Strategies (CAS)
- Architects & Engineers (A&E)

Technical Groups:

- Facilities Services
- Auxiliary Services
- Information Technology Services (ITS)
- Grounds and Landscape
- Transportation and Parking Services (TAPS)
- Police Department
- Campus Fire Marshal
- Environmental Health and Safety

## SITE SELECTION PROCESS

The University conducted an initial site selection analysis that studied five potential Project locations within the area of the East Campus known as the "academic core", that contains a high concentration of classroom and student-centered facilities.

The Five Locations met basic suitability requirements:

1. An unencumbered site
2. Easy access for students
3. Proximity to related student support functions
4. Adequate land area for the program
5. Potential connections to the future planned development outlined in the Central Campus Neighborhood Plan and 2016 Physical Master Plan Study

In February 2018, the Chancellor, in consultation with senior campus leadership and the Project Working Group, selected a site for the Student Success Center, commonly referred to as "Site E". Site E is the last spot along the two main malls; Arts Mall and Carillon Mall. These malls not only serve pedestrians, but also organize open spaces and establish active nodes. The site selected was largely based on its accessibility to students, proximity to other classrooms, the student union, and other student support functions; and suitability of program based on near-term and long-term campus development plans. The construction of the Project at Site E shall activate the immediate area and complete an existing corridor of student-centered facilities.

## PARTICIPANTS

### UCR - Executive Project Sponsors

Cynthia K. Larive
Thomas M. Smith
Jeff Kaplan

### UCR - Capital Asset Strategies (CAS)

John White
Uma Ramasubramanian
Michelle Baniqued
Tricia Thrasher
Jaime Engbrecht
Karen Jordan
Leslie Rose

### UCR - Architects and Engineers (A&E)

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Jacqueline Norman
Rowan Reid
Robert Williams
Lezlie Howard

### UCR - Student Affairs

Joseph Virata
Brendan O'Brien

### UCR - Auxiliary Services

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Richard Geiger
David Henry

### UCR - Facilities Services

Hassan Ghamlouch
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John Peraino
Chris Pillen
Aaron Uresti
Toshio Ishida
Craig Kasten
Robert Corey
Manny Sanchez
Ben Kochevar
Steve Burleson
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### UCR - Faculty

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Ken Baerenklau
Richard Cardullo
Francesca Hopkins
Cynthia K. Larive
Michael McKibben
Marko Princevac
Thomas M. Smith
Stephen Wimpenny
Elaine Wong

## PARTICIPANTS CONT'D

### UCR - Information Technology Solutions

Martin Byrne
Michael Capriotti
Israel Fletes
Dan Martin
Angel Rocha

### UCR - Environmental Health and Safety

Amanda Grey
Tiffany Kwok

### UCR - Transportation and Parking Services

Irma Henderson
Andrew Stewart

### UCR - Police Department

Paul Dombrowski

## STUDENT SUCCESS CENTER PROJECT WORKING GROUP

### Working Group Members

Ken Baerenklau
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Aram Ayrapetyan
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Braken Dailey
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Francesca Hopkins
Lewis Luartz
Michael McKibben
Jacqueline Norman
Brendan O'Brien
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Erin Walch
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Stephen Wimpenny
Elaine Wong

### Working Group Staff

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Rowan Reid

### Campus Internal Consultants

Michael Capriotti
Israel Fletes
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Susan Marshburn
Dan Martin
Sharyl Murdock
Uma Ramasubramanian
Angel Rocha
Tricia Thrasher

## PARTICIPANTS CONT'D

### STUDENT SUCCESS CENTER PROJECT DESIGN CRITERIA TEAM

**Steinberg Hart - Program & Criteria Architects**

Kim Patten
Sean Rosebrugh
Joe Sion
Andrea Stalker
Brad Lang
Stephanie Yoo

**Glumac - Mechanical, Electrical and Plumbing Consultant**

Kameron Beeks

**Psomas - Civil Engineer**

Alysen Weiland
Sarah Curran

**Landlab - Landscape Consultant**

Neil Hadley

**Vantage Technology**

Michael Dannenberg

# OPEN STUDENT & FACULTY FORUM

## INTRODUCTION

During the first workshop of the programming phase, Steinberg Hart and UC Riverside worked together to hold an Open Student & Faculty Forum to collect student and faculty user feedback on the types of spaces they were looking for in each program. The Open Student & Faculty Forum was broken down into four stations.

The four stations included:

1. Visual Listening Voting
2. "Day in the Life" questionnaire
3. Open Discussion
4. Suggestion Box

The purpose of this exercise was to gather student and faculty user information to understand their program space needs and wants in comparison to the University's outlined programs.

The exercise revealed that ample student study areas with furniture to support studying were overcrowded and not sufficient for UCR's growing student population. In response, the University adjusted the building program to prioritize the increase of break-out spaces and informal student study seats with work surfaces to be distributed throughout the building to accommodate student needs.

A total of 147 students, alumni, faculty, and staff participated in a visual listening voting exercise.

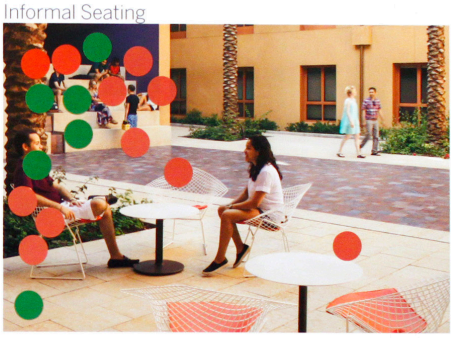
- 115 Students
- 20 Staff
- 2 faculty

# 1: VISUAL LISTENING VOTING EXERCISE RESULTS

Lawn Club

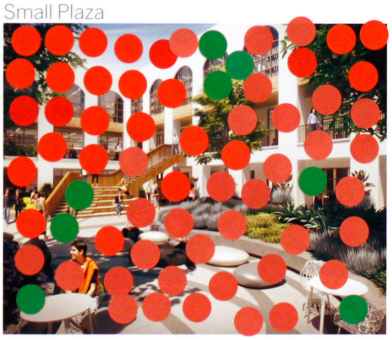
Dining Seating

Informal Seating

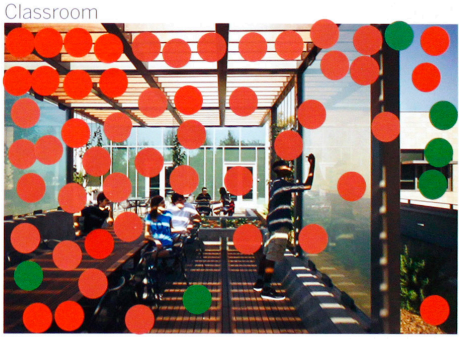


Large Plaza

Small Plaza

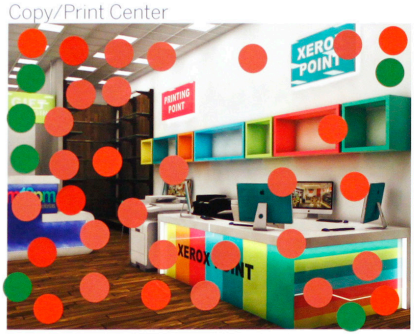


Classroom

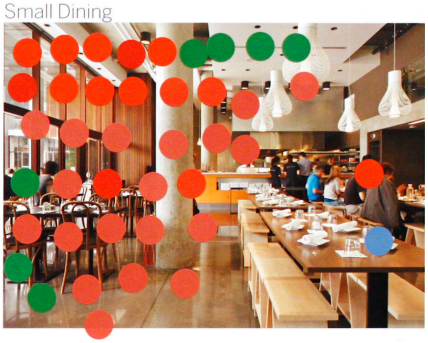


Cafe

Copy/Print Center



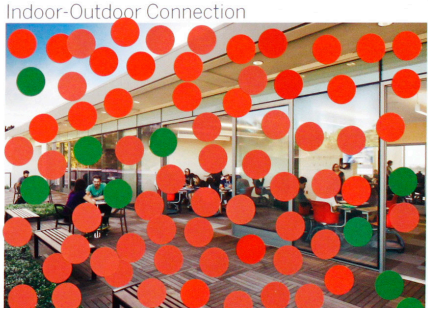

Small Dining



Grab N-Go

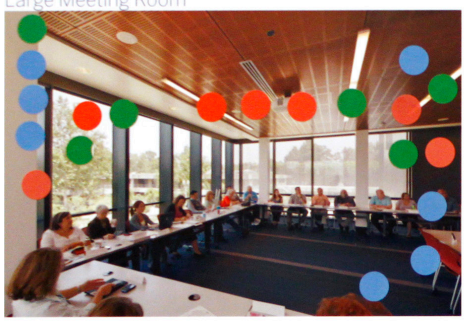
Coffee Shop

Indoor-Outdoor Connection

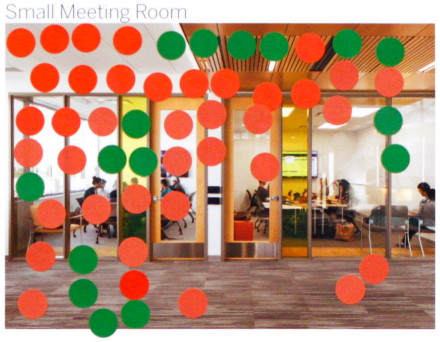


# 1: VISUAL LISTENING VOTING EXERCISE RESULTS

Large Meeting Room

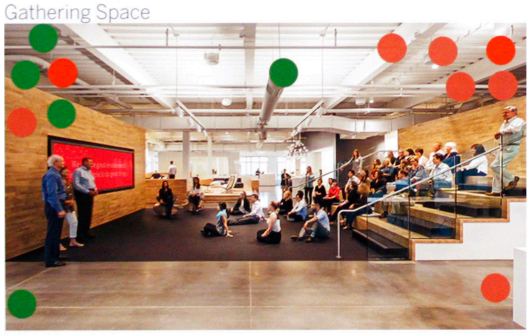


Small Meeting Room

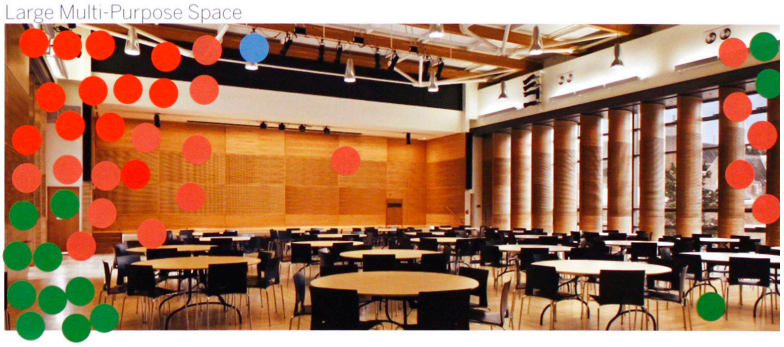


Small Collaborative Space

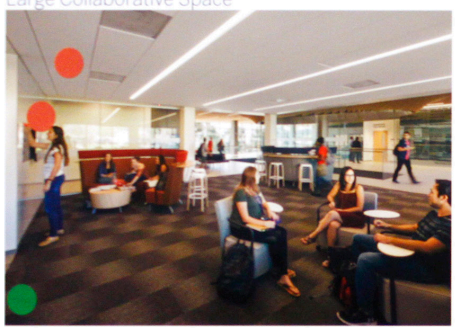
Gathering Space



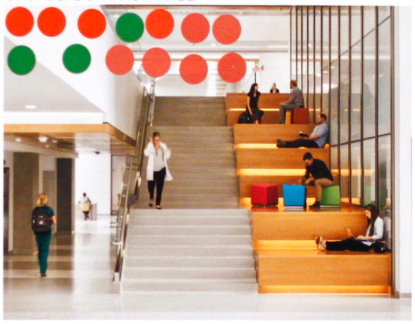
Large Multi-Purpose Space



Large Collaborative Space

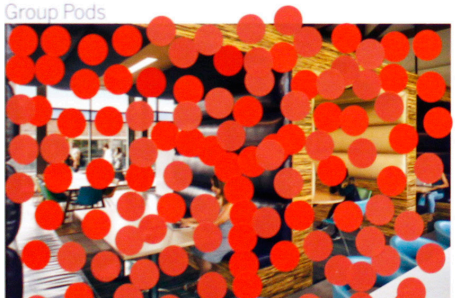


Shared Common Area



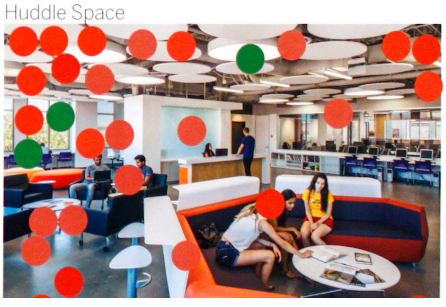
Breakout Group Space

Group Pods



Lounge

Huddle Space



# STATION 1: VISUAL LISTENING VOTING EXERCISE RESULTS

## STUDENT & FACULTY TOP VOTES

### Group Study Pods

115 VOTES

### Indoor/Outdoor Connection

65 VOTES

### Small Outdoor Courtyard

60 VOTES

# STATION 1: VISUAL LISTENING VOTING EXERCISE RESULTS

## STUDENT & FACULTY TOP VOTES

50 VOTES

### Group Study

50 VOTES

### Indoor/Outdoor Connection

40 VOTES

### Group Meeting Rooms

## 2: DAY IN THE LIFE QUESTIONNAIRE

After voting for most needed and desired spaces, students and other participants were asked to fill out a questionnaire that asked the following questions:

Imagine the Student Success Center is open today...

1. Do you go there?
2. If yes, why? What is it that brings you there?
3. When do you go? How long do you stay?

Below are the responses.

**60** responses

**15** freshman

**16** sophomore

**10** junior

**13** senior

**6** graduate

### TOP THREE RESPONSE THEMES:

What brings you there?

1. Socialize & Relaxation
   - Leisure between classes
   - Relief/comfort/seating
2. Academic
   - Study work spaces
   - Group study spaces
   - Meeting room spaces
3. Sense of Community
   - Student organizations
   - Student networking

### HOURS OF THE DAY:

When do you go and how long?

1. In between classes
   - Commuter students who stay on campus all day and need a place to stay between classes
2. Afternoon
   - Lunch breaks
   - Student and faculty meetings
3. Evening
   - Exam week for all students
   - Residents more likely to stay after hours

## 3: OPEN DISCUSSION



Understanding student needs by having an open discussion.

---

This activity of the Open Student Forum allowed Steinberg Hart to ask students directly what they were looking for in the Student Success Center and start an open discussion on items that may have not been represented during the visual listening voting exercise.

**TOP RESPONSES & DISCUSSION ITEMS:**

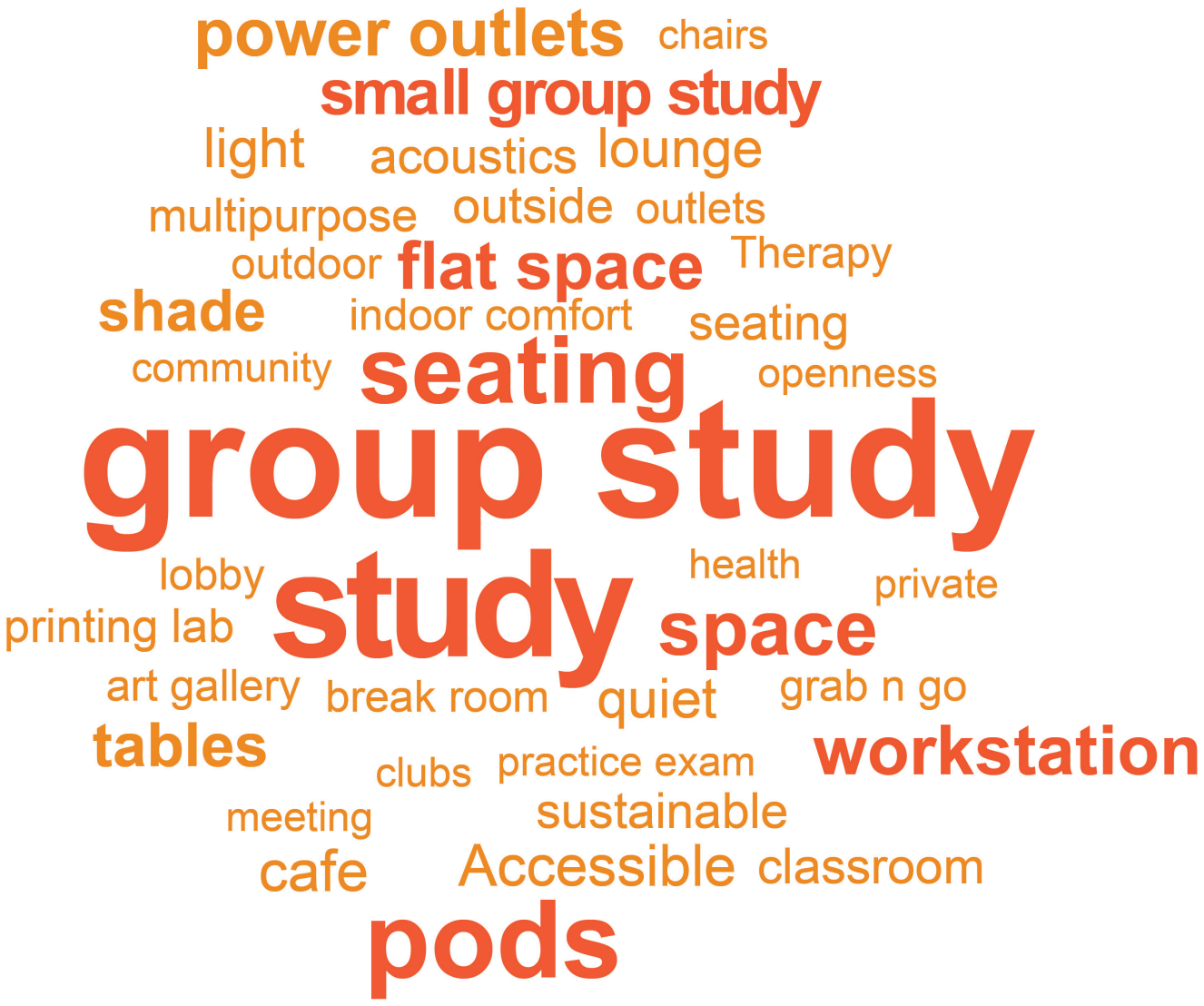
1. Group Study spaces
   - spaces set up to support multidisciplinary study groups by providing seating with work surfaces, technology to support screen presentations, writable surfaces.
2. Environment & Ambiance
   - Spaces should support wellness by bringing natural daylighting into classrooms, appropriate acoustic treatment, thermal comfort, and indoor and outdoor connections.
3. Services
   - Cafe serving healthier food options to support healthy lifestyle.

## 4: SUGGESTION BOX

**KEYWORDS**

**Top Suggestions:**

1. Group Study spaces
2. Accessories and furniture to support studying and active learning
3. Multipurpose space



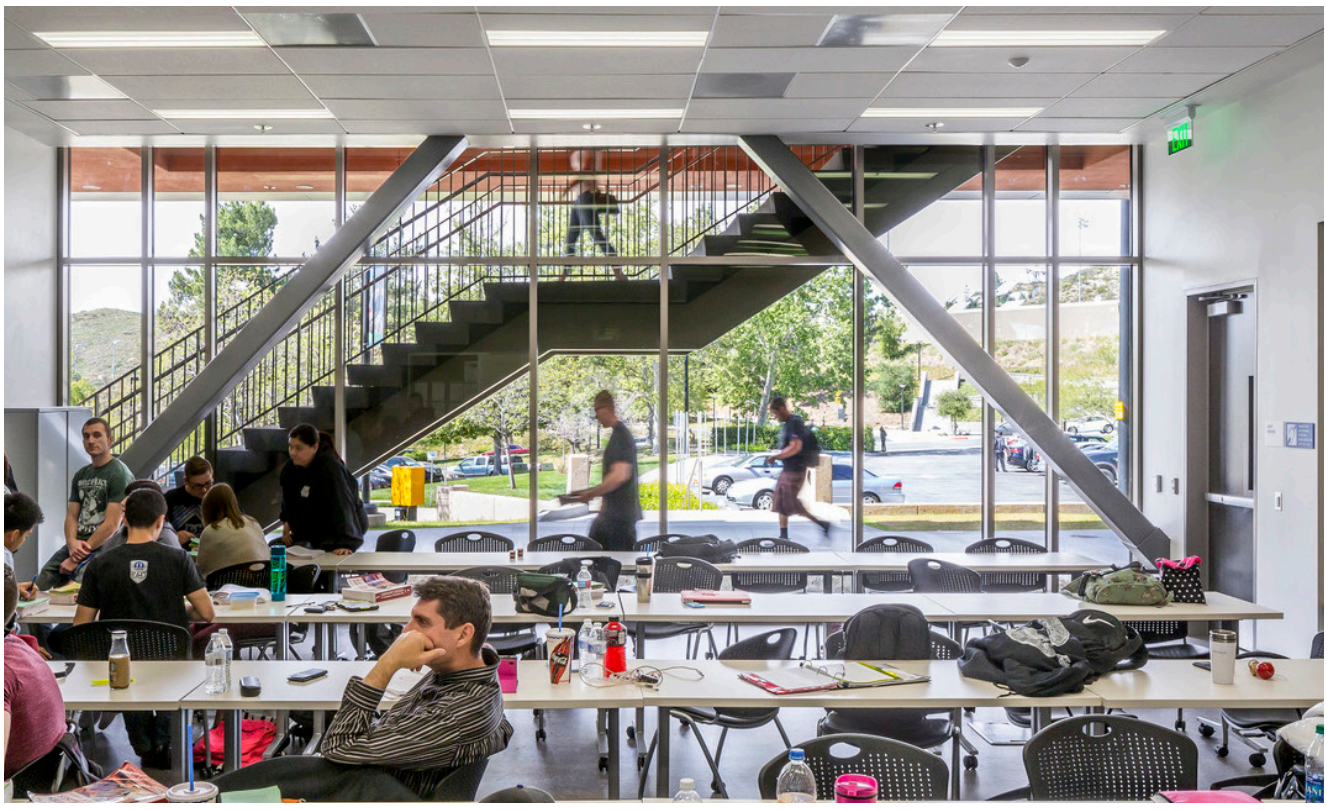
# CLASSROOM CHARACTER IMAGERY

Classroom reference images reflect the University's desired character and quality of the space for the Student Success Center's classrooms and lecture halls. Reference images do not represent the final room design and are provided for reference only. It is not the intention of the Criteria Architect to hinder the expertise or creativity of the Design-Build Team to provide a project proposal that exceeds minimum requirements.

The following reference images represent spaces of:

- Lecture Halls
- Classrooms
- Testing Center

Refer to the Room Criteria (Section 3.0) for additional information.



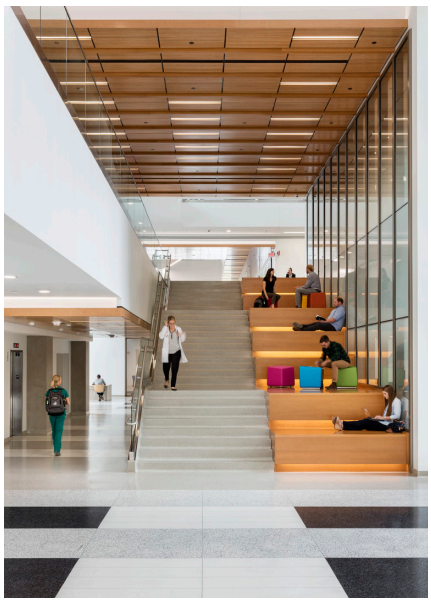
# STUDENT AFFAIRS CHARACTER IMAGERY

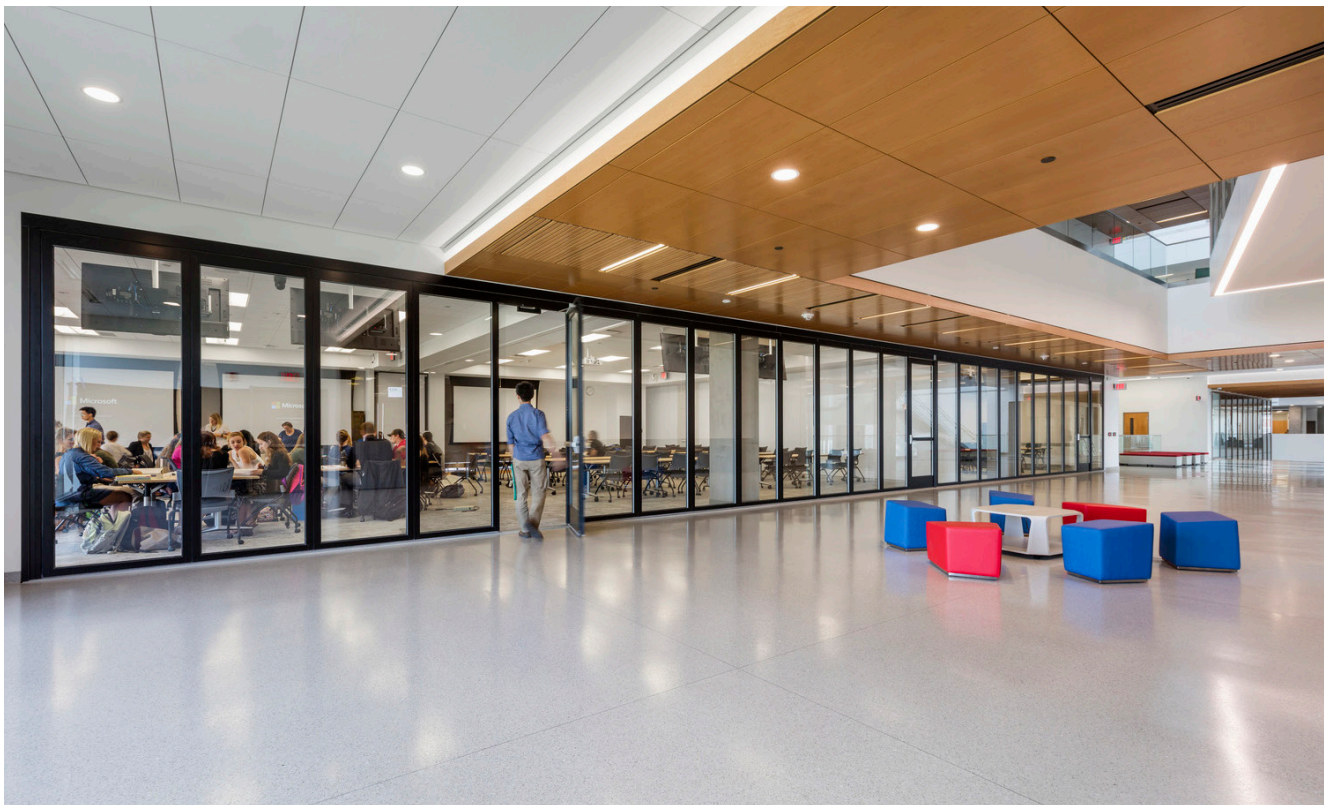
Student Affairs reference images reflect the University's desired character and quality of the space, for the Student Success Center's Student Affairs program spaces. Reference images do not represent the final room design and are provided for reference only. It is not the intention of the Criteria Architect to hinder the expertise or creativity of the Design-Build Team to provide a project proposal that exceeds minimum requirements.

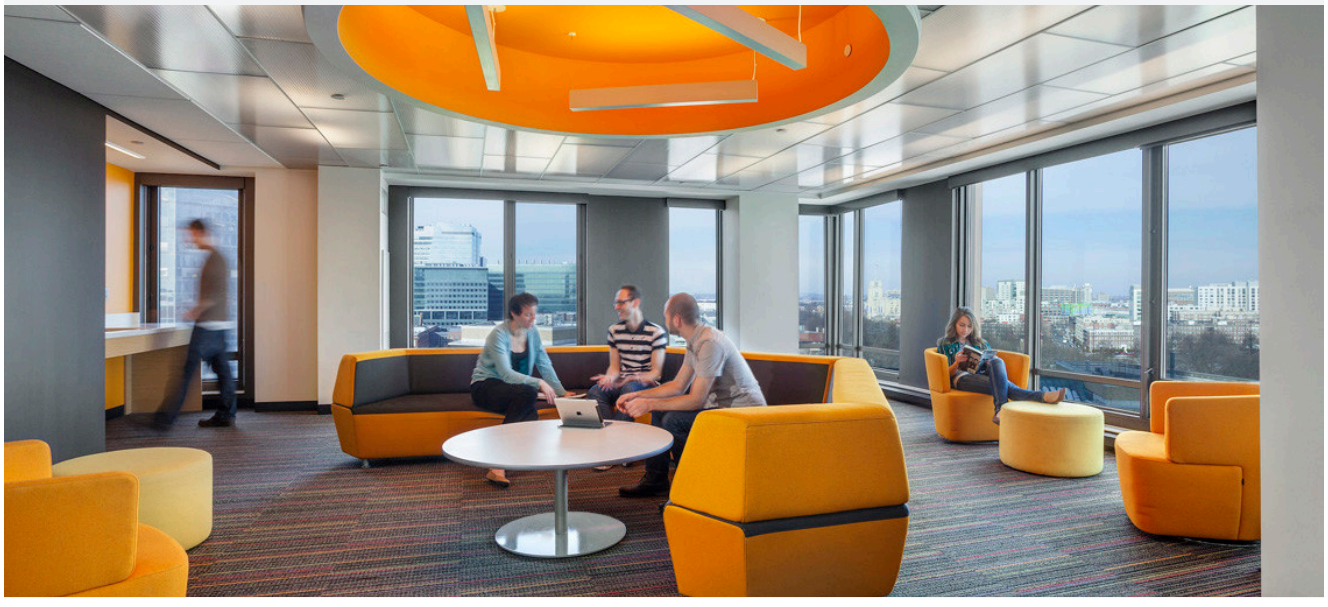
The following reference images represent spaces of:

- Lobby
- Pre-function space
- Multipurpose room
- Group Meeting room
- Group Study room

Refer to the Room Criteria (Section 2.4) for additional information.







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# EQUIPMENT LIST

## ROOM EQUIPMENT SCHEDULE

The following list outlines equipment to be used in the Student Success Center. This Equipment list does not include Audio Visual equipment, furniture and equipment required for Dining Services. Refer to Room Diagrams in Section 3.0 for additional equipment.

| ROOM | EQUIPMENT | QTY | MFR/VENDOR (Basis of Design) | PROVIDER |
|---|---|---|---|---|
| **Student Lounge** | Microwave, Commercial | 6 | GE Model PEB7226SFSS<br>Capacity: 2.2 cubic ft.<br>Power: 1100 watts<br>Features: Include turntable<br>Finish: Stainless Steel | DBF-DBI |
| **Mother's Room** | Refrigerator, Undercounter Commercial, Single Door | 1 | Summit Appliance Model AL750BISSHV<br>Total Capacity: 5.5 cubic ft.<br>Finish: Stainless Steel<br>Size: 3c h x 23.6 w x 23.5 d (inches) | DBF-DBI |
| **Lobby Storage Room** | Lockbox/Safe | 1 | | OFOI |
| **Restrooms** | Toilet Accessories; Paper towel dispensers, toilet paper dispensers, and soap dispensers. | | | OFDBI |
| **Student Affairs Program Spaces & Classroom Program Spaces** | Group 2 and 3 movable equipment | | | OFOI |

**DEFINITIONS:**

**OFOI:** Owner Furnished - Owner Installed

**OFDBI:** Owner Furnished - Design Build Entity Installed

**DBF-DBI:** Design Build Entity Furnished - Design Build Entity Installed