# George Mason University

## BULL RUN HALL 2, ACADEMIC VIII, & DISCOVERY PROGRAMMING KICKOFF

May 10, 2019

**EYP**

# OVERVIEW

# Architect/Engineer Team

| | |
|---|---|
| Architect | EYP |
| MEP | Mueller Associates Inc. |
| Structural | Cagley & Associates |
| Civil | GORDON |
| Landscape | Rhodeside & Harwell |
| Lighting Designer | MCLA |
| AV/IT/Acoustics | The Sextant Group |
| Cost Estimating | Forella Group LLC |
| Specifications | Sue McClymonds |

**John Baxter**
*Project Executive*

**Suzanne Klein**
*Project Director*

**Melissa Burns**
*Academic Planner*

**Brian Tucker**
*Lab Planner*

**Rick Clarke**
*Lead Designer*

# Sci Tech Instructional & Academic Support Space – 3550 FTE



Existing + New Instructional & Academic SupportSpace   Instructional & Academic Support Space Need   ATCC Space is not included
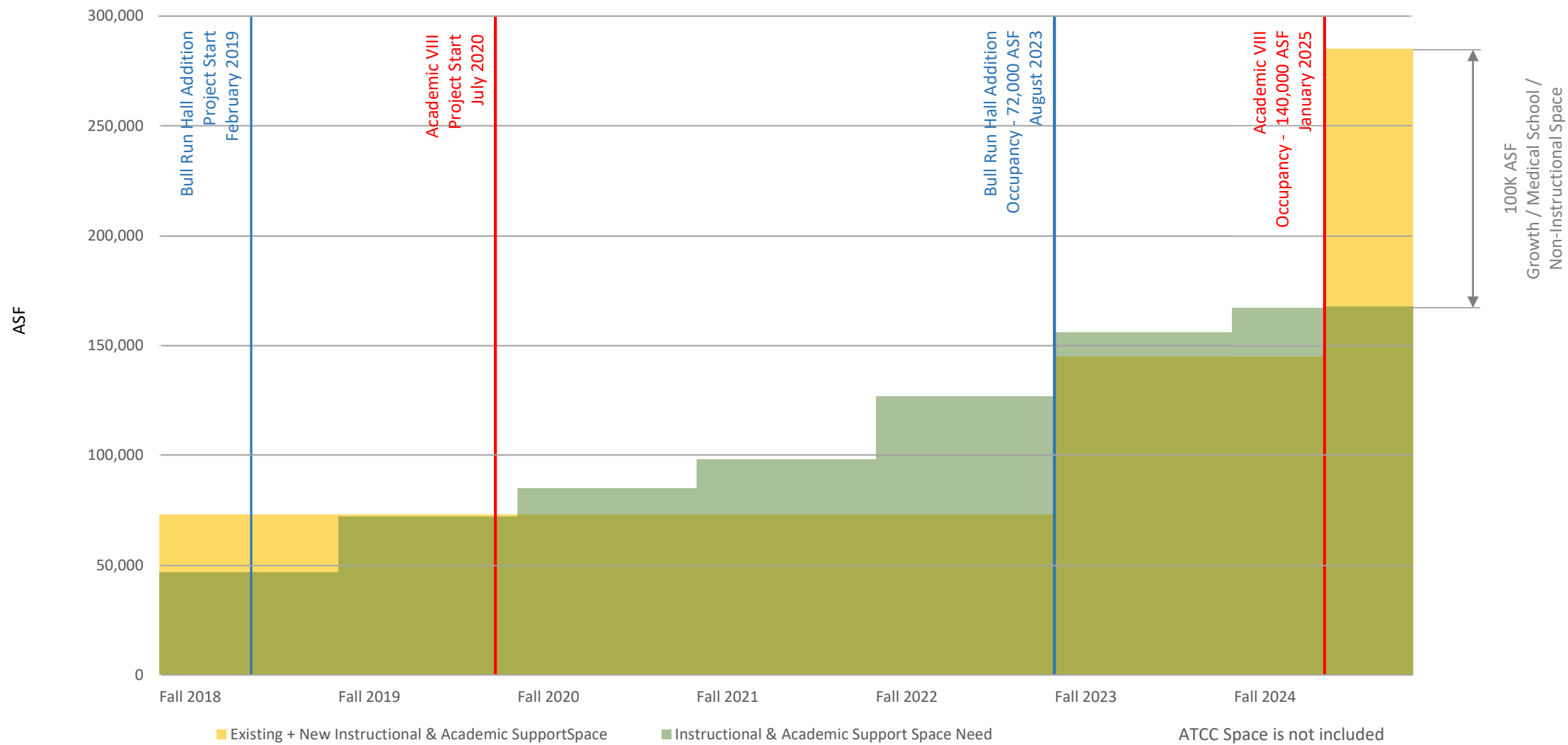
# Roles & Responsibilities: Building Committee

**Building Committee**

| | |
|---|---|
| CEHD | Banville, Dominique |
| COS | McVicker, Carrie |
| CVPA | Nam, Sang |
| VSE | Durant, Liza Wilson |
| Research | Crawford, Deb |
| Research | Hazel, Bill |
| Provost/Facilities | Manno, Laura |
| Facilities | Lipscomb, Doug |

# Roles & Responsibilities: Stakeholders

| | | | | | |
|---|---|---|---|---|---|
| CEHD | Ginsberg, Mark | VSE | Barton, Oscar (ME) | VSE | Manitius, Andre (IST) |
| CEHD | Caswell, Amanda | VSE | Jeff Moran (ME) | VSE | Farrell, Pete (IST) |
| CEHD | Stroiney, Debra | VSE | Colin Reagle (ME) | VSE | Khondkar Islam (IST) |
| CEHD | Ford, Martin | VSE | Pei Dong (ME) | VSE | Irene Bruno (IST) |
| CEHD | Banville, Dominique | VSE | Johnnie Hall (ME) | VSE | Pouyan Ahmadi (IST) |
| CEHD | Caswell, Shane | VSE | Elizabeth Lattanzi (ME) | VSE | Liz White (CS) |
| COS | O'Toole, Mary Ellen | VSE | Ramin Bighamian (ME) | VSE | Mark Snyder (CS) |
| COS | Falsetti, Tony | VSE | Pilgyu Kang (ME) | VSE | Craig Yu (CS) |
| COS | Weatherspoon, Gerald | VSE | Ali Behesheti (ME) | VSE | Jyh-Ming Lien (CS) |
| COS | Grant, Gerry | VSE | Erik Knudsen (ME) | VSE | Yotam Gingold (CS) |
| COS | McVicker, Carrie | VSE | Mehdi Amiri (ME) | VSE | Zoran Duric (CS) |
| COS | Vaisman, Iosif | VSE | Urgessa, Girum (CEIE) | VSE | Sean Luke (CS) |
| COS | Rockwood, Larry | VSE | Caroline Hoemann (BIOE) | VSE | Parth Pathak (CS) |
| COS | Wescoat-Andes, Martha | VSE | Carolina Salvador Morales (BIOE) | VSE | Jones. Jim (CYSE) |
| CVPA | Nam, Sang | VSE | Remi Veneziano (BIOE) | VSE | Setia, Sanjeev (CS) |
| CVPA | Davis, Rick | VSE | Shani Ross (BIOE) | Research | Crawford, Deb |
| CVPA | Martin, Scott | VSE | Juan Cebral (BIOE) | Research | Hazel, Bill |
| CVPA | Casey, James | VSE | Siddhartha Sikdar (BIOE) | ITS | Allen, Ben |
| VSE | Durant, Liza Wilson | VSE | Qi Wei (BIOE) | ITS | Clemons, Crystal |
| VSE | Pyster, Art | VSE | Vicky Ikonomidou (BIOE) | EHSRM | Didier, Paul |
| VSE | Rose, Joyce | VSE | Buschmann, Michael (BIOE) | Registrar | Xiong, Pheng |

# Roles & Responsibilities: Facilities Staff Support

Facilities Staff Support

| | |
|---|---|
| Planning | Manno, Laura |
| Project Mgmt. | Steele, Virginia |
| Interiors | Brady, Debbie |
| Facilities Mgmt. | Drerenberger, Tad |
| Space Mgmt. | Staulcup, Joy |
| PD&C | Lipscomb, Doug |

# Schedule

| Phase | Programming | Schematic Design | Preliminary Design | Working Drawings | Permitting & Bidding | Construction |
|---|---|---|---|---|---|---|
| Durations | 3 Months May 2019-August 19 | 3 Months August 2019-November 2019 | 4 Months November 2019-March 2020 | 5 Months March 2020-August 2020 | 5 Months August 2020-January 2021 | 27 Months January 2021-June 2023 |
| Key Meetings | Work Session #1: May 20 -21<br><br>Work Session #2: June, 10-12<br><br>Work Session #3: July 9-11 | | | | | |
| User Tasks | Identify Needs Define Activities Specify Specialized   Equipment | | | | | |

THE SPACE
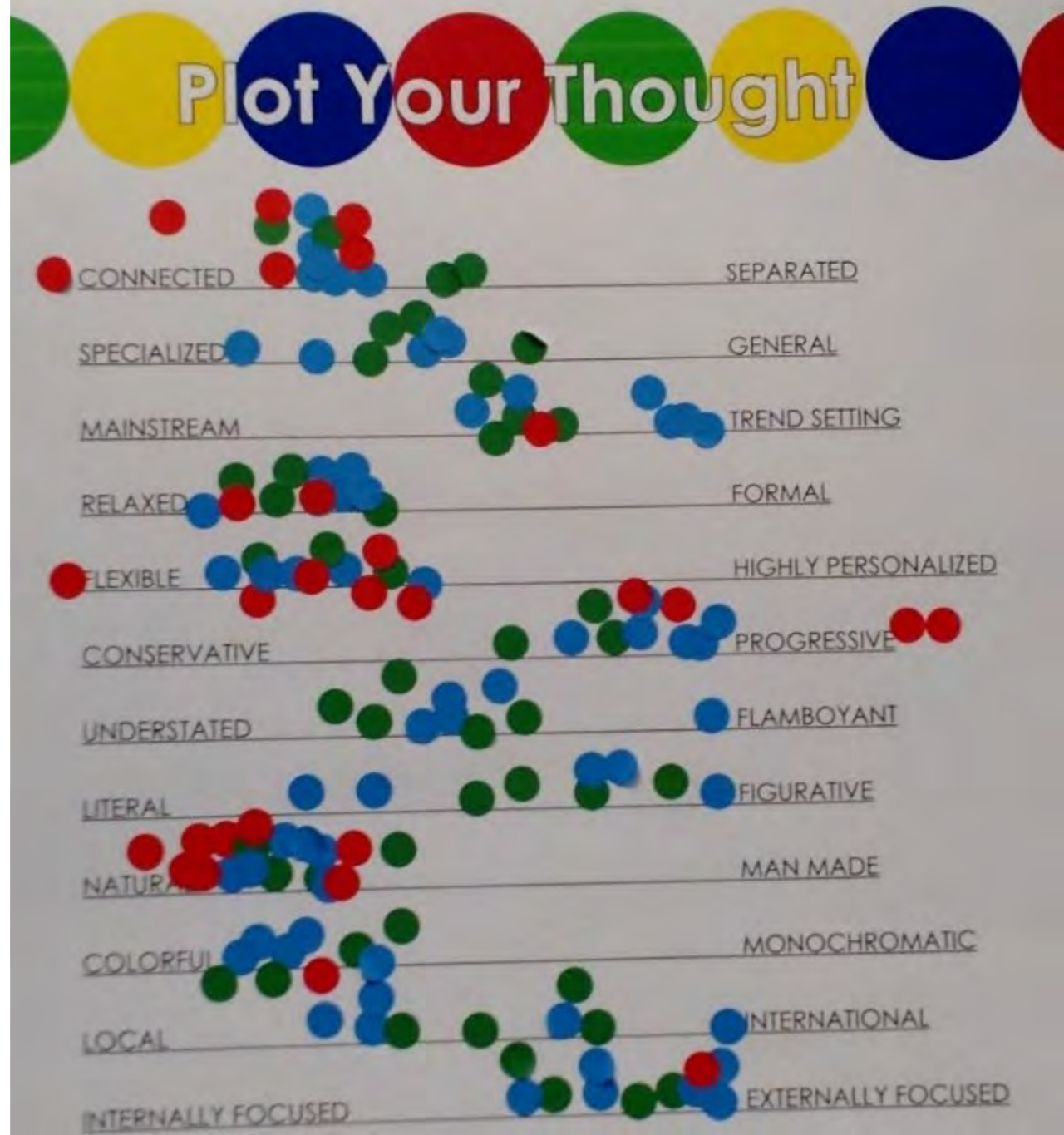PROGRAMMING PROCESS

# Student Engagement
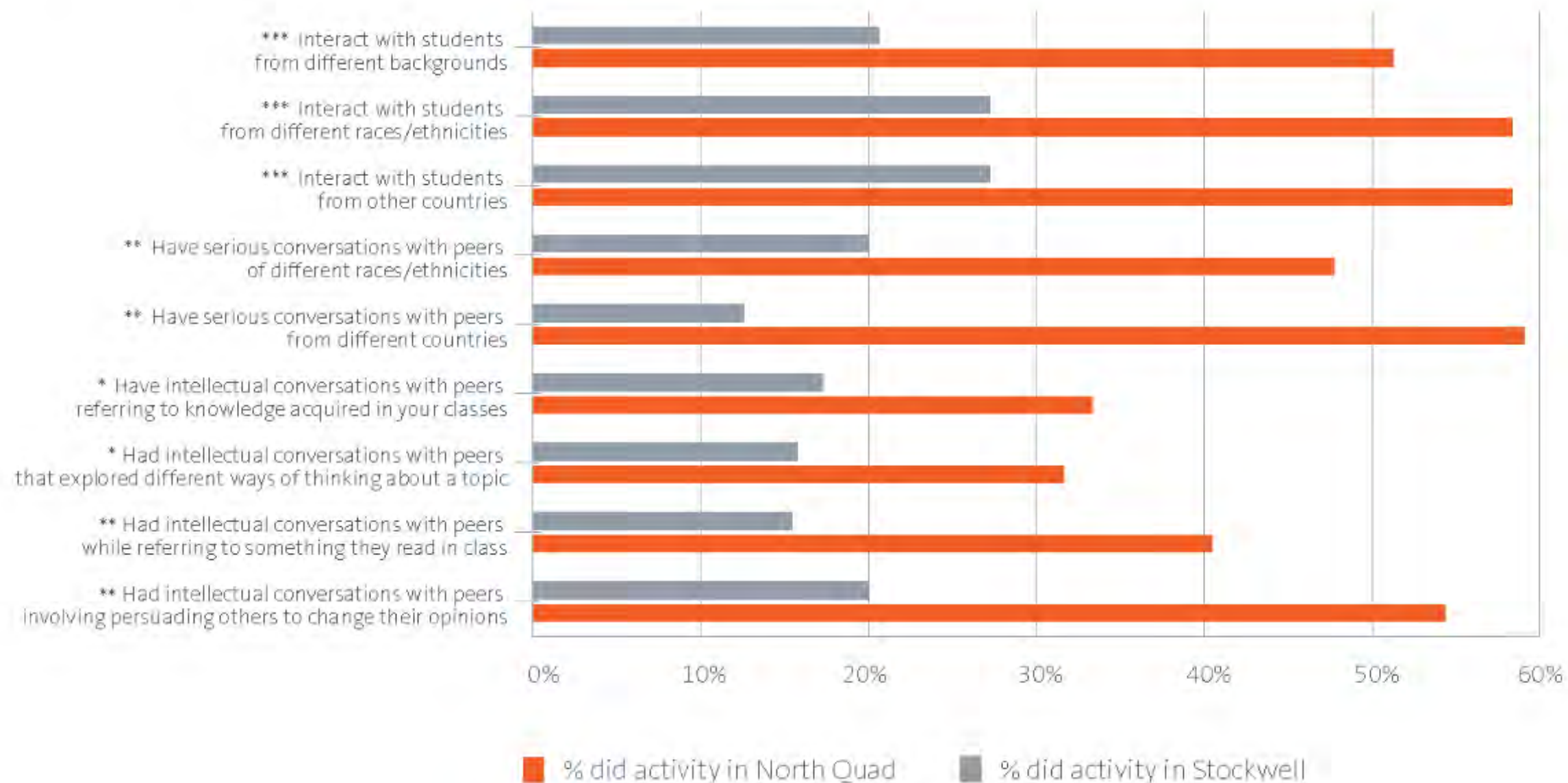
# Anticipated Stakeholder Groups

- Instructional Wet Labs & Support Spaces
- Instructional Wet Labs – Bio or Chem Intensive
- Instructional Cadaver Lab & Support Spaces
- Other Medical Education Instructional Labs & Spaces
- Instructional Dry Labs & Support Spaces
- Instructional Computer Labs
- Virtual Reality &/or Animation & Support Spaces
- Human Performance/Physiology/Motion Capture
- Student Design Spaces
- Classrooms
- Collaboration Spaces
- Facilities Staff
- Building Committee
- Discovery - ATCC

Project Kickoff

1 UNDERSTAND

2 EXPLORE

3 ALIGN

4 REALIZE

# George Mason University    Prince William Campus

## Program Space Requests for Bull Run Addition & Backfill Project

**New Addition Scope - Proposed** (some additional program adjustment may be required)

9/18/2017 - Final Planning Program

**New Addition Program**

| Item | QTY | Size | Total ASF | Comments | Stakeholders |
|---|---|---|---|---|---|
| **Specialized Wet Labs (Proposed)** | | | | | |
| Instructional wet lab - general | 1 | 3000 | 3,000 | aero, fluids, environmental, chemistry, EHS, forensics, others? | VSE-CoS-CEHD-EHS |
| Instructional wet lab - general | 1 | 3000 | 3,000 | aero, fluids, environmental, chemistry, EHS, forensics, others? | VSE-CoS-CEHD-EHS |
| Instructional wet lab - general | 1 | 1400 | 1,400 | aero, fluids, environmental, chemistry, EHS, forensics, others? | VSE-CoS-CEHD-EHS |
| Instructional Wet lab - bio-intensive | 1 | 3000 | 3,000 | biology, biochemistry, biomedical engineering, UHSUS, G2, kinesiology, forensics, others? | VSE-CoS-CEHD-EHS |
| Instructional wet lab - chemistry-intensive | 1 | 1800 | 1,800 | biology, biochemistry, biomedical engineering, USHYS, organic/synthetic chemistry, others? | CoS-VSE |
| Cadaver Intake and processing | 1 | 400 | 400 | forensics, UHSUS, biology, biomedical engineering, G2, kinesiology, others? | CoS-VSE-CEHD |
| Cadaver Lab | 1 | 2600 | 2,600 | forensics, UHSUS, biology, biomedical engineering, G2, kinesiology, others? | CoS-VSE CEHD |
| Photography Lab | 1 | 300 | 300 | Studio for development of film | CoS-CVPA-CEHD-VSE |
| | | | | | |
| *Specialized Wet Lab Requests - Total* | | | **15,500** | | |
| | | | | | |
| **Specialized Dry Labs (Proposed)** | | | | | |
| Dry lab - general | 1 | 3000 | 3,000 | mechanics, manufacturing, materials, robotics, others? | VSE-CoS-CVPA |
| Dry lab - general | 1 | 3000 | 3,000 | manufacturing, making, robotics, others? | VS_-CoS |
| Dry lab - general | 1 | 3000 | 3,000 | manufacturing, making, robotics, others? | VSE-CoS |
| Dry lab - general | 1 | 1000 | 1,000 | forensics, others? | CoS ? |
| Computer lab - general | 1 | 2500 | 2,500 | cybersecurity, networking, machine learning/analytics, computer game design, computational science/engineering, others? | VSE-CoS-CVPA |
| Computer lab - general | 1 | 2500 | 2,500 | cybersecurity, networking, machine learning/analytics, computer game design, computational science/engineering, others? | VSE-CVPA-CoS |
| Computer lab - general | 1 | 960 | 960 | cybersecurity, networking, machine learning/analytics, computer game design, computational science/engineering, others? | VSE-CVPA-CoS |
| Computer lab - virtual reality | 1 | 1500 | 1,500 | computer game design, human machine interfaces, scientific visualization, others? | CVPA-VSE-CoS |
| Computer lab - virtual reality and exhibits | 1 | 3000 | 3,000 | computer game design, visualization exhibits, shows, competitions, fund raisers, others? | CVPA-VSE-CoS |
| Audio post-production lab | 1 | 1200 | 1,200 | computer game design | CVPA-VSE-CoS |
| Animation lab | 1 | 900 | 900 | computer game design, human-machine interfaces, scientific visualizations, others? | CVPA-VSE-CoS |
| Motion capture lab | 1 | 1500 | 1,500 | computer game design, information technology, physiology and human performance, biomechanics | CVPA-CEHD-VSE |
| Physiology dry lab | 1 | 10500 | 10,500 | human performancem kinesiology, biomechanics, biology, biomedical engineering, UHSUS, others? | CEHD-VSE-CoS |
| Open Student Design Space | 1 | 4000 | 4,000 | Will require sink, highly flexible, reconfigurable space to support student design competitions, capstone projects, others? | VSE-CVPA-CEHD-CoS |
| Open Student Design Space | 1 | 4000 | 4,000 | Will require sink, highly flexible, reconfigurable space to support student design competitions, capstone projects, others? | VSE-CVPA-CEHD-CoS |
| | | | | | |
| *Specialized Dry Lab Requests - Total* | | | **42,560** | | |

# EXPLORE

**1** UNDERSTAND

**2** EXPLORE

**3** ALIGN

**4** REALIZE

# SPECIALIZED WET LABS (PROPOSED)

- AERO & FLUIDS LAB — 1000 SF
- ENVIRONMENTAL ENGINEERING LAB — 1000 SF
- BIOMEDICAL ENGINEERING LAB — 1000 SF
- ORGANIC/SYNTHETIC MEDICAL CHEMISTRY LAB — 1000 SF
- INSTRUCTIONAL WET LAB — 1000 SF
- PHOTOGRAPHY LAB — 300 SF
- CADAVER INTAKE & PROCESSING — 400 SF
- CADAVER LAB — 2500 SF

# SPECIALIZED DRY LABS (PROPOSED)

- MECHANICS/MATERIALS LAB — 1000 SF
- MANUFACTURING/MACHINING LAB — 1500 SF
- ROBOTICS LAB — 1500 SF
- CYBER SECURITY LAB — 1500 SF
- MACHINE INTELLIGENCE & DATA ANALYTICS LAB — 1500 SF
- NETWORKING LAB — 500 SF
- DRY FORENSICS LAB — 1000 SF
- DESIGN COMPETITION SPACE — 4000 SF
- CAPSTONE DESIGN — 4000 SF
- HEALTH & HUMAN PERFORMANCE / PHYSIOLOGY LAB — 16000 SF
- GAME DESIGN INSTRUCTION & EXHIBIT — 3000 SF
- MOTION CAPTURE STUDIO — 1000 SF
- AUDIO POST PRODUCTION SUITE — 1000 SF
- VIRTUAL REALITY STUDIO — 1000 SF
- ANIMATION STUDIO — 600 SF

# UNIVERSITY CLASSROOMS

- 72 SEAT ACTIVE LEARNING CLASSROOM — 2150 SF
- 60 SEAT ACTIVE LEARNING CLASSROOM — 1000 SF
- COMPUTER LAB INSTRUCTIONAL — 1000 SF
- 32 SEAT ACTIVE LEARNING CLASSROOM — 960 SF
- 32 SEAT ACTIVE LEARNING CLASSROOM — 960 SF

# COLLABORATION

- INFORMAL LEARNING SPACES — 2000 SF
- LARGE CONFERENCE — 600 SF
- MEDIUM CONFERENCE — 400 SF
- MEDIUM CONFERENCE — 400 SF
- MEDIUM CONFERENCE — 400 SF
- SMALL CONFERENCE — 160 SF
- SMALL CONFERENCE — 160 SF
- SMALL CONFERENCE — 160 SF
- SMALL CONFERENCE — 160 SF
- SMALL CONFERENCE — 160 SF
- SMALL CONFERENCE — 160 SF

# SHARED WORK SPACE

- SHARED GTA SUITE — 1000 SF
- ADVISING — 100 SF
- ADVISING — 100 SF
- ADVISING — 100 SF
- ADVISING — 100 SF
- SHARED ADJUNCT SUITE — 750 SF
- ADVISING — 100 SF
- ADVISING — 100 SF
- ADVISING — 100 SF
- ADVISING — 100 SF
- ADVISING — 100 SF

# SUPPORT

- BIOLOGICAL WASTE ROOM — 200 SF
- CHEMICAL WASTE ROOM — 200 SF
- MDF SERVICE ROOM — 240 SF

## ROOM USE LEGEND

- Building Support
- Classroom
- Dedicated Support
- Faculty/Student Support
- Office
- Teaching Lab

CADAVER LAB

BIOMEDICAL ENGINEERING LAB

ORGANIC

DESIGN COMPETITION

MANUFACTURING & MACHINING

CAPSTONE DESIGN

HEALTH & HUMAN PERFORMANCE

MOTION CAPTURE STUDIO

MATERIALS

ROBOTICS

ANIMATION

AUDIO

INSTRUCTION & EXHIBIT

GAME DESIGN

3
ALIGN

| Department | Net Area | Gross Area |
|---|---|---|
| Biology | 24,365sf | 39,000sf |
| Chemistry | 23,750sf | 38,000sf |
| Computer Science | 6,100sf | 9,700sf |
| Engineering | 27,725sf | 44,400sf |
| Psychology | 9,800sf | 15,400sf |
| Shared Clusters | 14,730sf | 23,600sf |
| Shared Classrooms | 10,410sf | 16,700sf |
| Mechanical | | 17,400sf |
| Total | | 204,200sf |

**Building Gross Areas**

| | | |
|---|---|---|
| Cowles 4 @ 18,300sf | | 73,200sf |
| New Construction +/- 4.25 @ 31,000sf | +/-131,000sf | |
| Total | | 204,200sf |

**3**

**ALIGN**

MARRS MCLEAN          NEW          COWLES

Biology · Chemistry · Computer Science · Engineering Science · Geoscience · Physics · Psychology · Shared - Classrooms · Shared - Clusters

EYP/

**Mixed Grill Scheme**
Trinity University
Science & Engineering Facility Study

# Utilization Analysis



33% growth 2018.04.16
BIOLOGY T. LABS UTILIZATION

INTRO          ORGANISMAL          CELL-MOLECULAR          SYSTEMS
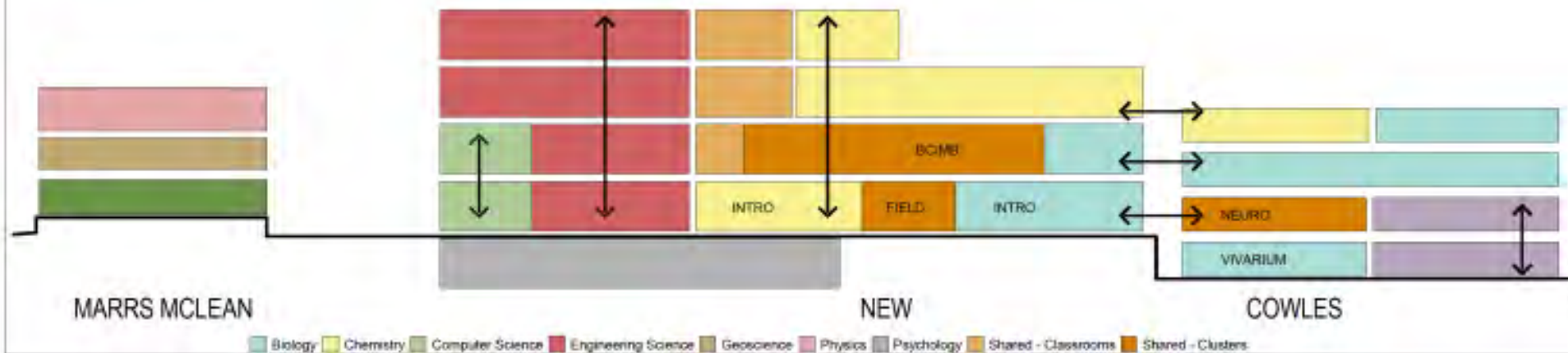
3
ALIGN

# REALIZE

**1** UNDERSTAND

**2** EXPLORE

**3** ALIGN

**4** REALIZE

| Dept. Code | Space Number | Space Name | Space Needs | Required Adjacencies | # Fume Hoods | # Laminar flow hoods | # of stations | Station Size | # Spaces Req'd | Size Req'd | Net Square Feet Area |
|---|---|---|---|---|---|---|---|---|---|---|---|

## 2 — Teaching and Research Laboratories - Low Bay

**Laboratories**

| Dept. Code | Space Number | Space Name | Space Needs | Required Adjacencies | # Fume Hoods | # Laminar flow hoods | # of stations | Station Size | # Spaces Req'd | Size Req'd | Net Square Feet Area |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.01 | Electronics Teaching Lab | Shared (2 per) workstations with common electronic instrument, tools, power strips, soldering station, magnifier lights, solder vapor filter | Electronic Instrumentation Lab | 0 | | 12 | 6'x3' | 1 | 1,300 | 1,300 |
| | 2.02 | Electronics Instrumentation Lab | Workbenches for electronic repair, storage cabinets, bench top soldering | Electronics Teaching Lab | | | | | 1 | 500 | 500 |
| | 2.03 | Microbiology Teaching Lab | bench space and open area for lab activities with larger pilot scale equipment, storage, visible from the corridor | Shared Support | 2 | | 16 | 3 LF per stud. | 1 | 1,300 | 1,300 |
| | 2.04 | Microbiological Engineering Lab | teaching and research groups, 8 research and 10-15 students in teaching, Class 100,000, Biosafety level 2, visible from the corridor. | Shared Support, PI and Graduate Students | 1 | 1 | | | 1 | 1,300 | 1,300 |
| | 2.05 | Fermentation Research Lab | class 100,000, Biosafety level 2, bench top equipment and open area for equipment, visible from the corridor. | Shared Support, PI and Graduate Students | 1 | 1 | | | 1 | 500 | 500 |
| | 2.06 | Microbiology/Fermentation lab | 5-10 researchers, 10-15 students for teaching, 2 biosafety hoods, a separate room for Biosafety cabinets and equipment, adjacent and connected to the lab area. Visible from the corridor | Shared support, Biomass receiving, Bioprocessing and Graduate Students | 2 | 1 | | | 1 | 1,300 | 1,300 |

# Spatial Adjacencies
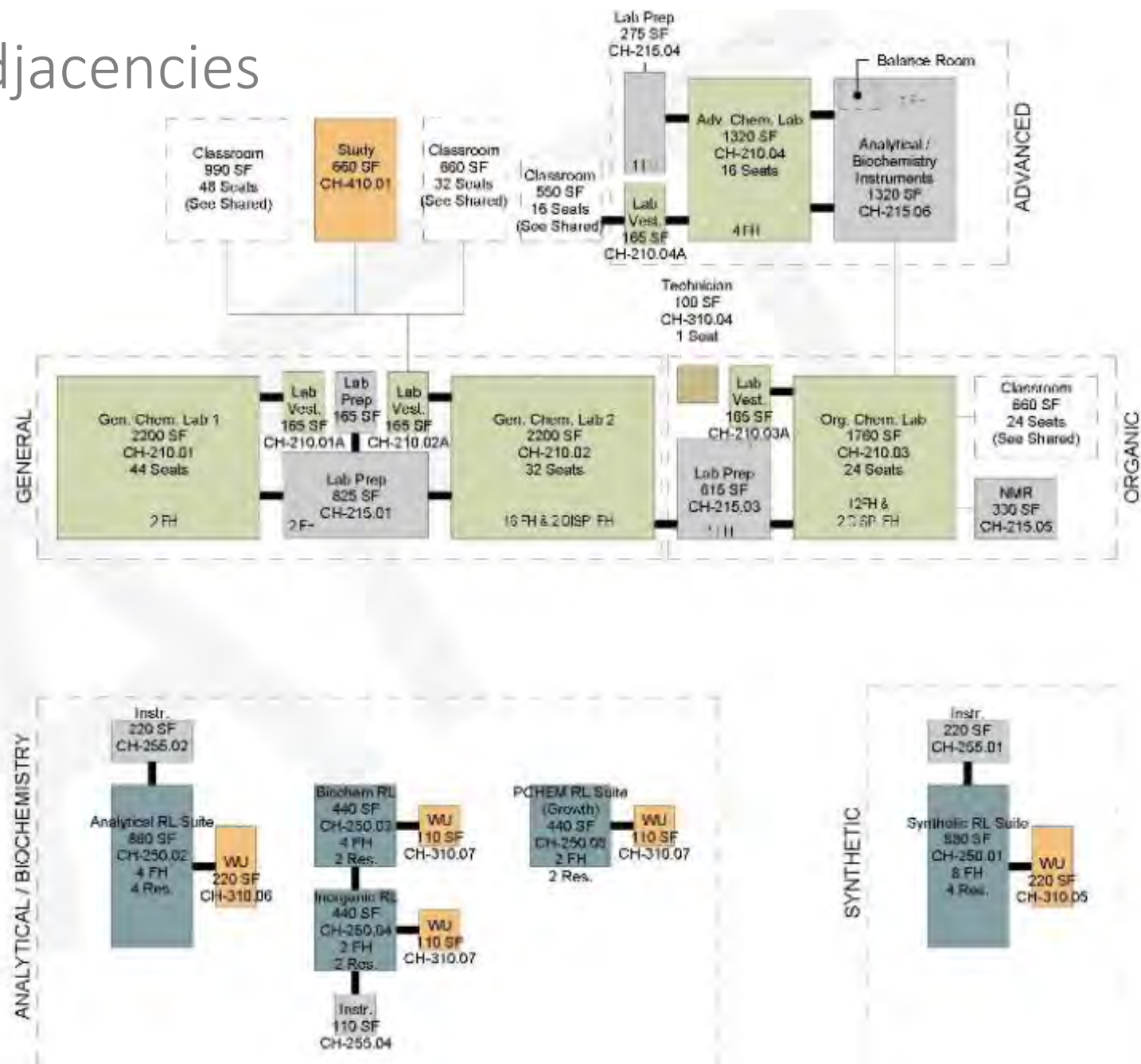
# SPACE TYPES

# Multi-Disciplinary Teaching Laboratories

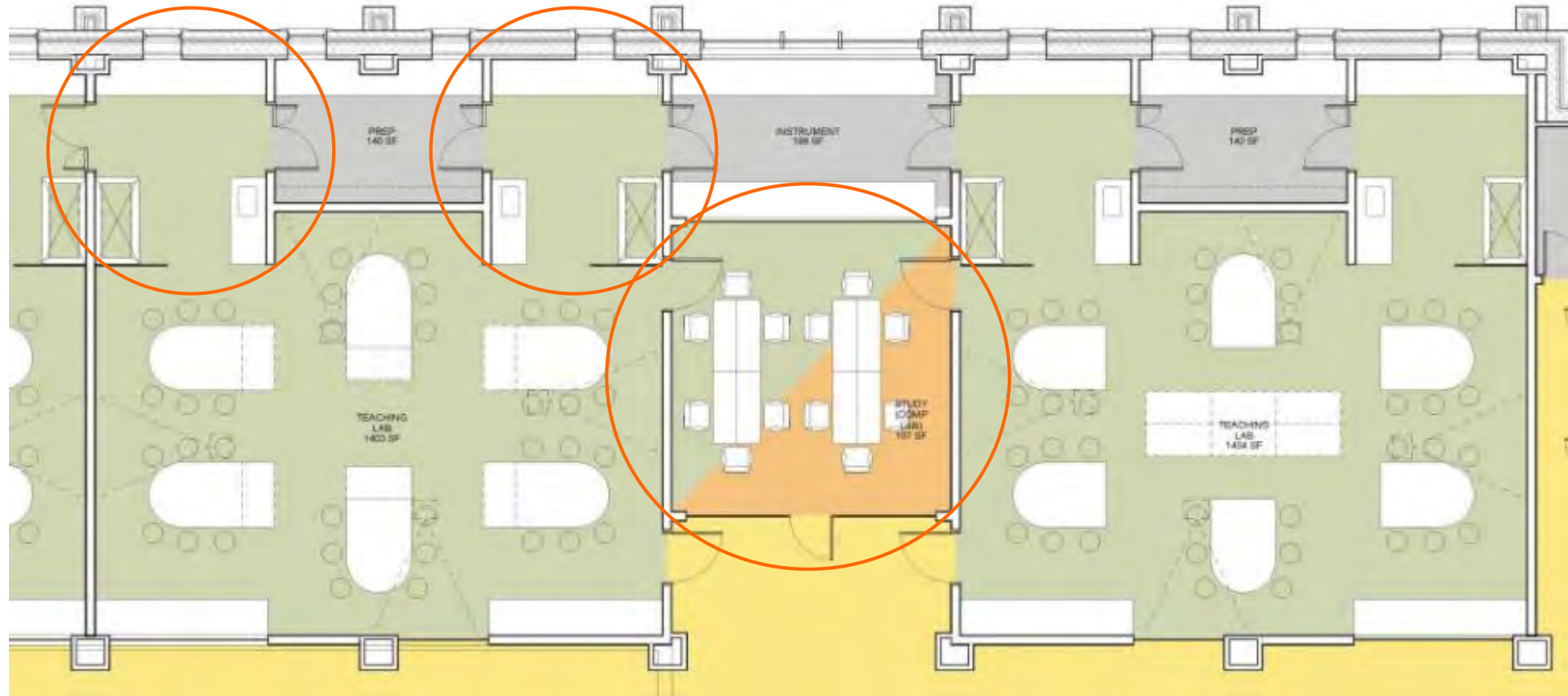**Biology**

•Groups of 2 or 4

**Chemistry**

•Groups of 3
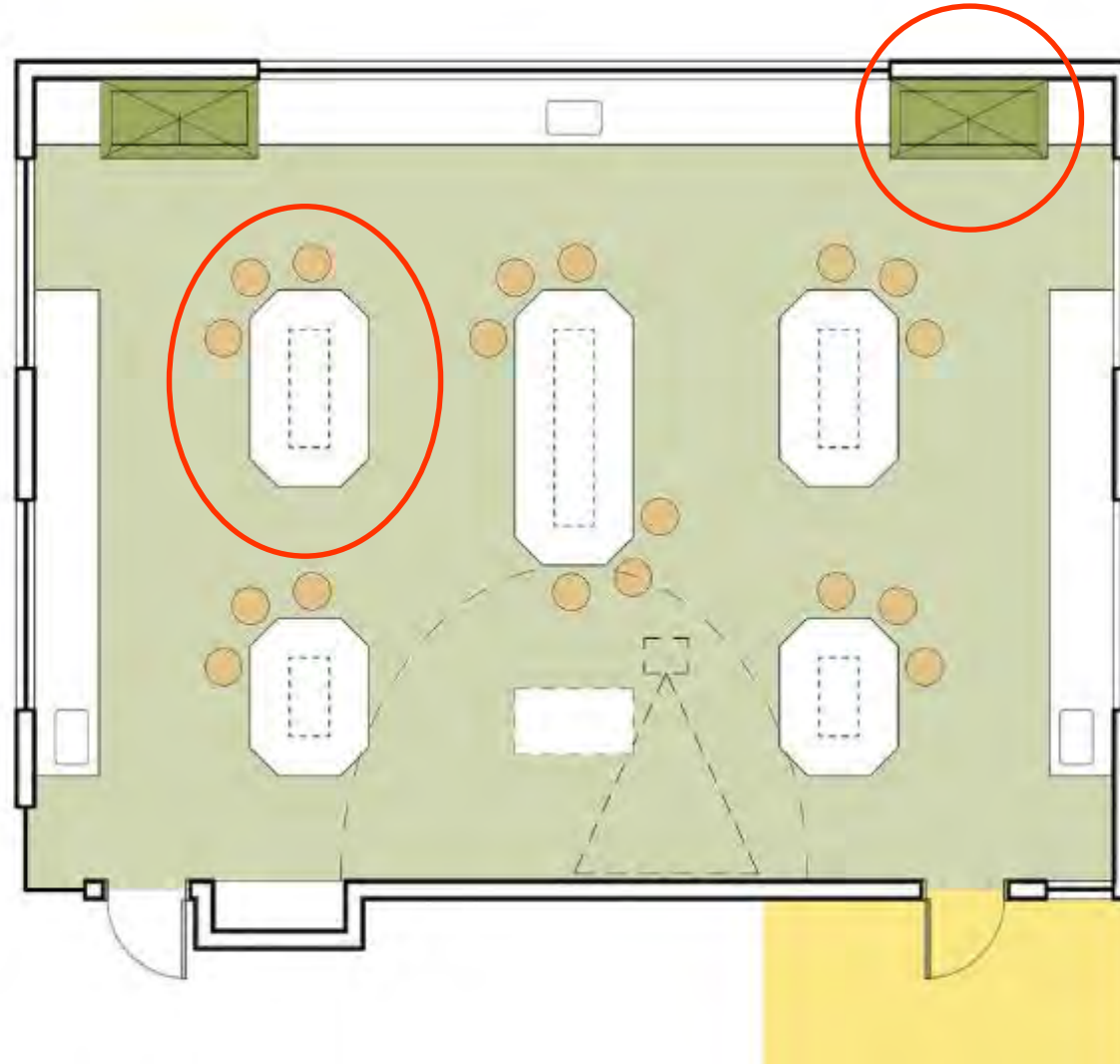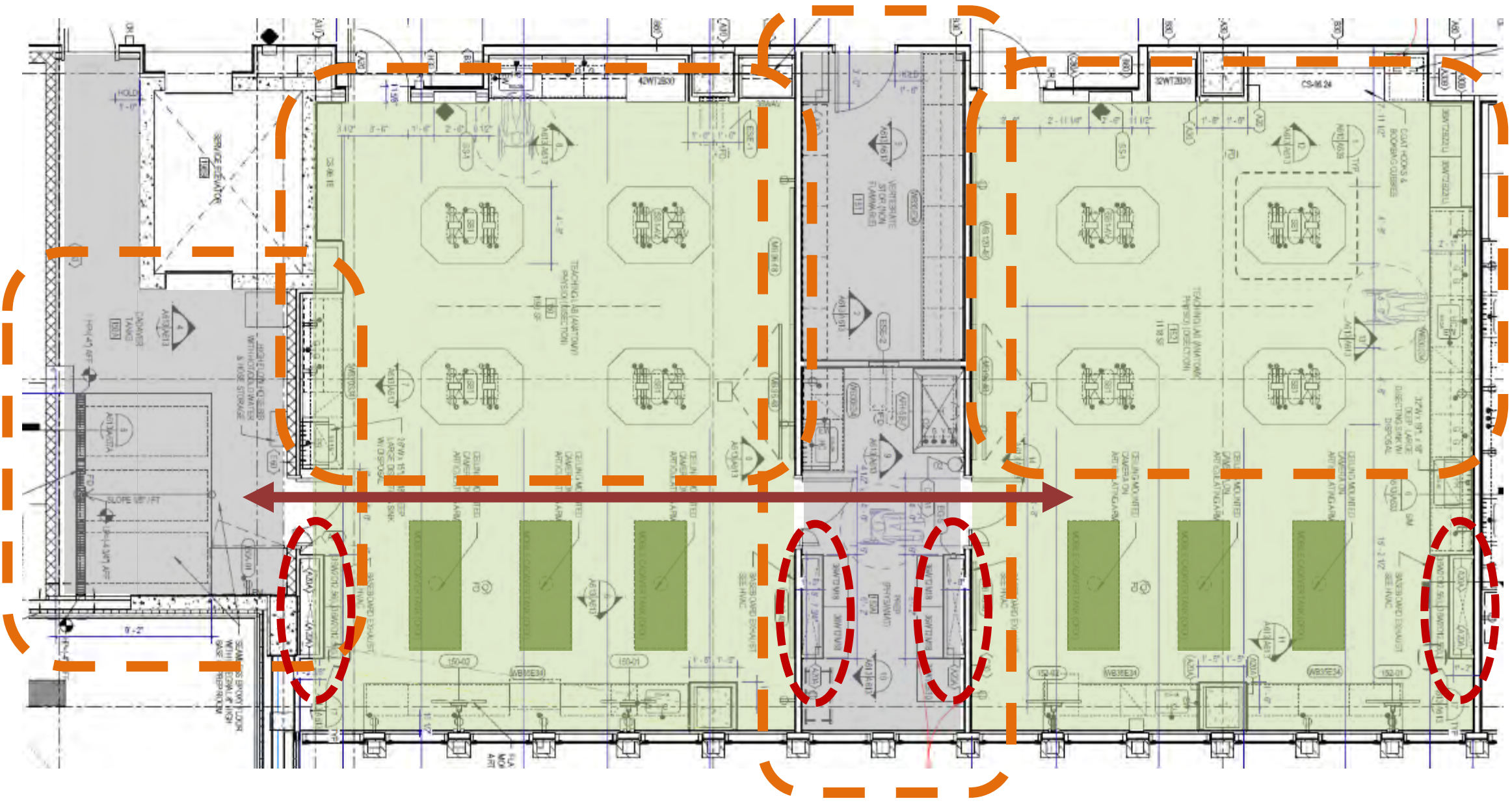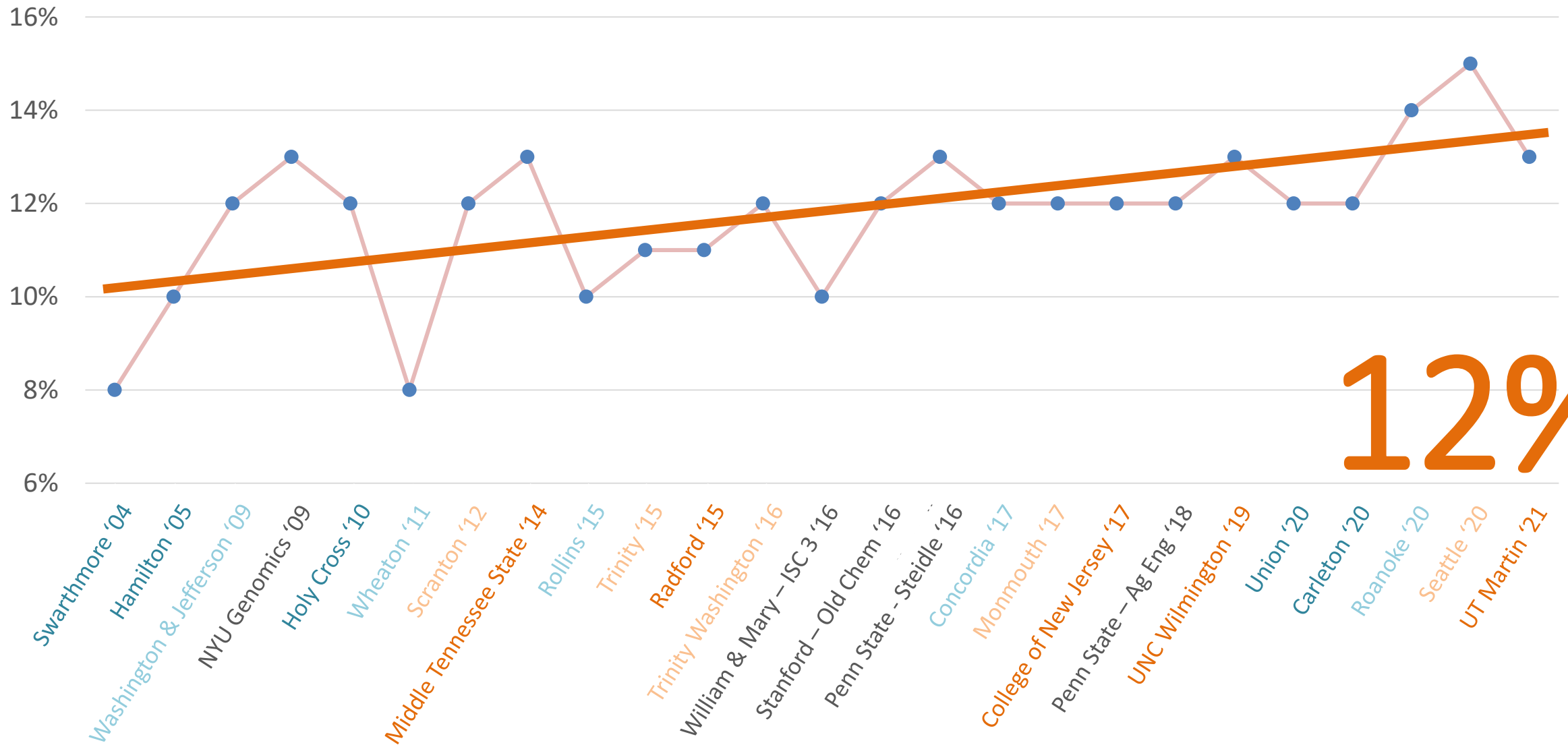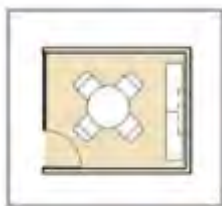
# Interdisciplinary Science

Collaboration Areas @ 25 Colleges & Universities

/ Enclosed, Scheduled

/ Enclosed, Unscheduled

/ Open, Informal

# PROJECT OVERVIEW

# Project Definition



**72,000 ASF**

| Bull Run Hall Addition Program Summary | |
|---|---|
| **Total Gross SF of Building (GSF)** | **100,000** |
| State-mandated efficiency factor (72%) | 0.72 |
| **Total Assignable SF for Allocation (ASF)** | **72,000** |

| Bull Run Hall Addition Program Breakdown | |
|---|---|
| Specialed Wet Labs - Instructional | 15,500 |
| Specialized Dry Labs - Instructional | 42,560 |
| Shared Work Space | 2,706 |
| University Classrooms | 9,080 |
| Meeting & Conference | 2,300 |
| Specialized Building & Support Space | 640 |
| **Total Assignable SF (ASF)** | **72,786** |
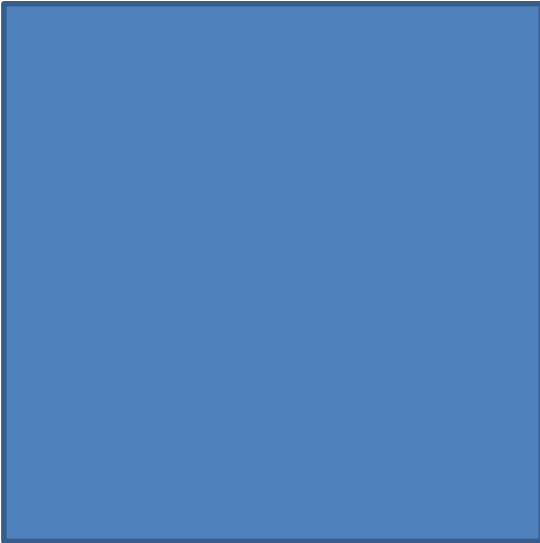
**132,000ASF**

| Academic VIII Program Summary | |
|---|---|
| **Total Gross SF of Building (GSF)** | **200,000** |
| State-mandated efficiency factor (66%) | 0.66 |
| **Total Assignable SF for Allocation (ASF)** | **132,000** |

| Academic VIII Program Breakdown | |
|---|---|
| Academic & Instructional Support | 111,000 |
| Student Services & Support (E&G Funded) | 10,000 |
| Admin/ Central Services & Support (E&G Funded) | 11,000 |
| **Total Assignable SF (ASF)** | **132,000** |
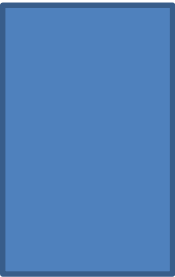
**24,000 ASF**

| Discovery Hall - Current ATCC Space | |
|---|---|
| **Total Assignable  SF of Building (ASF)** | **23,874** |
| Vacated by ATCC July 2020 | 16,688 |
| Vacated by ATCC January 2021 | 7,186 |

| Discovery Hall - Current ATCC Space Program Breakdown | |
|---|---|
| Wet Labs & Lab Support Spaces (vacated July 2020) | 11,700 |
| Office & Office Support Spaces (vacated July 2020) | 4,988 |
| Dry Research Lab (vacated Jan 2021) | 696 |
| Office & Office Support Spaces (vacated Jan 2021) | 6,490 |
| **Total Assignable SF (ASF)** | **23,874** |

# Sci Tech Future Program Needs
# SCHEV E&G Student Service/Support Departments

| Division | Department Name | FX ASF | FX FTE (Fall 2018) | ASF/FTE | SciTech FTE (6-yr Plan) | Calculated ASF | Sci/Tech Current ASF | Remaining ASF Need |
|---|---|---|---|---|---|---|---|---|
| Provost | MIX Admin/Operations | 20,491 | 22,869 | 0.90 | 3,550 | 3,181 | 0 | 3,181 |
| Provost | Global Education Office | 3,348 | 22,869 | 0.15 | 3,550 | 520 | 0 | 520 |
| Provost | Office of Undergrad Educ/OSCAR | 2,352 | 22,869 | 0.10 | 3,550 | 365 | 0 | 365 |
| Provost | Admiss-Office of Military Svcs | 972 | 22,869 | 0.04 | 3,550 | 151 | 0 | 151 |
| Provost | Admissions | 14,612 | 22,869 | 0.64 | 3,550 | 2,268 | 0 | 2,268 |
| Provost | Ctr Acad Advising,Retent,Transition | 4,173 | 22,869 | 0.18 | 3,550 | 648 | 0 | 648 |
| Provost | Enrollment Central | 753 | 22,869 | 0.03 | 3,550 | 117 | 153 | -36 |
| Provost | Student Financial Aid | 5,094 | 22,869 | 0.22 | 3,550 | 791 | 0 | 791 |
| Provost | Office of the Registrar | 6,951 | 22,869 | 0.30 | 3,550 | 1,079 | 1,234 | -155 |
| University Life | Career Services | 7,341 | 22,869 | 0.32 | 3,550 | 1,140 | 0 | 1,140 |
| Fnan & Admin | Student Accounts | 3,698 | 22,869 | 0.16 | 3,550 | 574 | 0 | 574 |
| Fnan & Admin | Cash Office and ALM | 1,493 | 22,869 | 0.07 | 3,550 | 232 | 0 | 232 |
| | | **71,278** | | | | **11,065** | **1,387** | **9,678** |

# Sci Tech Future Program Needs
# SCHEV E&G Admin/Central Service/Support Departments

| Division | Department Name | FX ASF | FX FTE (Fall 2018) | ASF/FTE | SciTech FTE (6-yr Plan) | Calculated ASF | Sci/Tech Current ASF | Remaining ASF Need |
|----------|-----------------|--------|--------------------|---------|-------------------------|----------------|---------------------|--------------------|
| Provost | Sponsored Programs Administration | 6,867 | 22,869 | 0.30 | 3,550 | 1,066 | 0 | 1,066 |
| Provost | Provost Administration | 12,679 | 22,869 | 0.55 | 3,550 | 1,968 | 0 | 1,968 |
| Provost | Stearns Ctr for Teaching/Learning | 3,849 | 22,869 | 0.17 | 3,550 | 597 | 226 | 371 |
| Provost | Inst Assessment, Research & Effectiveness | 2,330 | 22,869 | 0.10 | 3,550 | 362 | 0 | 362 |
| Provost | Executive and Professional Education | - | 22,869 | 0.00 | 3,550 | 0 | 1,134 | -1,134 |
| Fnan & Admin | Office Compliance, Diversity, Ethics | 3,205 | 22,869 | 0.14 | 3,550 | 498 | 0 | 498 |
| Fnan & Admin | SEERM / Environ Hlth & Safety | 5,897 | 22,869 | 0.26 | 3,550 | 915 | 3,519 | -2,604 |
| Fnan & Admin | ITS (LSS) - Classroom & Lab Tech/Design | 16,028 | 22,869 | 0.70 | 3,550 | 2,488 | 3,199 | -711 |
| Fnan & Admin | ITS (ESD) - Technology Support Svcs | 5,487 | 22,869 | 0.24 | 3,550 | 852 | 750 | 102 |
| Fnan & Admin | ITS (LSS) - Learning Support Svcs | 11,028 | 22,869 | 0.48 | 3,550 | 1,712 | 389 | 1,323 |
| Fnan & Admin | ITS (ISO) - Information Security | 1,690 | 22,869 | 0.07 | 3,550 | 262 | 0 | 262 |
| Fnan & Admin | ITS (AS) - GMU-TV | 5,653 | 22,869 | 0.25 | 3,550 | 878 | 0 | 878 |
| Fnan & Admin | ITS - Admin/Shared Space | 4,148 | 22,869 | 0.18 | 3,550 | 644 | 0 | 644 |
| Fnan & Admin | ITS (EA) - Enterprise Applications | 5,186 | 22,869 | 0.23 | 3,550 | 805 | 0 | 805 |
| Fnan & Admin | ITS (EIS) - Ent Servers & Messaging/Data Ctr | 8,518 | 22,869 | 0.37 | 3,550 | 1,322 | 0 | 1,322 |
| Fnan & Admin | ITS (EIS) - Network Engr & Tech/Collab Video Tech | 6,475 | 22,869 | 0.28 | 3,550 | 1,005 | 0 | 1,005 |
| Fnan & Admin | ITS (ESD) - Strategic Business Ops | 3,468 | 22,869 | 0.15 | 3,550 | 538 | 0 | 538 |
| Fnan & Admin | Accounts Payable Department | 2,299 | 22,869 | 0.10 | 3,550 | 357 | 0 | 357 |
| Fnan & Admin | Purchasing Office | 2,430 | 22,869 | 0.11 | 3,550 | 377 | 0 | 377 |
| Fnan & Admin | Human Resources Administration | 13,332 | 22,869 | 0.58 | 3,550 | 2,070 | 0 | 2,070 |
| Fnan & Admin | Police & Public Safety | 7,261 | 22,869 | 0.32 | 3,550 | 1,127 | 1,190 | -63 |
| Facilities | Facilities Mgmt Admin | 5,180 | 22,869 | 0.23 | 3,550 | 804 | 3,826 | -3,022 |
| Facilities | Central Warehouse | 21,078 | 22,869 | 0.92 | 3,550 | 3,272 | 0 | 3,272 |
| Facilities | EQE-Central Heat/Cooling Plant | 1,175 | 22,869 | 0.05 | 3,550 | 182 | 0 | 182 |
| Facilities | Waste Management/Recycling | 939 | 22,869 | 0.04 | 3,550 | 146 | 0 | 146 |
| Comm & Mktg | Information Services | 2,848 | 22,869 | 0.12 | 3,550 | 442 | 90 | 352 |
| Comm & Mktg | University Events (office/support) | 2,388 | 22,869 | 0.10 | 3,550 | 371 | 0 | 371 |
| | | **161,438** | | | | **25,061** | **14,323** | **10,738** |

# Sci Tech Future Program Needs
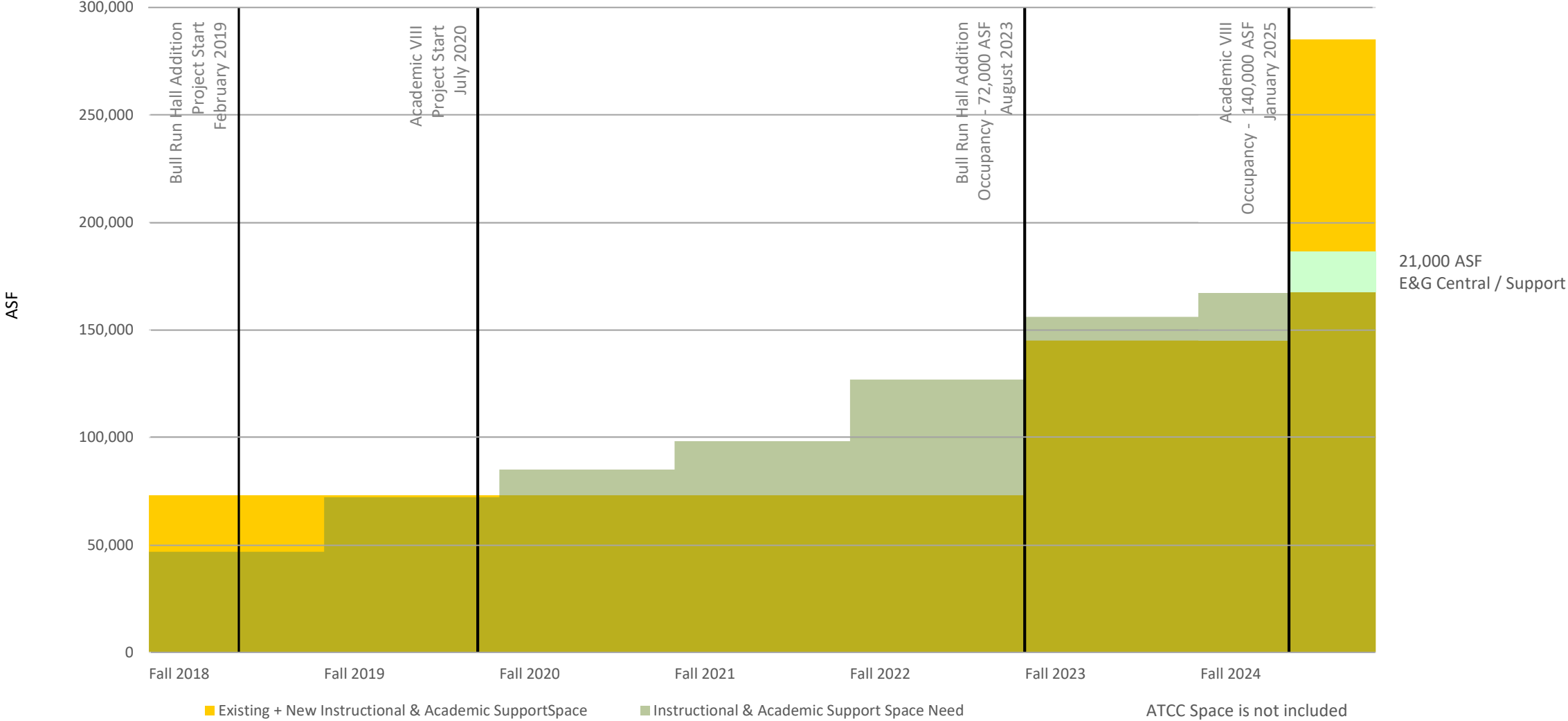# SCHEV Auxiliary Student Service/Support Departments

| Division | Department Name | FX ASF | FX FTE (Fall 2018) | ASF/FTE | SciTech FTE (6-yr Plan) | Calculated ASF | Sci/Tech Current ASF | Remaining ASF Need |
|---|---|---|---|---|---|---|---|---|
| University Life | Office of Student Involvement-Campus Life | 8,523 | 22,869 | 0.37 | 3,550 | 1,323 | 0 | 1,323 |
| University Life | Student Government | 893 | 22,869 | 0.04 | 3,550 | 139 | 0 | 139 |
| University Life | Graduate Student Life Office | 157 | 22,869 | 0.01 | 3,550 | 24 | 0 | 24 |
| University Life | Student Organizations | 1,908 | 22,869 | 0.08 | 3,550 | 296 | 0 | 296 |
| University Life | Office of Internatl Programs & Svcs | 3,167 | 22,869 | 0.14 | 3,550 | 492 | 0 | 492 |
| University Life | Student Media Group | 7,395 | 22,869 | 0.32 | 3,550 | 1,148 | 0 | 1,148 |
| University Life | Diversity/Inclusion/Multicult Ed & LGBTQ Resources | 4,991 | 22,869 | 0.22 | 3,550 | 775 | 0 | 775 |
| University Life | Student Health Services | 9,464 | 22,869 | 0.41 | 3,550 | 1,469 | 1,130 | 339 |
| University Life | Student Support & Advocacy Center | 2,986 | 22,869 | 0.13 | 3,550 | 464 | 0 | 464 |
| University Life | Counseling & Psychological Services | 7,502 | 22,869 | 0.33 | 3,550 | 1,165 | 0 | 1,165 |
| University Life | Learning Services | 1,388 | 22,869 | 0.06 | 3,550 | 215 | 0 | 215 |
| University Life | Early Identification Program | 2,906 | 22,869 | 0.13 | 3,550 | 451 | 0 | 451 |
| University Life | New Student & Family Programs | 3,686 | 22,869 | 0.16 | 3,550 | 572 | 0 | 572 |
| University Life | Office of Disability Services | 3,726 | 22,869 | 0.16 | 3,550 | 578 | 0 | 578 |
| University Life | University Life Admin & Programs | 9,826 | 22,869 | 0.43 | 3,550 | 1,525 | 1,757 | -232 |
| University Life | Leadership Educ/Devel (LEAD) | 1,467 | 22,869 | 0.06 | 3,550 | 228 | 0 | 228 |
| University Life | Office Acad Integrity/Student Conduct | 2,776 | 22,869 | 0.12 | 3,550 | 431 | 0 | 431 |
| University Life | Off-Campus Student Services | 759 | 22,869 | 0.03 | 3,550 | 118 | 0 | 118 |
| | | **73,520** | | | | **11,413** | **2,887** | **8,526** |

# Sci Tech Future Program Needs
# SCHEV Auxiliary Admin/Central Service/Support Departments

| Division | Department Name | FX ASF | FX FTE (Fall 2018) | ASF/FTE | SciTech FTE (6-yr Plan) | Calculated ASF | Sci/Tech Current ASF | Remaining ASF Need |
|---|---|---|---|---|---|---|---|---|
| Fnan & Admin | Photo ID/Card Office* | 798 | 22,869 | 0.03 | 3,550 | 124 | 0 | 124 |
| Fnan & Admin | CASO-Card Access/Security Office | 861 | 22,869 | 0.04 | 3,550 | 134 | 0 | 134 |
| Fnan & Admin | Auxiliary Enterprise Administration | 3,295 | 22,869 | 0.14 | 3,550 | 511 | 0 | 511 |
| Fnan & Admin | Mail Room Operations | 3,218 | 22,869 | 0.14 | 3,550 | 500 | 0 | 500 |
| Fnan & Admin | Print Services Admin/Ops | 5,080 | 22,869 | 0.22 | 3,550 | 789 | 1,000 | -211 |
| Fnan & Admin | Student Centers Admin | 2,580 | 22,869 | 0.11 | 3,550 | 401 | 0 | 401 |
| Fnan & Admin | Mason Bookstore/Computer Store-Barnes & Noble | 20,997 | 22,869 | 0.92 | 3,550 | 3,259 | 1,189 | 2,070 |
| Fnan & Admin | Transportation Administration | 3,867 | 22,869 | 0.17 | 3,550 | 600 | 121 | 479 |
| | | **40,696** | | | | **6,317** | **2,310** | **4,007** |

# Sci Tech Instructional & Academic Support Space – 3550 FTE

**ASF**

- 300,000
- 250,000
- 200,000
- 150,000
- 100,000
- 50,000
- 0

Bull Run Hall Addition Project Start February 2019

Academic VIII Project Start July 2020

Bull Run Hall Addition Occupancy - 72,000 ASF August 2023

Academic VIII Occupancy - 140,000 ASF January 2025

21,000 ASF
E&G Central / Support

Fall 2018 | Fall 2019 | Fall 2020 | Fall 2021 | Fall 2022 | Fall 2023 | Fall 2024

■ Existing + New Instructional & Academic SupportSpace  ■ Instructional & Academic Support Space Need  ATCC Space is not included

# Bull Run Hall Addition – Specialized Spaces

| Item | QTY | Size | Total ASF | Comments |
|---|---|---|---|---|
| **Specialized Wet Labs (Proposed)** | | | | |
| Instructional wet lab - general | 1 | 3000 | 3,000 | aero, fluids, environmental, chemistry, EHS, forensics, others? |
| Instructional wet lab - general | 1 | 3000 | 3,000 | aero, fluids, environmental, chemistry, EHS, forensics, others? |
| instructional wet Lab - general | 1 | 1400 | 1,400 | aero, fluids, environmental, chemistry, EHS, forensics, others? |
| Instructional Wet lab - bio-intensive | 1 | 3000 | 3,000 | biology, biochemistry, biomedical engineering, UHSUS, G2, kinesiology, forensics, others? |
| Instructional wet lab - chemistry-intensive | 1 | 1800 | 1,800 | biology, biochemistry, biomedical engineering, USHYS, organic/synthetic chemistry, others? |
| Cadaver Intake and processing | 1 | 400 | 400 | forensics, UHSUS, biology, biomedical engineering, G2, kinesiology, others? |
| Cadaver Lab | 1 | 2600 | 2,600 | forensics, UHSUS, biology, biomedical engineering, G2, kinesiology, others? |
| Photography Lab | 1 | 300 | 300 | Studio for development of film |
| | | | | |
| *Specialized Wet Lab Requests - Total* | | | **15,500** | |
| | | | | |
| **Specialized Dry Labs (Proposed)** | | | | |
| Dry lab - general | 1 | 3000 | 3,000 | mechanics, manufacturing, materials, robotics, others? |
| Dry lab - general | 1 | 3000 | 3,000 | manufacturing, making, robotics, others? |
| Dry lab - general | 1 | 3000 | 3,000 | manufacturing, making, robotics, others? |
| Dry lab - general | 1 | 1000 | 1,000 | forensics, others? |
| Computer lab - general | 1 | 2500 | 2,500 | cybersecurity, networking, machine learning/analytics, computer game design, computational science/engineering, otl |
| Computer lab - general | 1 | 2500 | 2,500 | cybersecurity, networking, machine learning/analytics, computer game design, computational science/engineering, otl |
| Computer lab - general | 1 | 960 | 960 | cybersecurity, networking, machine learning/analytics, computer game design, computational science/engineering, otl |
| Computer lab - virtual reality | 1 | 1500 | 1,500 | computer game design, human machine interfaces, scientific visualization, others? |
| Computer lab - virtual reality and exhibits | 1 | 3000 | 3,000 | computer game design, visualization exhibits,shows, competitions, fund-raisers, others? |
| Audio post-production lab | 1 | 1200 | 1,200 | computer game design |
| Animation lab | 1 | 900 | 900 | computer game design, human-machine interfaces, scientific visualizations, others? |
| Motion capture lab | 1 | 1500 | 1,500 | computer game design, information technology, physiology and human performance, biomechanics |
| Physiology dry lab | 1 | 10500 | 10,500 | human performancem kinesiology, biomechanics, biology, biomedical engineering, UHSUS, others? |
| Open Student Design Space | 1 | 4000 | 4,000 | Will require sink, highly flexible, reconfigurable space to support student design competitions, capstone projects, othe |
| Open Student Design Space | 1 | 4000 | 4,000 | Will require sink, highly flexible, reconfigurable space to support student design competitions, capstone projects, othe |
| | | | | |
| *Specialized Dry Lab Requests - Total* | | | **42,560** | |

# QUESTIONS?

WORKSESSION

# Goals Exercise

Collaborative Building:

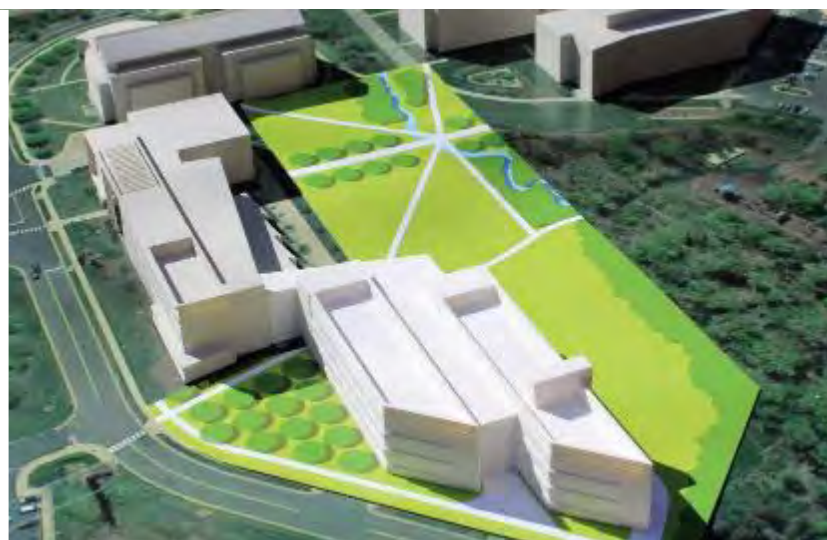College:

Personal:

Designing innovative academic environments for student success

# Project Definition – Discovery

Admin / Central Services & Support (E&G Funded)

11,409 nsf

Wet Labs

9,029 nsf

Lab Svc 2,740

Dry / Computational Lab 696sf

Project Definition – Bull Run Hall Addition

Classrooms

9,080 nsf

Wet Labs

15,500 nsf

Shared Work Areas 2,706

Mtg & Conf 2,300

Bldg 640sf

Dry Labs

42,560 nsf

# Project Definition – Academic VIII